Pharma Pricing in India[1] : a failure of the Market(s)?

-S.Srinivasan

> *"People of the same trade seldom meet together even for merriment and diversion, but the conversation ends in a conspiracy against the public or some contrivance to raise prices." –Adam Smith*

The markets are supposed to have the wisdom[2]. The usage of the word 'market' and its supposed wisdom harks back to atleast Adam Smith who advocated the invisible hand (actually only once, in passing, in his *Wealth of Nations*) that somehow brings equilibrium to supply and demand and therefore prices. More recent and sophisticated defendants of the market have included Hayek who had this to say in his Nobel Lecture, *Pretence of Knowledge:*

> It is indeed the source of the superiority of the market order, and the reason why, when it is not suppressed by the powers of government, it regularly displaces other types of order, that in the resulting allocation of resources more of the knowledge of particular facts will be utilized which exists only dispersed among uncounted persons, than any one person can possess. But because we, the observing scientists, can thus never know all the determinants of such an order, and in consequence also cannot know at which particular structure of prices and wages demand would everywhere equal supply, we also cannot measure the deviations from that order; nor can we statistically test our theory that it is the deviations from that "equilibrium" system of prices and wages which make it impossible to sell some of the products and services at the prices at which they are offered[3].

Let us assume for the time being that the market(s) indeed has/have wisdom. Do stock markets for instance have wisdom? Wisdom for what you may ask. This wisdom is usually related to its calculation of what stocks, and what companies, are profitable. Now no ethical criteria or criteria for long-term ecological and/or civilizational sustainability enter into it. Otherwise Union Carbide and Coca Cola should have been consigned to the dustbin of history.

Even black-markets (those arbitrarily defined sites of economic crimes) have wisdom. Wisdom to know where the goddess Lakshmi smiles. She seems to smile on the rich and crooked more, much lesson on your meek and innocents and your huddled masses.

Markets are supposed to be allocatively and productively efficient. But the efficiency criterion eschews what economists conveniently call externalities. A market can end up catering to a minority of population. That is a major segment of the population can be priced out of the market. Or never even considered as target segment for consumption. What does it matter to the producers of goods (say medicines) if a lot of people die a slow death because of poor or no access to medicines as long as the firm is making profits and the stock prices are doing well (wisdom of the markets)?

If the same good is available at comparable quality, at a range of prices, is the market allocatively efficient? If more players do not automatically reduce prices, or if the most selling brand also sells at the highest prices, is the market efficient? Obviously no. But that is the situation of the pharmaceutical market today in India. It is neither productively nor allocatively efficient. But the shares in the markets are doing well.

Competition felt Adam Smith and many after him should reduce prices. What is competition? To an economist it means:

1.Existence of very large number of buyers and sellers, each consuming and producing a small fraction of the goods in the market.

2. The producers and consumers are such a small fraction of the market that whether they buy or sell, it has no influence over supply and demand.

3.All the items in the market must be identical.

4. There can be no substantial barriers (obstacles) to entry into, or exit from, the market.

All these above exist, for the pharmaceutical sector in India. Still we have a situation where prices defy competition. With the help of branding, and sometimes without branding, pharma companies tend to resort to product differentiation. That is their aspirin is somehow better than the other aspirin. Adequate competition, and certainly, perfect competition, does not, apparently, exist in the Indian pharma market.

In economic literature, market failure is said to occur when inter alia:

1) When adequate competition does not exist.
2) Buyers and sellers are not well informed. Without information uneducated decisions are made.
3) Resources are not free to move from one industry to another (resource immobility)
4) Prices do not reasonably reflect the costs of production.
5) Presence of

- Negative externality- harmful side effect that affects an uninvolved third party. In most events, it constitutes external cost. In this case, production of irrational and unscientific medicines. Or 20-year long patents restricting entry of other players. Or use of unethical marketing techniques.

- Positive externality- beneficial side effect that affects an uninvolved third party.

6) Production of public goods (supplementation by the government or subsidy).

We argue conditions 1, 2, 4 and 5 definitely hold for the pharma formulations sector in India.

Evidence from India's Pharma Industry[4]

Competition does not work in the Indian pharma industry - always. More players in an uncontrolled market have meant only a wide range of prices for the same drugs.[5] On the other hand, you have the same drug being sold by different companies (and sometimes by the same company) at vastly different prices. (See Tables 1-3 below)[6]

Table 1: Different Prices of Amlodipine

Drug	Brand name	Company	Price per tab. of 5 mg*
Amlodipine 5 mg.	Amlogard	Pfizer	Rs. 4.81
Amlodipine 5 mg.	Stamlo	Dr. Reddy's	Rs. 2.47
Amlodipine 5 mg.	Amlogen	Alkem	Rs. 1.20
Amlodipine 5 mg.	Amlodac	Alidac	Rs. 0.50

Source of prices: April-June 2002 edition of CIMS

Table 2: Different Prices of Inj. Ceftriaxone.

Drug	Brand name	Company	Price per 1g*.
Inj.Ceftriaxone	Cefaxone	Lupin	Rs.213.
Inj.Ceftriaxone	Oframax	Ranbaxy	Rs. 99
Inj.Ceftriaxone	Gutencef	E-merck	Rs. 50

All prices are as mentioned in the April-June 2002 edition of CIMS:

Table 3: A Comparison of the Leading Brands of Ciprofloxacin 500 mg tablets Listed in CIMS.

Brand	Price* per 10 tablets	Company	Price of Cifran compared to the drug
Cifran	85.34	Ranbaxy	
Ciplox	78.90	Cipla	+8 %
Ciproace	63.00	Ranbaxy	+35 %
Ciprolet	49.50	Dr. Reddy's	+72 %
Strox	39.00	Dabur	+118%
Zoxan	29.00	Fdc	+194%
Orpic	26.81	Dey's	+218 %

Source of prices: April-June 2002, CIMS

A study published by Roy and Rewari in the Indian *Journal of Pharmacology*[7] that surveyed the variation in prices of 84 formulations used in the management of cardiovascular diseases in the Indian market concluded that variation in prices ranged from 2.8 % to 3406 %. "In the absence of comparative information on drug prices and their quality it is difficult for physicians to prescribe the most economical treatment. There is an urgent need to provide adequate information to physicians regarding cost, bioequivalence and quality of drugs."

Secondly, the most-selling brand is seldom the lowest priced. The product leader is often the price leader too. (See Table 4[8]). If one would insist marginal revenue is equal to marginal cost – the criteria for perfect competition -- for the pharma company rolling in billions, it is laughable.

Table 4: Antibiotic Brand Leaders, Market Share and Price Behavior: A Brief Overview

Drug Product	**Market Turnover of Product in Rs crores**	**Brand Name of Product Leader (s)**	**Market Share of Product Leader (in %)**	**Product Leader is Price Leader?**	**Remarks**
Cefataxime Injection	122.02	Taxim	63%	Yes	
Ceftrioxone Injection	136.01	Monocef	35 %	No	Price Leader is Becef
Cefuroxime Tablets	12.82	Ceftum	38 %	Yes	
Cephalexin Capsules	171.26	Phexin	69 %	No	Price Leader Ceff is 10 % more costly
		Sporidex		No	

Amoxy-cillin Capsules	212.45	Mox	47 %	Yes	
		Novamox		Yes	
Amikacin Sulphate Inj	69.12	Mikacin	68 %	No	
		Amicin		No	
Chloram phenicol Capsules	41.31	Chlormycetin	86 %	Yes	Chloromycetin is the costliest
		Enteromycetin		Yes	
		Paraxin		Yes	
		Kemicetine		Yes	
Ampicillin + Cloxacillin Caps	109.05	Megapen	78 %	No	
		Ampoxin		No	
Ciprofloxacin Capsules	272.35	Cifran	56 %	Yes	Four brands dominate the market; the product is costly; but still would not be in price control as per PP 2002. Currently in price control.
		Ciplox		Yes	
		Ciprobid		Yes	
		Alcipro		Yes	
Doxycycline Capsules	63.35	Microdox	46 %	Yes	
		Doxy - 1		Yes	
Roxithromycin Capsules	97.60	Roxid	49 %	Yes	
Erythro mycin Tablets	95.41	Althrocin	84 %	Yes	
		Erythrocin		No	
Azithromycin	62.71	Azithral	30 %	Yes	
Norfloxacin Tablets	53.09	Norflox	61 %	Yes	
Gentamycin	38.08	Genticyn	33 %	Yes	

(All data as per ORG-AC Nielsen Retail Audit, Oct 2003)

Thirdly, retail market prices are often 1-3 percent of government tender prices. This shows if anything the tremendous overpricing without precedent -- in times of relative peace – in any other industry in the world (See Table 5[9]).. Also this percentage differential in pricing for the public sector and private retail sector is probably true of no other industry in India – or in the world. Would the booming computer industry sell in the market a laptop at Rs 100,000 and to the government tender for Rs 2000 to Rs 3000/-? Would a truck manufacturer sell trucks for Rs 5 lakhs in the market and to the government tender for Rs 10,000/- to Rs 20,000/- even if he had an order of 10,000 trucks at a time? This however is the situation of the drug industry in India.

Table 5: Tender Rates at a Fraction of Retail Market Rates							
Drug Name **(1)**	**Name of Firm** **(2)**	**Tender Rate (Rs)** **(3)**	**Unit** **(4)**	**Mfr.** **(5)**	**Retail Market Price (Rs)** **(6)**	**Over-price Index Col (6)/(3)** **(7)**	**Tender Rate as percent of Retail Mkt. Price (8)**
Albendazole Tab IP 400 mg	Cadila Pharmaceuticals P Ltd	22.60	10×10 tablets	Torrent	1190	52.65	1.89
Bisacodyl Tab IP 5 mg	Lark Laboratories (I) Ltd	16.50	10×10 tablets	German Remedies	717	43.45	2.30
Alprazolam Tab IP 0.5 mg	Bal Pharma Ltd	3.50	10×10 tablets	Sun Pharma	141.5	40.43	2.47
Diazepam Tab IP 5 mg	Pharmafabricon/LOCOST	3.05	10×10 tablets	Ranbaxy	92.5	30.33	3.29
Folic acid and Ferrous Tab NFI	Aurochem India P Ltd	5.89	10×10 tablets	Smith Kline	148.5	25.21	3.97
Amylodipine Tab 2.5 mg	Lark Laboratories (I) Ltd	9.10	10×10 tablets	Lyka	148.5	16.32	6.13

Adapted from: Srinivasan, S. "How Many Aspirins to the Rupee? Runaway Drug Prices", Economic and Political Weekly*, February 27-March 5, 1999.*

Evidence from India's Pharma Industry

Competition does not work in the Indian pharma industry - always. More players in an uncontrolled market have meant only a wide range of prices for the same drugs.[10] On the other hand, you have the same drug being sold by different companies (and sometimes by the same company) at vastly different prices. (See Tables 2-7 and related discussion in Chapter 1; and Chapter 2 for the Anarchy in Retail Drug Pricing in India). There is not even a direct relation between top-selling drugs and real need as per the disease and illness conditions prevalent.

Secondly, the most-selling brand is seldom the lowest priced. The product leader is often the price leader too. (See Table 2, Chapter 1 and related discussion.). If some semblance of competition existed it would have been otherwise. If one would insist marginal revenue is equal to marginal cost – the criteria for perfect competition -- for the pharma company rolling in billions, it is laughable.

Mar`ket Fundamentalism

…Welcome to the World of Market Fundamentalism. To the Final Solution.

Flip channels on television and you can't miss it. Gaggles of elegantly clad and very earnest young men and women speaking breathlessly about The Market (you can hear the capital letters). And of course, the need to 'unleash' its creative energies. It's not only these young who hold this view, though. Several older people do, too. But perhaps they're somewhat tainted, having romanced other gods in the past. This does not, however, induce much modesty in the line up of editor-analysts we're condemned to hearing forever on the theme.

There is no miracle the market cannot perform. Market forces, as Swaminathan Aiyer argued long ago, are great for the environment. Markets are green. We've learned more since then. *Time* magazine's Charles Krauthammer has laid down that while better-off workers are abandoning the less fortunate ones, the market is rescuing the 'once colonized'. It is in fact the lifeline for 'previously starving Third World peasants.'

Markets are also perfect for the field of public health. So perfect that hundreds of elderly American citizens get some exercise each year as a result. The incredible cost of drugs in their country compels them to drive all the way to Canada to buy medicines there. (But wait a minute, that's a distortion of market...).

The market is not merely inseparable from democracy. It *is* democracy…

…Hunger is a function of anti-market systems. Want more jobs? Free the market. Crisis, whether in education or agriculture, is best dealt with by not dealing with it at all. Leave it to the market. Let the market decide. Some analysts now even see an intrinsically anti-caste character in the market.

Welcome to the world of Market Fundamentalism. Reaganomics and Thatcherism fought many crusades for the new religion in the 1980s. India in 1991, along with many others, embraced that world with much enthusiasm.

Source: P.Sainath, 'And then there was the Market', *Seminar*, Jan 2001

Pharma Scenario under Market Failure

Considering the evidence referred to above briefly, and presented in more detail in the other chapters of this book, the Indian pharma scenario, as far as the consumer is concerned, is a failure of the market. As a result of this extreme market failure and failure of regulation in the absence of well-functioning markets, the drug (medicines) availability situation in India is one of poverty amidst adequacy – there is poverty of supply of even essential drugs to the poor despite adequate drug production.. Also the following features obtain in the Indian pharma sector – evidence of extreme market distortions, of profit maximization without bothering about short-term and long-term consequences on people:

1. A significant percentage of drug formulations are irrational. Some are even therapeutically useless, unscientific and hazardous. Irrational combinations rule the roost. The market is flooded with numerous potency drugs, aphrodisiacs, antibiotic combinations, multi-ingredient analgesic combinations, digestive enzymes, cough syrups, and tonics and vitamins of little or doubtful therapeutic value. Ironically, many of these irrational drugs are amongst the top selling drugs. Vitamins and tonics, and other unnecessary and often inappropriate, ineffective and costly nutritional supplements, dominate in terms of sales[11].

2. Drugs banned in several Western countries, and otherwise considered unscientific and/or hazardous, continue to be produced in India.
3. Prescriptions are influenced by aggressive promotion of drug companies. As a result, the patient often does not get the most scientific prescription leading to over/under prescribing[12].
4. This is compounded by inaccurate diagnosis, lack of up-to-date knowledge, unethical practices like receiving commissions for prescribing certain drugs and sponsorship by drug companies of individual doctor's expenses as well as of medical conferences, etc.
5. One upshot is demand is supplier induced. The health market creates and promotes wants. Doctors also set themselves as gate-keepers, with societal sanction, to certify various physical states of being including starvation[13], birth and death.
6. Companies often fail to provide consumers with unbiased information about the drugs they sell. The labels on drug packages frequently omit to mention the mandatory warnings and cautions. Similarly, drugs not recommended for the elderly, for children, for people with liver or kidney impairment do not carry appropriate warnings. Ironically, when these warnings *are* present, the size of the print used to describe the 'contradictions', 'side-effects' or even 'the ingredients' is so small that they can hardly be seen except with a magnifying glass. Only the brand name is well displayed.
7. Although in 1996, the Health Ministry came up with a list of essential drugs, the Chemicals Ministry, which is the nodal ministry for making policies relating to drugs, has not included any clause in the current drug policy (Pharmaceutical Policy 2002[14]) to ensure that a certain percentage of all drug production is used for the production of essential drugs. A National Essential Medicines List (NEML, 2003) has been brought out by the Government of India, presumably as the basket from which to apply criteria that will keep drugs in price control[15].
8. Poor infrastructure for quality control, weak-kneed and poorly staffed regulatory administration and overpricing of several drugs are the rule rather than the exception. The Drug Technical Advisory Board (DTAB), the body whose duty is to opine on the rationality of drugs in India, does not meet as often as it should to advise the government on rationalising the drugs in the market.[16]

Box 1

Guidelines for Rational Use of Drugs

- Prescribing a drug only when genuinely indicated
- Choosing drugs which are effective
- Using single ingredient drugs
- Using drugs indicated for specific conditions
- Choosing drugs which are relatively safe
- Choosing cheaper alternatives.

Steps to rationalize the use of drugs in the market:

* Elimination of new drugs which are expensive and not necessary because other drugs with proven efficacy already exist in the market.
* Elimination of useless, hazardous and harmful drugs which have irrational combinations
* Use of essential drugs list
*Marketing of drugs by their generic name

Source: *A Lay Person's Guide to Medicine. What is behind them and how to use them*. LOCOST, Baroda, 2000

Pricing and Related Matters

9. Drugs (pharmaceuticals) are overpriced as already pointed out.
10. In no country with a world-class pharma industry does the drug administration allow at the same time essential drugs and irrational and non-essential drugs.
11. Most of the lifesaving drugs like that for AIDS/HIV, TB, malaria, cancer, heart conditions are not in price control and are extremely highly priced.
12. The Indian drug scenario of anti-poor pricing is compounded by poor regulation of the medical profession, of the retail pharmacists, of the pharmacy profession, and poor drug control.
13. Also of a serious nature is the lack of serious prosecution of offenders as well as the will to prosecute those selling substandard, sub therapeutic and spurious drugs.

14. The end costs of drug therapy become even more unaffordable because of prevalence of many irrational, unscientific and harmful drugs as also leading to "therapeutic chaos and therapeutic nihilism" in the Indian market and among medical professionals.
15. The serious implications for people's health and therefore national security due to ignoring the public health scenario in the formulation of the pricing and pharmaceutical policy is reiterated with fresh data..
16. Equally alarming in terms of effects on the consumer is the burgeoning field of nutraceuticals – nutrient products positioned by drug companies as therapeutically advantageous. These are extremely overpriced apart from promoting a want and not a need.

Asymmetry of Information

Referring to the pharma market, a doctor friend of the writer said: "In no other situation in life does a consumer buy goods of which he/she has no knowledge, buys on the written recommendation of a second party from a third party; and the second party may charge heavily for doing so; and the second party may also get paid by third party and other parties manufacturing those goods; and bought usually at a time of severe distress with death as a possible threat of non-purchase. Is this not, combined with the above irrationalities, sufficient cause for thorough overhaul of the drug control and pricing system of India?"

The doctor friend is referring to extreme asymmetry analysed by Akerlof[17] et al. In the instant case, the consumer may not get lemons most of the time, but tends to do so for a significant part of the time, and in the absence of regulation of the drug industry and of medical practice, lemons are what a poor person gets on the whole. Lemons in the skin of alphonso mangoes.

There is a difference though with Akerlof who tried to show for instance that 'the market for used cars--because of asymmetric information--is likely to be quite a small market and that other markets with sufficient asymmetric information will, in fact, collapse and will not be there at all. The leading and most obvious such failure is in health care insurance.' In the case of the pharma sector in India, the market exists, it is anything but small, may be even flourishing, but as a paradigm of meeting health care requirements efficiently in the long run, it appears to be a failure. This prevalence of chaos is seen as an argument for health insurance, not necessarily State-guaranteed universal health insurance, with every danger that health insurance premia would be priced out of the reach of the poor.

The effects of this extreme asymmetry need regulation from the government and intervention from a whole lot of other external actors, if justice is to be done and the patient has to be fully cured.

Asymmetry and Rational Choice

Again, it is this asymmetry of information that precludes the possibility of rational (reasoned) action. Rationality in the larger sense as well as in the limited sense used in rational choice theory. In the literature of the latter, human beings are essentially seen as utilitarian, all human action a result of deliberate, calculative strategies, calculating the costs and benefits of alternative courses of action, and talking of getting 'value' for money ("paisa vasool"). This has been now sufficiently shown to be absurd (including famously by Amartya Sen in his description of Rational Fools) in the context of having to explain things like committent, altruism and ideologically motivated behaviour. Of course it is possible to see asymmetry and lack of information themselves as another set of constraints to be factored into before engaging in motivated, rational behaviour. However, at best this is a trivial way of making the theory inclusive and all explaining.

But let us look through the lens of rational choice behaviour in the pharma industry and patient-doctor behaviour. Are doctors rational in choice of treatment and prescriptions? Yes, your average doctor tends to be rational in the sense that he/she would do even irrational (= unscientific) things to maximize self-interest –prescribing unnecessary tests and/or drugs for instance. Also however guiding his/her behaviour is some need for self-preservation as a guild, as well as, at least in some cases, adherence to ideology (in this case the ideology of reason as embodied in the best of medical science.). The medical profession,

especially when it is poorly regulated as in India, seems to be a case of rational behaviour in the economic sense with few willing to subsume Reason (as in scientific logic) in the larger sense to the altar of market forces and commerce. However few in the medical profession, maybe only those at the edge of ethical behavior, truly are calculating in terms of costs and benefits before every action. Recall the popular perception that American doctors always take time and explain where as your average Indian doctor does not do so –the difference is explained by saying American doctors have malpractice suits hanging over them. Rationally calculated behaviour or true concern for the patient? Difficult to say.

Do drug companies indulge in rational choice? Indeed they would appear to be. They do seem to be interested in maximizing profit even at the risk of making unnecessary drugs, at the risk of sacrificing scientific behaviour in the larger sense of promoting irrational therapy[18]. However even here there is some measure of self-preservation in their apparent subservience to the rule of law. A socially responsible corporate at best is seen as an oxymoron, as socially responsible behaviour in many cases of corporations and certainly of drug companies seems to be motivated by self-interest and 'winning' in the market. A drug company seems nearest to the economic paradigm of 'rational' behaviour.

What of the patient? Does he/she indulge in rational/irrational behaviour? This is very difficult to say. The health seeking behaviour and motivations are often guided by self-preservation and that is understandable. But how do I make choices of which physician, which therapy, which drug – whether to take a drug or not or whether to continue with a therapy or not? Here there is a tremendous asymmetry of information. Few patients, if at all, have information that can be understood by them for making decisions about therapy, drug regimens and choice of doctors and treatment facilities. One goes at best by popular perceptions and socially shared evaluations. Much of patient behaviour in the absence of information is irrational and that on the top of irrational, unscientific professional advice proffered doubly so.

A related issue where asymmetry is a real issue is when ordinary patients are selected for clinical trials (say for a trial of an experimental drug) or a trial of a new experimental therapy – theoretically informed consent is taken but how many patients - -and in India these are in many cases illiterate – understand what they are getting into[19].

What of governments' rational behaviour with respect to health? Here again it is clear (to some of us) that a government by spending less on health services and doing precious little or not applying its mind is palpably indulging in irrational behaviour of economic and non-economic kinds.

Amartya Sen in his *Rationality and Freedom* defines Rationality "as the discipline of subjecting one's choices—of actions as well as of objectives, values and priorities—to reasoned scrutiny. Rather than defining rationality in terms of some formulaic conditions that have been proposed in the literature (such as satisfying some prespecified axioms of 'internal consistency of choice,' or being in conformity with 'intelligent pursuit of self-interest,' or being some variant of maximizing behavior), rationality is seen … in much more general terms as the need to subject one's choices to the demands of reason.''

If one takes this more acceptable definition of rationality, the behaviour of most of the actors in the health care scenario of India –drug industry, doctors, and policy makers – are not strictly rational. That is at best their behaviour would exhibit a mix of science and commerce: rationality in the pure economic sense with appropriate rationality in the scientific sense. The latter too, if you would want to be even more cynical, is because of calculations of economic rationality. Patients are forced to be irrational or adopt irrational behaviours by default and lack of choice. The only choice they have is not to approach an irrational doctor but they do not know he/she is one such apriori.

Differential/Tiered Pricing, Ramsey Pricing

In order to obviate the charge of overpricing, pharma lobbies in industry and academia internationally have advocated differential or tiered pricing. Differential or tiered pricing for medicines means basically pricing for different types of markets, that is, a lower price in the poorer countries and a higher price in the richer nations, has been advocated by those who are keen to end the mounting criticism and embarrassment of the

of big pharma corporations and their perceived profiteering. This has some kind of theoretical support in economics literature – the so-called Ramsey Pricing.

Ramsey pricing in its original form meant charging a higher price, the less elastic the buyer's demand - the less elastic demanders paying more and the more elastic demanders paying less. (Price elasticity of demand is defined as the percentage change in quantity in response to a percentage change in price. If a market demand is sensitive to changes in prices, then the demand is elastic. If nobody could care what price a drug is priced and are still willing to pay for it, the market is inelastic.) In theory, and at first glance it looks attractive, but basically it turns out that it justifies monopolies and/or high pricing by big companies. By offering to settle for lower prices in poorer markets (who decides the lower prices would still be affordable to the poor?), the big company effectively shuts off competition and innovation, from smaller generic producers for instance –an eventuality likely to be assured by the onset of tighter intellectual property rent collection devices like the TRIPS and WTO. This in Ramsey pricing literature is considered economically efficient pricing – as the big pharma company can have its cake and eat it too – they can indulge in monopoly behaviour and monopoly pricing, ensure their so called R&D costs are recouped, and yet get by feeling that they are after all not so heartless with regard to the poor. Defendants of differential pricing have argued that Ramsey pricing ensures rewards on innovation by the corporation.

But is it really free trade/free market/perfect competition when you have practically made your market captive to your product (for 20 years in the case of a new drug in the post-product patent India of 2005 and after)? Monopolies with constant rent-seeking (that is patent protection) through newer uses of a drug or newer presentations of a drug are in the long-run –some even in the medium run – are as much as a paradigm of inefficiency as any protected market. Whither perfect competition?

A related question is who or what is free in the 'free market'? Does it imply freedom of some kind? Who then has the freedom –buyer, trader, manufacturer? When, what I consume and at prices is dictated by forces beyond my control, do I enjoy freedom of choice?[20]

Pretence of Certainty?

Much of what we have observed about the economy-related features of the pharma sector hold true of the health sector in India and elsewhere in the world. More germanely, why do policy makers, pharma industry lobbyists and other motivated commentators pretend that the usual rules of economics work in the pharma and health sector: namely of competition driving down prices given especially the asymmetries of information involved. That competition, or what goes in its name, in a deregulated market has allocative and productive efficiency?

Why then do policy makers pretend that the free market will take care of the challenges of health care – of providing accessible and affordable health services and medicines? It is not as if mainstream economics has held steadfast to free market and perfect competition – in fact the work of Akerlof and Nash, Harsanyi and a host of game theorists among many others try to address precisely how economies and markets work in their departures from the idea of perfect competition and complete information.[21]

The idea of free market and the associated virtues have not been realized in the health sector. Neither in this country nor in the so-called predominantly market economy countries has it worked, for the poor; and has certainly not demonstrated the virtues of allocative efficiency claimed, let alone promoting equity. Active and ongoing state-led intervention and regulation is the rule rather than the exception in almost all the so-called predominantly market economy countries, that is in countries where the free market philosophy is the dominant economic paradigm and is considered a given. While on the other hand there is no great evidence to conclude in general that State-sponsored regulation and or intervention is more effective and efficient in general, it can certainly be argued that State-sponsored or State-led regulation is certainly more responsive to the real health needs of people, like it or not thanks to vote bank politics[22]. And why not regulation in health services and the pharma sector given that we have some of regulation in telecom (TRAI for instance), insurance (IREDA), and the stock market (SEBI)? Drugs are equally if not more crucial for the common person. Why then this pretence of certainty that free market and competition

work in the health sector? Pretence of Certainty of a consummation devoutly to be wished, if not prescient Knowledge of an eventuality foretold?[23] If the free market did not exist, it would be invented and along with it a suitable history and mythology.

The Common Minimum Programme (CMP) of the new government says, inter alia, "the UPA Government will take all steps to ensure availability of life-savings drugs at reasonable prices. Special attention will be paid to the poorer sections in the matter of health care. The feasibility of reviving public sector units set up for the manufacture of critical bulk drugs will be re-examined so as to bring down and keep a check on prices of drugs."

In the absence of universal and free access to health services for the poor, there is no alternative but to sensibly regulate prices of drugs like in the so-called free market countries, taking into account availability of reasonable profit margins for drug companies. The case of free market in the pharma and health sectors seems to be one of poor empirical record.

Whose interests do we give priority to? Voters? Or 'The Market'?

…Behind the stock market is the larger notion of `The Market,' a much wider political concept. And the conflict between that and democracy is very real.

The Wall Street Journal knows this. "Democracy is perverse," it whined about the poll results on May 19. "Although it is natural for the U.S. to suggest that all countries should embrace democracy, the lesson from India is that Western countries cannot be dogmatic about elections."

"As India's election will testify, democracy is not always supportive of coherent economic policy and prosperity." (Read: the voters are too dumb to know what's good for them.) On countries not yet at India's level, the *Journal* has some advice. The West "should be more hesitant about promoting political competition... " For alas, that "could destroy the leadership" that pursues vital economic change.

Maybe the *Journal* worries about post-June Baghdad? An elected government that might grumble when Dick Cheney's cabal plunders Iraq's oil? The *Journal*'s dilemma is a classic one. Market fundamentalism *versus* mass democracy.

It's a dilemma that has our own market *jihadis* seeking martyrdom. They go a step ahead of the *Journal*. With them, it's death to the infidels. "In 2004," writes a leading editor, "no government that the markets see as hostile can survive." The rhetoric of the rabble "has to be tempered to provide for the sensitivities of Dalal Street."

"The markets have spoken," declared another top Indian newspaper. But God is a bit edgy. "The markets are jittery," explained one business editor on television. "We need to soothe their nerves." (Hush now, the markets are asleep. Don't start off something by speaking aloud).

So, did 400 million citizens and voters queue in blistering heat of 40-plus to soothe the fretful nerves of the market? Some of us thought they were asserting their sovereignty. To demand the reforms they really needed. And to pass judgment on the market-driven reforms governments have followed. So what happens when poll verdict clashes with market edict?

The Wall Street Journal's answer: Don't waste time on the electorate. "The lesson of the past week is that if India truly wants to become an economic power it has to pay heed to the global voters known as investors, in addition to its own voters at home." We can listen to our people, says the *Journal* (gee, thanks guys) so long as they vote the way the investors want them to.

Surely, this is a regression? For years, the *WSJ* and others have argued that not only are markets intrinsic to democracy, they are democracy…

There is no miracle The Market cannot perform…

…Hunger is a function of anti-market systems. Want more jobs? Free the market. The crisis in agriculture is best dealt with by not dealing with it at all. Leave it to the market. Given its all-knowing wisdom, maybe the `The Market' ought to go out and seek a popular mandate….

…. Meanwhile, the media assured us all these years that the Indian Left is irrelevant. Unless it can learn from China. (China's CEO is our CEO?) Yet, the same pundits tell us that a couple of sentences from the irrelevant Left was enough to trigger "Bloody Monday."

There you are. Revealed — the secret of how to make the markets dance up and down in a frenzy….

…Market-worship is not novel. But the insane primacy it now gets is relatively new. Among other things, it reflects the ever-growing corporate links of the media. Links that spur them to mislead the public for their own profit.

"Markets are all about sentiment and confidence," gushed one TV anchor. "We must give them the confidence that governments will listen, that their interests will be honoured."

Voters, too have sentiments. Often very anti-market ones. They too wish to have confidence that governments will honour their interests. Whose interests do we give priority to? Voters? Or `The Market'? The corporate media have given their response to that question. The new Government still has time to find its answer.

Source: 'McMedia & Market *jihad',* P.Sainath in *The Hindu*, June 1, 2004

---

[1] A briefer version of this chapter and related issues is available in *Impoverishing the Poor: Pharmaceuticals and Drug Pricing in India,* LOCOST/JSS, Baroda/Bilaspur, Dec 2004. Hereafter LOCOST/JSS, 2004. Author can be contacted at sahajbrc@icenet.co.in

[2] The term 'Markets' is currently being used as a synonym for the stock market. But we use it in the generic sense: the market as in the free market worldview in general.

[3] Of course Hayek's defense of free market and what he called decentralized market socialism was far more nuanced than the above quote suggests.

[4] For more on this see:LOCOST/JSS, 2004.

[5] See the article 'Drug Price Control: Principles, Problems and Prospects' by Chandra Gulhati, Editor of MIMS in *MFC Bulletin*, June 2004). Also Chapter 3 in LOCOST/JSS 2004

[6] Source: LOCOS/JSS, 2004

[7] V.Roy, S. Rewari (1998). "Ambiguous Drug Pricing: A Physician's Dilemma". *Indian Journal of Pharmacology***,** 30: 404-407**.**

[8] From LOCOST/JSS 2004

[9] From LOCOST/JSS 2004

[10] See the article 'Drug Price Control: Principles, Problems and Prospects' by Chandra Gulhati, Chapter 3 of this book.

[11] See 'Marketing of medicines in India: Informing, inducing or influencing?' by Dr. Chandra Gulhati, BMJ 2004; 328:778-779 (3 April). See also for instance: Pharmaceuticals: Restrictions in Use and Availability (WHO/EDM, 2001); Guide to good prescribing: A practical manual (WHO/EDM, 1994); WHO Policy Perspectives on Medicines 2002, June:The Selection of Essential Medicines (WHO/EDM, 2002); The Use of Essential Drugs: Ninth Report of the WHO Expert Committee (WHO/EDM, 2000). See also for analyses of Indian situation prevailing:

a) Desai, S.V. 1990. 'Anaemia and Oral Haematinic Preparations'. *Drug Disease Doctor*; Vol. 3, No.2.
b) b) . Desai, S.V. and R.S. Desai. 1991. 'Rational Cough Mixtures: Analysis of Proprietary Preparations'. *Bulletin of Society for Rational Therapy*, Vol. 3, No. 5.
c) Modak, Shishir. 1984. *Rationality Analysis of Anti-diarrhoeal Preparations*. Medico-Friend Circle, Pune.
d) Phadke, Anant. 1985 'Scientific Scrutiny of Over the Counter Drugs'. *Medical Service*, Octo-Nov, pp. 30-42.
e) Phadke, Anant and Deepak Deshpande. 1992. 'A Review of Haematinics Marketed in India'. *Drug Disease Doctor*. No. 28, pp. 88-92.
f) Rane, Wishwas. 1994. 'Ayurvedic Drug Formulations: Are They Rational?' Paper Presented at the IOCU-ACASH Workshop on Consumer Education, Drugs and Media, April 3-4, Bombay, p.5.
g) Uhrig, Jamie and Penny Dawson. 1985. *A Rationality Study of Analgesics and Antipyretics.* Medico-Friend Circle, Pune.

[12] *Surviving the Pharmaceutical Jungle* by Nobhojit Roy and Neha Madhiwalla is a new WHO funded study on the unethical promotional practices of pharma companies in India. See also the Jan-Mar 2004 of *Issues in Medical Ethics.* For the study see www.issuesinmedicalethics.org/docs/Pharmrpt.pdf

[13] Thanks to Sunil Kaul, Bongaigon for pointing this out.
[14] For Pharmaceutical Policy 2002 and previous drug price control policies see http://www.nppaindia.nic.in/index1.html
[15] For National Essential Medicines List (NEML) 2003 see http://www.expresspharmapulse.com/nedl.pdf

[16] The failure of the the Drug Controller of India to make public the brand list of the formulations banned, the reasons thereof and the alternatives available, continues to be a major block in spite of Supreme Court directions. For instance, very few doctors and chemists are aware that B1, B6, B12, have been permitted only for acute peripheral neuritis; analgin for severe pain only when not responding to other pain killers; and that oxyphenbutazone and phenylbutazone is permitted only for acute ankylosing spondylitis or acute gouty arthritis. Most doctors and consumers are not aware of these restrictions, as DTAB decisions have not been communicated to them.

[17] Akerlof, George A., "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism." *Quarterly Journal of Economics,* 84(3), pp. 488-500, 1970
[18] "…Companies find it hard to generate prescriptions based solely on science. Relying on published datasheets issued by the inventing companies reduces the scope of a drug because of the inconvenience of contraindications, precautions, drug interactions, and adverse effects. Sometimes, for purely promotional purposes local data are generated, as happened with letrozole, which was given to over 430 young women to test its efficacy in inducing ovulation. Without new molecules, companies create "novel" products by mixing two or more medicines in a fixed dose combination. Such combinations are often irrational, and some pose danger. Short term use of combinations of quinolones with imidazoles for undiagnosed diarrhoea is encouraging *Salmonella typhi* resistance to quinolones**…" (**Chandra Gulhati in 'Marketing of medicines in India: Informing, inducing or influencing?' in *BMJ* 2004; 328:778-779 (3 April),
[19] See for instance 'Drug trials and questions', *Frontline*, Sep 14-27, 2002, regarding the controversy surrounding Danish pharmaceutical multinational Novo Nordisk's phase 3 trials of ragaglitazar (NN622/DRF-2725), a dual-action insulin sensitiser.
[20] See Garlikov who deals this question at greater length in his essay on freedom in *Ethical and Philosophical Foundations of Economics* at http://www.garlikov.com/EPFE/chap24.htm

[21] There is a good case for describing the normal health seeking behaviour in India as a many person game with incomplete information and with players trying to maximize utility under incomplete information conditions. Mainstream economics in as much as it addresses the departures from free market, it is always as if it were an aberration that needs to be corrected.

[22] The drug distribution services of the Tamil Nadu Medical Services is a kind of positive market intervention by the State and one which no successive government would like to reverse for fear of public wrath. And if one factors in better access to medicines for the poor in one's definition of allocative efficiency, the TNMSC, other things notwithstanding, is a good candidate for an effective intervention, in which poor people benefit ('better off than before"). A similar argument can be made for its mid-day meal programme.
[23] With apologies to Hayek