

Technological Dependence and the International Pharmaceutical Industry

— A Case Study Part II

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The first part of this study, published in our February 1977 issue, dealt with the main features of the pharmaceutical industry, including the level of concentration, the role of the transnational corporations, the extent and nature of the market power held by the international drug firms, and the implications of such power for the developing countries. In this concluding part the policy options for developing countries are examined: particularly a framework of policies for acquiring the necessary technology and for establishing pharmaceutical industries in the developing countries.

POLICY OPTIONS FOR DEVELOPING COUNTRIES

The essence of the problem facing developing countries may be stated thus: they want the benefit of having the best drugs available to modern medicine; they want to import or produce them at the lowest possible cost, using—wherever necessary—the results of research conducted abroad; they want to bring the drugs to consumers with the lowest possible expenditure on marketing and with the least possible distortionary effect on the flow of appropriate information to doctors; they want to eliminate any possibility of suppression of domestic research and entrepreneurship while ensuring that drugs are of the highest quality.

Clearly a major area for policy would be to investigate the scope for extending local R and D by channelling more funds into activities which are particularly relevant to the countries concerned, and by achieving a better co-ordination between academic, research and industrial establishments. This does not mean that foreign technology can be supplanted; in fact it seems quite likely that developing countries will continue to be dependent on im-

ported know-how in the drug industry for a long time to come. In this section we shall concentrate on options open to them to minimise the costs of the import of foreign technology; first with policies to deal with the technological and with the marketing aspects of the transfer; and then with some of the problems of implementing such policies.

Policies for Reform

The possibilities of remedying the abuses inherent in the present system may be discussed under two headings. Those dealing with the technological transfer process and those dealing with the marketing and information process.

Technology Transfer. There are several policy options open to developing countries to reduce the present costs of acquiring drug technology through direct investment by MNCs (Multi National Corporations). We may rank them in increasing order of stringency, starting with an initial position, as at present, where production is undertaken mostly by foreign MNCs.

Tighter Regulation of Transfer. A strict control on technology contracts, transfer prices, royalty payments and various restrictive practices can reduce the direct financial cost of technology transfers without changing the present structure in any important way, unless the government also chooses to impose limits on profit repatriation which are lower than the returns earned by the industry in other countries. In such a case the MNC may well decide to leave the country. The limits to the efficacy of such policies are set partly by this sort of consideration and partly by the problems of checking transfer prices and controlling MNCs generally.

Buying Drugs from Non-patent Observing countries. It may be possible to supplement MNC production by (i) importing finished drugs cheaply

from countries like Italy (or the Socialist-bloc) where some firms can supply drugs on the basis of copied technology, or (ii) setting up local production facilities and import intermediate chemicals cheaply from them. For those developing countries which do not have the industrial background required to undertake local manufacturing, imports of cheap finished drugs may well be a good solution. The limits to such policies will be set by the ability of the firms in question to supply the latest drugs in sufficient quantity—not a serious problem—and possibly by problems of quality control. For countries which do have local production capability, it would be undoubtedly cheaper to scout the world market for the cheapest intermediates. This may be done without getting rid of MNCs altogether and without renouncing the patent system; all that would be required would be to circumscribe the activities of existing MNCs (perhaps selectively according to their social cost) and to use some compulsory licensing provision with regard to patents (such as those contained in the 1970 Indian patent law). Even the US government has at some time indulged in such policies, for instance in importing some drugs from Italy for its military needs.

Abolishing Patents. The abolition of patents would give local competitors of MNCs a free hand in copying foreign technology. There would still be no need to ban MNC activity, but it may be hoped that competition would bring down overall drug prices. The Italian experience does not, however, hold out much hope for success. The marketing strength of MNCs is such that they are able to keep large market shares, and drug prices are no lower than in patent observing countries.

Abolishing patents and banning MNCs. The final alternative would then be to opt out of the patent system and undertake wholly local production, in public or private firms, on the basis of technology copied freely from developed countries. It goes without saying that this would only be possible for countries which have the requisite industrial ability. For countries like India it is quite conceivable: the technology of drug production is relatively simple to copy and economies of sale are insignificant, so that

the difficulties which arise for such efforts in other industries should not be too formidable. The important problem is that of quality control. A number of small producers in India, for instance, manufacture drugs of variable quality or adulterated drugs and recent Pakistani experience (mentioned below) is salutary; this can be dealt with either by effective inspection or by permitting only public sector production. In most cases the latter option would be preferable because inspection is always liable to abuse and because a lower rate of return acceptable on public sector industries would permit a lowering in drug prices. If the possibility for co-operative action between developing countries were extended, the scope for self-reliant production would of course be considerably greater, and there is no basic reason why all developing countries could not do without MNCs in this sector.

Marketing. The problems of the present marketing system arise from the premium placed on brand names and the cost and confusion of information resulting from promoting brand names. Reforms in the marketing structure must, therefore, tackle this basic fact, and they must also necessarily substitute a system of information on new drugs, their prices and effectiveness, for the present one.

We can think of two alternative marketing systems: private (as at present) or state-controlled. If the private marketing system is retained, the following reforms would be required:

Abolition of brand names. If the MNCs are retained or if local production is undertaken by private firms, the abolition of brand names would not by itself eliminate the possibility of product differentiation and may not lower prices. The market leaders may still promote their drugs on the ground that a generic product made by them is better than that of their competitors; this would occur as the manufacturer's identity could be distinguished and local producers had inadequate quality control.

In Pakistan brand names were recently abolished in favour of generic names, and advertisements of the following sort were used: Two identical bottles are shown with the caption "They may look alike.....but Pfizer knows the difference. One of

them does not live up to Pfizer's quality standard. And because Pfizer takes no chance at all, all products undergo strict quality control before they reach you. That's why when a doctor recommends a Pfizer product you know he is doing the best for you". (From the *Pakistan Economist*, April, 20-26, 1974.) Needless to say, price differences persisted between MNC and other products, and the sales of MNCs actually shot up following an influx of low-quality or spurious drugs from small-scale indigenous producers. Available evidence, reported in several issues of *International Pharmaceutical News*, published by SCRIP, London, shows that the objective of reducing prices was not achieved.

preserve brand names (foreign or local) for use in export markets, if this is necessary to promote exports in competitive conditions.

Provision of information. If private marketing is retained developing countries would be well advised to exercise strict checks on advertising and promotion and to provide supplementary information on drug misuse and effectiveness. This is not an easy administrative task, but it would be rendered much easier if information gathered in these areas in developed countries were tapped by less-developed ones. As we have seen, however, the situation in the developed countries themselves is far from ideal, so that it is unlikely that

The primary objective in formulating policies on drug production, research and development, marketing and distribution should be to provide appropriate drugs to as wide a segment of the population as possible. Under the present system the availability of drugs is essentially limited to the developed countries and to a small elitist segment in the developing countries. Moreover, available drugs reflect the health needs of the population in the developed countries, which are in several respects quite different from those in developing countries. A part of the problem is due to the inadequacy of health delivery systems in most developing countries, especially as far as the rural areas are concerned. However, the major difficulty lies in the inadequate development, transfer and adaptation of such technology for the needs of the developing countries. ... "Although there are some basic economic and technological constraints on achieving domestic self-sufficiency in drug production which can be adequately coped with only by the largest and most industrially advanced developing countries, there are nevertheless various steps which can be taken by all countries in order to alleviate to some extent the harmful effects arising from the present system of drug production and distribution."

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The replacement of MNCs by local private firms would not resolve the problem, since the latter would end up using the same marketing tactics as the former. An effective policy must therefore abolish all possible means of product differentiation; the consequence of this, however, may well be that profitability is so reduced below international levels that MNCs decide to leave the country. If local industry is incapable of shouldering the burden, therefore, the country may necessarily have to preserve MNCs and their sources of market-power. It may also be necessary to

less developed countries will fare much better.

The alternative to private marketing is to replace it with a wholly government marketing and information system. This could be operated in conjunction with privately-owned production or with public production. In the first case, the government buying service would negotiate all the prices with the manufacturers, ensuring them a 'fair return' on their investments,* undertake to distribute the drugs only by generic names, and provide comprehensive information

* A reform of this sort was proposed for the UK by the Sainsbury Committee (1967) but was never implemented because of resistance by the drug industry and by the civil service. See the interesting study of this by Lang (1974), *The Politics of Drugs*, Lexington.

to debtors. The problem of assessing 'fair returns' would be enormous, given transfer pricing practices and the high international profitability of the industry; again, the outcome of strict policy may be a withdrawal of MNCs.

In the second case, with public sector drug production, the costs would be minimal and the freedom to use socially desirable marketing maximum. What we said above about using the results of clinical tests and investigations in developed countries applies here just as much as to the regulation of private marketing. The system of personal visits by representatives may have to be retained, but the flood of free samples, literature and the other paraphernalia of promotion could be substantially reduced.

The optimum combination of technological and marketing policies would depend crucially on the nature of the developing country itself and on the possibilities for international co-operation. Some reduction of costs is possible in practically every economy on its own, but the options open are much larger and the savings much greater in those which are industrially and administratively more advanced and in circumstances where co-operative action is feasible. The situation which appears, at least in principle, to offer the maximum benefits is that of state production and marketing, and the least is that of regulation of the existing structure.

Implementation of Policy

The possibilities of implementing any reform depend not only on a country's economic position but also on the freedom it possesses internally and externally for political manoeuvre. The drug industry has proved itself to be one of the most powerful industrial lobbies in both developed and less-developed countries, and has succeeded, often in conjunction with domestic industrial and civil service interests, in blocking serious moves for reform. The best example in developed countries is that of the United Kingdom, where a Labour Minister's move for changing its operations in accordance with the relatively mild proposals of the Sainsbury Committee were blocked by the ABPI (Association of British Pharmaceutical

Industry), the producers' union. As Lang concludes, "All the evidence points to the conclusion that the ABPI wields too much influence, has accumulated too much expertise, and has become too entrenched in the bureaucracy of the government for the elected representatives of the people to deal with it effectively..... entrenched pressure group interest like the ABPI is not the repository of the public good—it is limited to speak for its own narrow constituency. To the extent that the private interest replaces the public interest then the democratic process suffers in direct proportion". In the US serious criticisms of the industry were launched as long ago as 1960 by the Kefauver Committee, yet the latest investigations under Senator Kennedy show that all the fundamental problems are still present. In fact, some doctors and research workers have even alleged at the latest hearings that the Food and Drug Administration has been subjected to "undue pressure to secure approval of new drugs and that the FDA has been lax in dealing with applications to market drugs that have been questioned on safety grounds".

In the case of less-developed countries, information is understandably scarce, but scattered evidence from India shows, for instance, that foreign drug firms were in the early stages able to block a Soviet offer to set up a plant to produce cheaper drugs in the public sector, and that they were able to delay a reform of the patent system for many years, until a law was finally passed in 1970 which still did not achieve the original aim of abolishing patents. Recent proposals for reform put forward by a government commission (the Hathi Committee) have also been violently criticised by the various representatives of the industry, and the most far-reaching recommendations now have little hope of being implemented. No doubt such instances can be found for many other developing countries where the governments are less stringent in their controls over the private sector than in India.

The implementation of basic reform in the drug industry may, therefore, encounter organized opposition from the industry itself (perhaps from the medical profession) as well as from

the defenders of private enterprise as a whole, who would argue that a state takeover of production and marketing coupled with a free use of foreign technology, was tantamount to an attack on private property. It would probably encounter similar opposition from the home countries of the drug MNCs, whose interests lie in preserving the international structure of the industry while making some minor domestic reforms to counter its worst effects. Whether or not all such opposition amounts to a *real* constraint on policy would obviously depend on the country and the nature of its economic and political system. It may simply be noted in general that the potential constraints cannot be ignored and reforms must not be recommended in a political vacuum.

Conclusions

We have tried to show in this paper that the developing countries pay a heavy social cost for technological dependence in the pharmaceutical industry. This cost is in part the consequence of certain intrinsic characteristics of the international drug industry in all areas of its operation, and in part the result of the less-developed countries' special position *vis a vis* the developed countries. Any far-reaching reform to minimise the costs of dependence must involve the developing countries in breaking loose of the powerful technological and marketing grip of the drug MNCs, and in much greater self-reliance in terms of the production of drugs, their distribution and their promotion. More modest reforms may reduce some of the minor costs, but the structure of dependence is so multifaceted and complex that it is difficult to break at a single point. A wholesale reform is, however, far from easy, for political as well as economic reasons, and is not feasible for every country to undertake on its own. Increased co-operation between developing countries would, however, greatly increase their freedom for manoeuvre and their ability to reduce the costs of dependence. The problems raised are urgent and of great social importance, and in view of the human cost involved it is vital that reforms are undertaken without delay. Prevarication can only serve to worsen the dependence on MNCs and increase the cost of their operations.

