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Resources for Social Development: Additional and Innovative Measures

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Abstract

This paper considers various ways of securing and retaining additional resources for social development: in many cases (but not all) with the help of joint international action. Beside outlining methods for increasing public revenue available, it considers the acquisition of resources through financial intermediation and community mobilization and through incentives to commercial enterprise for appropriate research, and also explores how the erosion of existing sources of public finance can be resisted and the use of public resources may be more effectively secured for social development through tying revenue to outlay, or at least to the relevant level of government, and through fiscal stabilization.

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RESOURCES FOR SOCIAL DEVELOPMENT: ADDITIONAL AND INNOVATIVE MEASURES

Introduction

Various ways of securing and retaining additional resources for social development are explored in this paper.

The following items numbered P1.1 to P3.5 are presented as priorities for consideration by individual governments, and by the world community, under three separate heads relating to whether international action is required and their degrees of political difficulty. From within those groups, P1.1-4, P2.1-3, and P3.1-5 are concerned with tightening government revenue systems in the face of globalization, corruption, and international crime. P1.8-9 cover opportunities for taxation (including local taxation) with peculiar advantages that are often not fully exploited. P1.5-7 deal with ways of channelling labour and capital into social development that require public finance only for pump-priming, and for creation and maintenance of management capacity. P2.4-5 concern mobilizing existing research resources and technology for meeting the health needs of the world's poor. P1.10 and P2.6-7 are directed to fiscal (and general economic) stabilization, which is often a precondition for safeguarding public expenditure on poverty and social development.

P1. Measures suitable for immediate action by individual governments acting alone:

- P1.1 Transparency, and the minimization of executive discretion, in tax law and administration, principally to reduce the opportunities for both corrupt and innocent erosion of tax receipts;
- P1.2 Removal, in all countries retaining them, of tax allowances for bribes paid in foreign countries;
- P1.3 Legislation in each country to make bribery in foreign countries a criminal offence;
- P1.4 Confiscation of funds illegally acquired, and blocking of international transfers of funds under reasonable suspicion of being illegally acquired; to this end, legislation requiring banks and financial institutions to supply certain types of information (under safeguards) to authorized public authorities;
- P1.5 Progressive extension of microfinance to the entrepreneurial poor, with the medium-term aim of moving to reliance on commercial finance for funding it;
- P1.6 Suitable intermediary arrangements for directing private funds to private house-building;
- P1.7 Maximum scope and encouragement for community mobilization directed to the provision and maintenance of local infrastructure, with a readiness to seek the cooperation of non-government organizations both national and foreign;
- P1.8 Full exploitation of the possibilities of taxes precisely targeted on the site-value of land and the rents of other natural resources;
- P1.9 Legislative authority and encouragement for the arms of government responsible for local taxation (a) to apply local site-ownership levies based on the increase in property values arising from the extension or improvement of local infrastructure, and also (b) to charge property developers in advance for the costs of the additional infrastructure that their projects will entail.
- P1.10 Where short-term capital inflows seem likely to become important as a source of instability, fiscal arrangements in place to make it possible to discourage them.

P2. Measures that require international negotiation and construction of institutions, but probably face only moderate political obstacles, so

that such preparation can start now:

P2.1 Negotiation of limits on the form and extent of direct-tax incentives to inward investors;

P2.2 Negotiation of downward limits on the effective rates of corporate taxation;

P2.3 Formation of an embryo secretariat for promoting international cooperation in tax matters;

P2.4 Mobilization of commercial enterprise---especially in pharmaceuticals---to develop appropriate technological solutions to certain major disease problems of low-income and middle-income countries at manageable cost, for example through an offer by the world community to guarantee, by underwriting, markets of specified extent at specified price maxima for solutions meeting specified criteria.

P2.5 Clear definition and broad interpretation of escape provisions in the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement that provide on certain conditions for normal patent rights to be circumvented; and encouragement, in the case of medicines essential to public health, for full use of these escape provisions by developing countries, with respect especially to production and export-import of products under patent;

P2.6 Development of more effective international incentives and insurance for stabilization of fiscal expenditure in countries heavily dependent on primary exports;

P2.7 Machinery (with the purpose among others of stabilizing fiscal expenditure) for temporarily blocking international capital movements that threaten excessively rapid changes in effective exchange-rates of particular currencies.

P3. Measures where action is of great importance, but where international agreement is needed, and obstacles of perception or inertia have probably to be

overcome before substantial steps can be taken:

P3.1 Movement to a point at which all transnational income from the services of capital and know-how are subject in the first instance to withholding tax at an internationally uniform rate at source, whatever subsequent adjustments may be made for ultimate distribution (a) of the ultimate burden among persons according to residence, and (b) of the proceeds among governments;

P3.2 Negotiation of a formula based on objective criteria for dividing transnational corporations' liability for profits tax among jurisdictions;

P3.3 Progressive negotiation of changes in national legislation to make possible (under suitable safeguards against inappropriate use) a system of exchange of information among tax authorities about the tax liabilities of transnational-income-earners under their respective jurisdictions;

P3.4 Negotiation toward standard definitions of profits for corporation-tax purposes;

P3.5 Establishment of an international tax organization, with the function (among others) of adapting and developing existing international tax conventions and of arranging and championing the negotiation of tax standards and practices appropriate to a globalized economy.

Note: Insertions such as [P2.3] in the text refer to the priority items above.

Additional sources to be tapped for social development

There are plenty of additional sources waiting to be tapped for the social development of the world's poor---available if governments individually and the international community can be sufficiently motivated to tap them. They can be realized through transparency, and the minimization of domestic discretion, over individuals' tax liabilities; through rudimentary international cooperation in tax matters in order to prevent tax erosion; through fundamentally reforming law and practice in the taxation of

transnational income in order to reduce evasion and avoidance; possibly through forms of internationally coordinated taxation; through providing incentives to commercial enterprises for research and development appropriate to the major health and nutrition problems of developing countries, while still allowing medicines essential to public health in poorer countries to be available at close to unit direct cost; through blocking demand and opportunity for corruption in tax administration and public contracts and ending any easy run for money-laundering; through smoothing the way for private funds to be channelled as loans directly or indirectly for the benefit of the poor; through fully and accurately taxing the use of natural resources; through relating local levies individually to local infrastructural benefits and costs; through removing unfair and unproductive subsidies from government activities; through various means of reducing the massive technical inefficiencies typical of infrastructural services and of state enterprise generally; and through encouraging and catalysing community participation in development projects.

Because social expenditures are especially vulnerable to fluctuations in government spending-power, **fiscal stabilization** is highly important to maintaining them. Here linked national and international measures are required.

Inevitably a number of these devices entail a burden on someone, or political costs, or both. But the governments of the world individually, and even more if they will act together, can---by sensible choices among the variety of paths on offer---**keep both economic burdens and political costs low.** Some moves will need extensive negotiation and institutional construction before they can be implemented. Some, though perhaps politically impossible now, are potentially in the interests of all nations and need to be kept on the agenda for a more suitable time.

The approaches outlined in this paper do not for the most part depend on new ideas. They are *innovative* in the sense that they are not yet practised in many of the situations in which they might be useful. Some are *additional* in the sense that they could well be applied without reducing any other measures for

tapping or securing resources for social development.

Devices are worth considering as extra ways of providing resources for social development if they:

- A Reduce tax-degradation (the erosion of effective tax rates resulting from competition among countries to attract inward investment); or
- B Reduce tax-evasion or tax-avoidance; or
- C Divert public or private financial, technological, or research resources by broadly equitable means to the benefit of poorer countries and people; or
- D Are wholly or largely self-financing because they enable private choices to be more effectively fulfilled, with no need, or relatively small need proportionally, for use of public revenue; or
- E Raise or release extra public revenue without significantly discouraging enterprise, effort, or saving, or otherwise distorting resource-allocation; or
- F Raise or release extra public revenue in ways that are, or can be made, broadly equitable and politically acceptable; or
- G Raise extra public revenue in ways that actually improve resource-allocation; or
- H Help safeguard social outlays by tying their funding to them, or at least directing it to the level of government responsible for them; or
- J Help safeguard social outlays by stabilizing fiscal expenditures.

One or more of these advantages (indicated by the appropriate letters in square brackets) is involved in each of the measures introduced below.

They are classified under the following headings.

1 MEASURES REQUIRING INTERNATIONAL COOPERATION

1.1 Conventions to limit tax-erosion arising from 'tax-competition' [A]

1.2 Reform of taxation of transnational income [B, C]

- 1.3 Internationally-coordinated taxes [E]
- 1.4 Mobilizing commercial research resources for appropriate health technology [C, D]
- 2 STARVING AND MILKING
CORRUPTION AND
INTERNATIONAL CRIME
 - 2.1 Transparency and rule-of-law [A, B]
 - 2.2 Removal of tax allowances on foreign bribes, and criminalization of foreign bribes [B]
 - 2.3 Action on money-laundering: information requirements and confiscatory provisions [B]
- 3 SELF-FINANCING MEASURES:
INTERMEDIATION FOR BENEFIT
OF THE POOR [C, D]
 - 3.1 Commercialized microfinance
 - 3.2 Intermediation in housing finance
 - 3.3 Indexed bonds in small denominations
- 4 LEVIES ON RENTS OF LAND AND
NATURAL RESOURCES [B, E, F, H]
 - 4.1 Taxes on the rent of resources other than land
 - 4.2 Taxes on rental value of land ('unimproved' land value)
- 5 VALORIZATION AND DEVELOPMENT
CHARGES: LINKING LOCAL
LEVIES TO BENEFITS AND
COSTS [E, F, H]
 - 5.1 Valorization
 - 5.2 Development charges
- 6 REFORM OF PUBLIC-ENTERPRISE
PRICING AND MANAGEMENT [E, F, G]
- 7 COMMUNITY MOBILIZATION [D]
- 8 FISCAL STABILIZATION TO
SAFEGUARD SOCIAL EXPENDITURES [J]
 - 8.1 Cushioning primary-export economies
 - 8.2 Convincingly killing the 'rapid-capital-flight' bug

1 MEASURES INVOLVING INTERNATIONAL COOPERATION

1.1 Conventions to limit tax-erosion arising from 'tax-competition'

International competition for inward investment encourages *tax-degradation*, in the form of (a) the lowering of rates of corporate tax; (b) statutory direct-tax concessions to inwards investors; and (c) 'flexible' provisions allowing for executive discretion to offer further concessions. The last of these provides a fertile field for corruption and is considered below under '2. Transparency and rule-of-law'. All three act to 'compete away' tax revenue. This process is not economically efficient. There is no reason to think that the jurisdiction that gives away most to the investor is allocatively the best. Nor is there any strong reason to think that a lower tax all round will enhance production in such a way as to increase the revenue collected at any given tax rate. Where the taxes concerned are based fairly accurately on the economic rent of the natural resources used, there is no presumption at all that reducing them will increase economic efficiency in any way.

So there may be gains in revenue all round if each government takes action (a) **to restrict as far as possible executive discretion** in the awarding of tax concessions to investors [P1.1]; and under international agreement (b) **to restrict the nature and extent of the direct-tax concessions** that will be prescribed under legislation [P2.1]; and (c) **to set a lower limit to effective corporate-tax rates** [P2.2].

1.2 Reform of taxation of transnational income

Tax on transnational income is full of holes.

The present system for taxing transnational income is wide open to *avoidance* and *evasion*.

However, there are simple ways in which the system might be reformed, provided there were enough agreement among the major economic and financial powers. These reforms could greatly reduce avoidance and evasion; there is no reason that the tax revenue of any country (other than possibly some of the present tax-havens) should be reduced as a result; at the same time they have the *potential* at least of transferring revenue differentially to poorer countries.

What is needed to make the system watertight?

To minimize evasion, (1) income should be taxed as far as possible in the first instance at source; and (2), where two tax authorities have claims on the same income, each should know what has been declared about that income to the other. To minimize avoidance, (3) the jurisdiction under which income is to be taxed should be determined by clear objective tests.

None of these three conditions is fulfilled at present.

(1) The basic model underlying the present treatment of transnational income from *capital and knowhow* (interest, dividends, royalties, management fees) is that it should be taxed in the country of the income-earner's residence. There are large exceptions to this in practice; but much income, especially interest, remains untaxed in the source country, and much of the rest is subject there only to withholding taxes at low rates. It is likely that much income *not taxed in the source country is not declared in the country of residence* and hence not taxed at all.

(2) There is very limited exchange of information among national tax authorities about individual taxpayers.

(3) Corporations that derive their income from more than one country are supposed to divide it among jurisdictions for tax purposes according to the proportions generated in each country. But this leaves large scope for judgment on the part of the taxpayer; one tax authority normally does not know what has been declared to the others; and there is evidence that the discretion thus given to the taxpayer is a means of considerable avoidance and probably some evasion [Tanzi, 1995, pp.101-3].

Six measures to improve the system

These deficiencies might be overcome by international agreement to the following six reforms (E1-6).

- E1 Income would be taxed in the first instance as near to the source as possible.
- E2 Hence withholding-taxes on interest, dividends, royalties, and management fees, if these payments are to cross inter-jurisdictional borders, would be collected universally, at a set of uniform rates internationally agreed. There might or might not at the same time be conventions providing for the transfer of some of the withholding tax so collected to the relevant country of residence of each taxpayer.
- E3 Governments would be expected to adjust the overall tax burden falling on individual residents under domestic law with regard to their total income from all sources---using the credit principle, not deduction or exemption, to take account of tax already paid in other jurisdictions. [E1-3 are covered by P3.1.]
- E4 Corporate and other enterprise income would be allocated among jurisdictions according to a an internationally agreed formula that relied as far as possible on objectively verifiable indicators, such as proportions of workforce, wage-bill, or capital assets, in various countries [P3.2].
- E5 There would be an international system of coded identification for all individual and corporate income-taxpayers. The code would not only refer to the jurisdiction in which the

taxpayer resided or was registered but also be extended to record all those from which she, he, or it derived income. Knowledge of the identity of the taxpayer attached to each code number would be confined to the tax authorities of the jurisdictions referred to in the code number, but information relating to the taxpayer's income would be shared among them--in certain circumstances automatically, and in certain circumstances on request.

E6 A tax-report to any tax authority of the income of a corporation or other enterprise would be required to give information relating to the *total world income* of the firm or agglomerate involved. Where a distribution of the enterprise's income for tax purposes between that authority and other authorities was proposed, the information and the proposed distribution would be circulated to the other authorities involved. [E5-6 are covered by **P3.3**.]

Though the above six arrangements are intended to fit together, they do not depend entirely on each other for their value. Any one of them individually, if universally adopted, would constitute an improvement. Some of these elements would serve to a point as substitutes for others.

A further longer-term objective would be to negotiate toward common definitions of income for tax purposes [**P3.4**]. This would simplify and facilitate transnational arrangements for taxing profits.

What if some countries would not play along?

Inevitably international compliance with any such set of rules would be incomplete. Most of the existing tax-havens in a narrow sense (microstates that derive a large part of their national incomes *from being* tax-havens) would probably remain outside.

So long as those remaining outside were confined to the existing tax-havens in this narrow sense, the capacity of such tax-havens to reduce the tax revenue of the rest of the world would probably be curtailed by the new arrangements. But *most* of the world economy would need to be in if the system were to be reasonably watertight.

Would developing countries gain?

With a reasonably high agreed rate of withholding tax, say of the order of 20%, the reforms **under E1-3** would almost certainly *initially* move substantial taxable capacity to developing countries. They are predominantly source-countries rather than residence-countries for direct investment. They would also recover some revenue losses that would otherwise have been engineered through transfer-pricing executed by means of royalties or management fees. At the same time, it is probable that tax-revenue in developing countries *would not suffer* from the fact that some governments that had previously not done so would now be taxing the interest from non-resident bank-deposits. Indeed some developing countries *might gain* in the share they retained of their own residents' deposits through the reduced attractiveness of moving funds to major financial centres.

It is true that a large shift to withholding tax at source might be agreed-to only on condition that some of the withholding tax collected would be subsequently transferred to the country of residence. This might *reduce* any net advantage initially accruing to developing countries. But, because of the reduction in evasion, considerably more revenue in total is likely to be collected, so that there would be room for a deal that on the whole *more than recompensed countries of residence* for the shift while *leaving source countries also with substantially more revenue than before*.

There is no reason too why the further reforms proposed **as E 4-6** above should not increase the revenue of developing countries as well as that of the rest---unless the particular countries concerned happened to be those with specially low corporate-tax rates. Even then any *relative* disadvantage through a less favourable *division* of taxable income than before would be mitigated by the fact that improved information would be likely to reduce evasion and so increase the *overall tax base*.

Strategy for getting there: an international tax organization

The chances of agreement to a new regime for the taxation of transnational income along these lines would be much enhanced if there were an international tax organization, parallel to the other multilaterals and especially comparable to the World Trade Organization, that could act as a forum and source of

information, and a champion for promoting such mutually-advantageous deals [P3.5]. To avoid undue delay, a start might be made with a small secretariat to promote cooperation in tax matters, without specific objectives relating to the form that such cooperation should take [P2.3]. This might gradually take over responsibility for various international tax conventions and their further development.

[The case for the proposals in this subsection is set out more fully in Clunies-Ross, 1999, which draws heavily on Tanzi, 1995, 1996.]

1.3 Internationally coordinated taxes

A number of forms of tax have been proposed that would, inevitably or most naturally, be imposed by international agreement: for reasons of enforcement, or to prevent any one country's being disadvantaged if it were to tax alone. In some cases these are taxes on activities considered in general harmful or to have negative externalities. These have included taxes on arms exports, on international airfares, on hydrocarbon use, and on foreign-exchange transactions. The first three of these can probably be ruled out for various reasons as subjects for uniform, internationally-coordinated taxes, though the second and third have been quite successfully applied by certain countries independently.

Attractions of a tax on foreign-exchange transactions

A uniform, globally-coordinated tax on foreign-exchange transactions, however, may still be seriously considered. The case for it is that the annual value of foreign-exchange transactions is so high (over \$450 trillion) that a tax on them at a very low rate (say 0.1% or less---of the order of the rates charged by banks for most of their currency exchanges), though it would have a negligible effect on trade and long-term-capital flows, would, even on the assumption of a quite high responsiveness of the *level* of transactions, yield substantial amounts. Projections of \$150 billion to \$225 billion global revenue from a 0.1% tax would assume---surely conservatively---that the *level* of transactions would fall by 50-67% in face of the 0.1% tax. It is accepted that a part of these proceeds would have to accrue to the authorities that collected them---as an incentive to do so and a recompense for the cost incurred. In other words, what we should have is primarily a coordinated system of *national taxes*. But, since the distribution across jurisdictions of the

revenue collected would be wildly disproportionate to the distribution of the burden of the taxes across the corresponding populations, a large share would need, as a matter of equity, either to be *redistributed among governments* or to be *retained for strictly global purposes or for use in anti-poverty programmes in less-developed countries*.

Use of the tax against foreign-exchange crises

Once established, the administrative mechanism for collecting the tax would be adaptable, as suggested by Spahn [1996], to serve as a means of checking incidents of massive capital flight, such as have generated major crises in the 1990s. This would be done by an agreement whereby a higher, prohibitive rate of tax would automatically be triggered (unless the country affected refused the facility) whenever the sale of a particular currency took place at a rate more than a certain percentage from a moving-average of recent past rates. The fact that this mechanism was in place would *limit the speed* of exchange-rate changes, and the fact that it was *known to be* in place would *remove the incentive for rapid panic moves* out of any currency. The mechanism need not in any way impair the country's autonomy over its own exchange-rate policy; it would in fact guarantee the country against a *too-rapid* defeat of any policy it was following to stabilize the rate; if the country wished, it could refuse the safeguard. Spahn's mechanism would be a neat method, but not necessarily the only one possible, for fulfilling this very important function.

Doubts about a foreign-exchange tax as an effective, fair, and acceptable source of revenue

But how promising would a (possibly universal) tax on foreign-exchange transactions be as a source of revenue for social development?

Inevitably it would not only impose a burden (reduce disposable income) like all taxes, but also compete with other sources of revenue. Its collection can be expected to reduce other tax bases--- though not to such an extent as to eliminate the net increase in tax revenue, even if all the competing taxes would have been effectively collected, as they may well not have been.

Until now, the main doubts that have been expressed about such a foreign-exchange tax are: (a) that consistently collecting it may not be administratively possible; (b) that its real burden will bear on countries inequitably; and (c) that political agreement will be too difficult to achieve.

(a) The main concern about the *possibility of implementing the tax successfully* has so far been that perhaps not all the ways in which currencies can be exchanged can be identified by the authorities; that any that were not taxed might be used as substitutes for those that were; and that any authority that failed to collect the tax would attract the market to its jurisdiction.

(b) A concern about its *equity* is that it would bear more heavily on countries with more 'open' economies than on those of comparable average income whose economies are less open, and (far more important) that revenue would accrue quite disproportionately to countries hosting the main foreign-exchange markets or (depending on the method of collection used) issuing the major 'vehicle' currencies. But the equity problem could be remedied by subsequent redistribution of some of the revenue, as suggested above.

(c) The *political* concern has been that it has been held to need the cooperation of governments whose jurisdictions covered at least all significant foreign-exchange markets.

Is the tax administratively feasible?

Kenen [1996], following this approach to the administration of the tax, concluded that, even though some transactions would have to be excluded from its scope, yet, provided the relevant governments took part, the tax, collected in and through the trading markets, would be 'technically feasible'. Yet doubts on the score continued.

However, the debate on the tax's enforceability has been carried forward by a recent paper [Schmidt, 1999], in which it is argued persuasively that, if the tax were to be collected through the *settlement* system for foreign-exchange trades, rather than through the trading markets themselves, it could be made administrable and watertight, regardless of the form of the financial instruments used, the location of the parties, or the site in which the payments were made.

Schmidt's argument is as follows. The overwhelming bulk of foreign-exchange trades necessarily go through a system of netting and settlement among the banks, and this has become increasingly organized, centralized, and regulated. The need of traders to avoid *settlement-risk* (the risk to one party that the other will not honour the agreement) requires that both sides of any trade should be settled simultaneously. It has recently become possible, through technological developments, to achieve such simultaneous settlement universally, and central banks have required banks within their jurisdictions to use the netting-and-settlement system that has been developed. This requires that all the original gross foreign-exchange trades should be recorded. It is probable that even foreign-exchange trade carried out through exchange of securities will seek to go through the system because that is the cheapest way of avoiding settlement-risk. Economies of scale in the netting-and-settlement process has been driving settlement toward a single world network (to be formalized in the year 2000 under the CLS Bank), in which records of all gross trades have to be held. Beside the precautionary commercial incentive to use this system, there are regulatory powers that that can be invoked to keep the whole of the settlement arrangements within it provided the central banks of the major-currency countries cooperate to that end.

A fee is collected on transactions that use the system. A tax on the same transactions could be collected as an addition to this fee. And any individual country acting alone could at least tax the transactions settled within its own banking system.

Is it worth pursuing?

Undoubtedly there are plenty of political obstacles in the way of a *universal* foreign-exchange tax (albeit nationally imposed and collected), but the potential payoff---in terms of revenue readily and reliably available without significant allocative distortion---would be high. If the main obstacles to a universal set of national taxes whose proceeds could be directed in part to world social needs and other global public goods are indeed political, persuasive effort might be directed at overcoming them. However, given the political position in the year 2000 and the untried character of some of the administrative

case, a foreign-exchange tax is not put forward here as a priority.

1.4 Mobilizing commercial research resources for appropriate health technology

Private corporations---notably in pharmaceuticals and farm supplies---command huge research-and-development resources, but these have been used almost entirely to meet the needs of rich countries that provide the overwhelming bulk of the markets. Thus, of 1,223 drugs licensed across the world from 1975 to 1997, only 13 were for tropical diseases and only 4 of these were developed by drug companies [Trouiller, cited Pilling, 1999]. A number of drugs and vaccines that would serve vital needs in poor countries are too expensive to be widely used, and some of these are withdrawn from sale because the small number of the people able to buy them makes them uncommercial. When drugs are under patent, prices charged are often far above the unit-costs of manufacturing them. As a result, though bacterial and parasitic and some viral diseases of temperate climates have very largely been eliminated, yet in the tropics respiratory diseases, malaria, dysenteries, tuberculosis, and hepatitis B each continue to cause deaths numbered in millions every year. Other diseases are perennially debilitating to huge numbers. And, for whatever reasons, AIDS has become an enormously greater killer in certain poor and tropical countries than elsewhere.

Despite these failures, the big drug companies are likely to be essential to the solutions. No one else has remotely comparable R & D resources. The task is motivating them to develop products that not only serve the medical needs but are cheap enough to be widely used.

This task potentially conflicts with another, which is to gain access for poor people to existing drugs. Patents and the monopoly that they convey are held to be necessary for motivating the large investments that developing new drugs entails. Yet patents commonly mean prices far above the actual costs of production for as long as the patents persist, namely for 20 years. In the past many developing countries have not recognized the patents, and there has been production within their territories of drugs under patent. Others, without their own pharmaceutical industries, have imported these cheaper versions. Yet recently, as part of

WTO membership, there has been pressure to observe (from the years 2000 and 2006 respectively for two groups of developing countries) the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement, which requires respect of patents. Apart from whatever use might be made of various *escape provisions* in the TRIPS Agreement, this would require a number of developing countries to pay much higher prices than before, prices moreover far above the costs of producing the medicines. For example, fluconazole, a drug used to treat cryptococcal meningitis, one of the diseases common among people with HIV/AIDS, costs \$14-25 for a daily dose where Pfizer has exclusive rights to sell it, but only \$0.75 a day where there is competition. This difference is said to be a matter of life and death for hundreds of thousands of people with HIV/AIDS [Pecoul *et al.*, 1999].

Both these problems are extremely serious. Care needs to be taken that solving one problem does not aggravate the other: for example, that dropping patent protection altogether in developing countries, without other action, does not *reduce* any tendency for drug companies to address the needs of those countries.

For the first of these problems, as it applies to medicines, several proposals have been mooted: (a) for governments of drug companies' home countries to give fiscal and other concessions to them for expenses of developing drugs to deal with conditions that are 'rare' in the countries concerned, as in the US Orphan Drug Act; (b) for such governments to obligate companies to direct a certain proportion of their resources to neglected diseases; (c) for international and inter-company private-public arrangements such as the one recently initiated under WHO auspices over malaria, in which research-and-development costs are reduced through pooling the information already available in the various companies, in exchange for certain rights extended to the companies participating; or (d) international underwriting in such a way as to guarantee markets to companies for technical solutions meeting certain effectiveness and cost criteria.

(a) US experience since 1983 suggests that the orphan-drug device is not very useful in developing treatment for tropical diseases, partly because the effectiveness of the scheme for developing certain drugs has seemed to depend on exclusive access under specially

favourable conditions to markets in the US itself [Trouiller *et al.*, 1999]. Extension of these exclusive privileges to tropical countries, in order to enhance the attractiveness of developing drugs for tropical conditions, might negate much of the benefit by raising price unduly. (b) Compulsory direction of R & D resources to neglected conditions does not appear to have been tried. (c) The public-private partnership on malaria is still new but has been attacked for giving the companies excessive rights in relation to their contributions.)

(d) A proposal for attacking the incentive and user-price problems *together* has been made by Sachs [1999, p.17]. This is that the world community (say, a consortium of industrialized countries and multilaterals) might **guarantee markets of a certain level** to the first drug or vaccine for one of the major tropical diseases that met certain performance and price conditions [P2.4]. The guaranteed sums might need to be large because developing a drug may cost \$300-500 million. But they might take the form of the *underwriting* of purchases by national authorities and others rather than straight promises to buy the guaranteed amount; and, insofar as they would be paid out, it would be *over a period of years* in the future. The basic supposition behind the Sachs proposal is that there is a market failure that needs to be corrected. It might be seen somewhat like this. If the companies can develop *sufficiently cheap* solutions to the major diseases of tropical countries, they will *probably* realize large enough markets to recoup their costs. But whether they will actually be able to do this or not is one uncertainty too many for them. The world community in effect needs to take on this part of the risk in order to make the connection between the technological resources and the crucial needs that they can meet---with their enormous implications for reducing premature death, suffering, and loss of productive power.

For the second of the major problems, there may be a need **to revise the TRIPS Agreement** as it applies to the sale of patented medicines in developing countries. This might, for example, involve allowing 'tiered pricing', with appropriately lower prices in developing countries (related, say, to unit costs of production) as a condition of patent recognition. But much can be done by **suitably clarifying, liberally interpreting, applying, and upholding, the escape provisions** that have been written into the existing Agreement to cover vital public-health needs [P2.5]. (Some developing countries have been put under pressure, with threat of trade sanctions, not to exert those rights [Wilson *et al.*, 1999]). In particular:

- (1) There should be a commitment that no member of the WTO will attempt to discourage a developing-country member from using the scope given it under the Agreement, for example, for allowing the manufacture, under so-called 'compulsory license', of a patented drug.
- (2) The rights, under the Agreement, of countries where 'compulsory licenses' have been taken out, to export and import such drugs should be clarified, and, if established, respected and their use by developing-country members encouraged.
- (3) Restrictions on the laboratory use of currently patented drugs, and of public information about them, for the purpose of registering such drugs for production after their patents have expired, should be relaxed in order to speed the process of registration, so that the period of patent protection is not effectively prolonged beyond the agreed 20 years.
- (4) Consideration should be given to extending the transitional period for implementation of TRIPS for some or all developing countries.
- (5) The WHO's Essential Drug List should be expanded to include drugs that would be regarded as essential if their prices were lower.

2 STARVING AND MILKING CORRUPTION AND INTERNATIONAL CRIME

Governmental corruption has a number of ill-effects. Statistical studies support the belief that it reduces expenditure on education and health, reduces the productivity of public investment and infrastructure, and reduces public revenue---as well as reducing foreign direct investment and the rate of economic growth [Tanzi, 1998, pp.585-6].

2.1 Transparency and rule-of-law

Removing the opportunity

Corruption of tax authorities is regarded as one of the main reasons why many taxes in developing countries realize so much less

revenue than knowledge of the tax bases suggests they should. Much of the opportunity for corruptly reducing tax due would be removed if **taxes were fixed rigorously by law so that no executive discretion was possible**. Since it will not be possible to remove executive discretion entirely, at least it should be *minimized* (confined to the *interpretation* of clear rules), and **any significant decisions, and reasons for them, should be recorded and the record publicly available** (so-called *transparency*) [P1.1]. Transparency and minimizing administrative discretion can not be guaranteed to end corruption in tax administration. But they make any reduction of tax for corrupt reasons much easier to detect if anyone is concerned to do so. If the government and senior officials are permissive about tax-corruption, there is not much chance that it will be curbed; but, *if there is a will to reduce it*, transparency and minimal administrative discretion *will help* by making the concealment of corrupt agreements much more difficult.

Even when there are no corrupt payments, discretion over the granting of tax concessions can easily erode revenue for no sound reason. Officials wanting (with the best of motives) to attract foreign investments may be led to give away too much because they are likely to know less about the investing firm's real intentions than the investing firm itself. Strict limits to the concessions fixed or allowed by law can overcome this effect of relative weakness. But there are likely to be pressures and temptations for 'flexibility' until there is **wide international agreement**, as advocated in 1.1 above, **for restricting both executive discretion in this matter and the concessions allowed under legislation** [P2.1].

2.2 Removal of tax allowances for foreign bribery; criminalization of foreign bribery

Attacking the demand

An important part of the demand for illegal favours in developing countries arises from OECD-country investors. There are new resolutions, under OECD auspices, for governments to penalize any of their own residents who contribute to it.

OECD countries agreed in a Recommendation of April 1996 that members **should not allow bribery of foreign officials to be a tax-deductible expense** [Ervin, 1998, p.152]. By

late 1999 it was said that 18 countries had legislated accordingly [P1.2].

In 1998 the OECD agreed to a Convention on International Bribery [see UNDP & OECD Development Centre, 1998, Appendix 2] that required signatories **to establish that bribery of a foreign public official was a criminal offence** under their own law and to take other action to make such criminalization effective. Though there are the usual arrangements for the Convention to come into force after so many countries of significant weight in international transactions have formally accepted, approved, or ratified it, there is no good reason why any country, OECD member or not, signatory or not, should not take the recommended action unilaterally [P1.3].

2.3 Action on money-laundering: information requirements and confiscatory provisions

Discovering and seizing the proceeds

Money-laundering refers to the use of financial intermediaries for disguising the origins of earnings from criminal activity. What it protects typically are earnings from extortion and from illegal drug, sex, and firearm sales, and income seeking to evade tax. It depends on secrecy, among banks and other financial institutions, about customers' accounts.

The first task is to reach international agreement on rules for financial institutions that would give reasonable confidentiality to depositors and borrowers on matters relevant to their position as commercial competitors, while at the same time allowing their governments, and foreign governments with a legitimate interest, **access to information with a bearing on criminal activity or on the liability of taxpayers within their jurisdictions**. (This is covered, insofar as it relates to tax liability, in 1.2 above.)

It is extremely likely that some countries that have made a reputation from banking secrecy would resist any such provision even if there was wide agreement upon it in the rest of the world. It would be important to look for ways of *inducing them to cooperate or else of neutralizing the effect of their non-cooperation*.

Similarly, there should be international agreement on guidelines for laws that would permit a government **to confiscate after due process**, from a financial institution within its

jurisdiction, sums corresponding to amounts passing through the institution that could be shown to be the proceeds of crime. Laws might also be agreed to permit governments to **stop foreign-exchange transactions** on the

part of institutions that are on good grounds suspected of handling the earnings of illegal activity [P1.4]. There might be a resolution to direct any confiscated funds to social purposes.

3 SELF-FINANCING MEASURES: INTERMEDIATION

Here are included ways of obtaining funds, either specifically for the benefit of the poor or in ways by which numbers of the poor are likely to benefit, through financial intermediation rather than through taxation. It is a question of removing blocks to certain types of loan transaction that would be of value to both lenders and borrowers---with very poor people benefiting directly or indirectly. These methods have the great advantage that they can be employed without the need to raise or commit public funds, or at least without the need to do so after an initial period.

3.1 Commercialized microfinance

Access to capital markets for the very poor

Microfinance is here taken to cover lending in very small amounts to the 'entrepreneurial poor'. It has been introduced in a number of countries in South and Southeast Asia, Latin America and the Pacific, following approaches pioneered most famously by the Bangladesh Grameen Bank. These ventures have shown that lending to the very poor is possible, with high recovery rates on the loans, and at rates of interest that can be high enough eventually to cover the full costs, and furthermore that by these means the incomes of many poor families can over a period of years be substantially increased---provided certain rules of good practice are observed.

The rules of good practice required have been summarized from abundant experience and well documented [e.g., Conroy *et al.*, 1995, pp.74-91].

It is important for governments to deal with microfinance at arm's length: through NGOs or else through autonomous state-owned institutions either set up specifically for microfinance or operating for the purpose through specialized arms. Grant-finance provided by the state from its own resources or aid funds should be treated as seedcorn to cover the initial high-cost period of lending in any locality and thus to finance expansion, but not to finance continuing operations, which should be put onto a commercial basis as soon

as that can be done. The reasons for this, given that it has been shown to be possible, is that, though it is vital that there should be continuous availability of new loans for past borrowers, public and charitable funds can not be relied upon to flow indefinitely; and that, **the more existing lending operations can be made self-supporting, the further can finance for the very poor be extended.**

Once operations are fully self-supporting, covering market interest-rates as well as the relatively high administrative costs of maintenance and expansion that are necessary in this type of lending, **potentially vast resources of commercial loan-capital are available.** For governments, it is a matter of (a) persuading commercial banks to set up special departments to deal with microborrowers directly, or else (b) equipping (or creating) other lending-borrowing agencies to act as intermediaries between the ultimate customers and the banks, and ensuring that these agencies have the expertise needed for them to be regarded by commercial banks as reliable borrowers. In addition, adequate training of managers is crucial [P1.5].

That such completely self-supporting microfinance is possible while covering large numbers of borrowers is evident from several examples, notably that of the Association for Social Advancement (ASA) in Bangladesh, with a million clients at the end of 1997, which is regarded as having *covered its full financial costs* [Goodwin-Groen, 1998, pp.3, 8]. According to a study covering East Asia and the Pacific [*ibid.*, pp.5-8], virtually all successful microfinance institutions *charge commercial rates of interest.* Those that do include the Grameen Bank (2.1 million borrowers) and BRAC (1.5 million) in Bangladesh, and the Unit Desa scheme of the Bank Rakyat Indonesia (2.5 million). Though most *are not fully self-sufficient*, the Grameen Bank is one of those that was regarded as 80% or more so in the mid-1990s and subsequently took measures calculated to fill the gap [*ibid.*, p.7]. Some that are not fully financially self-sufficient cover their whole *operational* expenses. The same study [p.3] cites findings of the end of 1995 that 6

million households in Bangladesh were provided with microfinancial savings and credit services. This number represented 25% of rural households, and 20% of all poor households, in that country. It seems that this huge operation goes a large part of the way toward paying for itself and its expansion.

3.2 Intermediation in housing finance

More private housebuilding by anyone means more and cheaper housing for the poor.

The durability of housing means that, when middle-income people build new houses for themselves in order to upgrade their accommodation, they release other dwellings for those below them on the income scale, which as a result tend to fall in price. The process continues down the housing and income ladder. More middle-income housing--built commercially or by households for themselves--- means more low-cost housing. So whatever facilitates unsubsidized private housebuilding will increase the supply and reduce the market price of accommodation for the poor.

There appears in many countries to be a latent demand for improved housing that requires only the supply of finance, in suitable form but at full market rates of interest, to become effective. Spending on housing has the advantage in countries with abundant unskilled labour that it is highly labour-intensive in the inputs that it demands and so can generate national income with a relatively low import component. A switch of spending toward housebuilding is likely to be a switch toward local inputs and to mean therefore that more national income than before can be sustained from a given level of foreign-exchange earnings. **Linking the supply of funds to the latent private demand for housing** will thus tend to increase potential national income as well as freeing accommodation for the poor [P1.6].

Colombia in the early 1970s began an attempt to make full use of this opportunity [Currie & Rosas, 1986]. The government's role was simply to set up a framework for deposit-and-loan institutions under suitable rules. The key requirements were that the lenders should receive an assured positive real rate of interest and that the borrowers should have their servicing obligations phased evenly in real terms over the life of the loan. Uncertain inflation at moderate or higher rates, especially coupled with caps to interest rates, would

under normal lending conditions prevent both these requirements from being fulfilled.

The device adopted was the simple one of creating intermediary institutions not subject to interest-rate caps that *indexed* daily to the prevailing price level the value *both of what they had borrowed and what they had lent*. The declared rate of interest charged and paid was thus a *real* rate. The institutions could contract to pay *depositors* enough---and *consistently* enough whatever might happen to the price level---to persuade them not to hoard their money in unproductive form or to send it abroad. Because their loans were indexed (the nominal value of the unrepaid part of the capital continually increasing with the price level) the rate of interest to the *borrowers* could be modest and also consistent; the high (and often highly variable) nominal rates that would have been required in conventional unindexed housing loans under inflationary conditions were therefore unnecessary. This meant that the loading of very heavy real servicing obligations on to the early part of the repayment period (the 'front-end load') was avoided: the real servicing obligations could be spread evenly over the life of the loan. On the assumption that borrowers would be limited in the proportion of their income that they could devote to the servicing of housing loans at any time, a system that spread the real burden evenly would enable people to borrow for housing lower down the income scale than one that concentrated it at the start of the period. A simulation [*ibid.*, Annex 1] assuming a rate of inflation of 23% year, 15-year loans, a real interest-rate of 7.5%, and a limit of 25% of income that a borrower could afford to spend for servicing in the first month, showed that this smoothing of the servicing burden as a result of the indexation would reduce by about 60% the critical level of household income below which a household would be unable to borrow.

Colombian experience was that, under these conditions, the real interest-rates sufficient to attract large amounts of capital did not deter an abundance of borrowers. While deposits grew in real terms at an average compound rate of 20.9% a year for 10 years from the end of the first full calendar year of operation [*ibid.*, Annex II, Table II], by the middle of the second year of operation loans were absorbing deposits virtually in full [*ibid.*, Annex II, Table III] and continued to do so for most of that 10-year period. A housebuilding boom was precipitated in Colombia in the early 1970s, which was associated with a large increase in

urban employment. There were analogous experiences in other South American countries that adopted similar devices.

3.3 Indexed bonds in small denominations

Attracting small and risk-averse lenders

If a government wants to discourage the funds of private savers from moving abroad and to attract them for public purposes, it is reasonable to issue bonds whose value is fully indexed to inflation and at rates of interest comparable with current world rates. Small lenders might be further attracted if the government agreed to buy the bonds back at any time at their indexed values with only a small discount.

4 LEVIES ON LAND AND NATURAL RESOURCES

Levies on the possession or use of natural resources have several advantages. One is that the entities on which they are based *can not move* from one jurisdiction to another. A second is that in principle taxes can be imposed upon them up to just short of their full user-value (their 'resource rent') *without discouraging effort, saving, or enterprise*, and generally without any distortion in resource allocation. A third that *often* applies is that, where the state is the owner of the resources and a private person has acquired their use in full knowledge of the conditions, there is *no objection in equity to taxing their use up to their full user-value*.

Governments do often collect taxes that fall more or less on natural-resource use, but fail to take full advantage of the opportunities offered because the taxes fall on other activities or factors as well. If very high rates are to be imposed without economic loss, the taxes must be closely targeted to the value of the resources rather than falling also on labour, capital, or enterprise [P1.8].

4.1 Taxes on the rent of resources other than land

For the use of most natural resources other than land (minerals, hydrocarbons, water sources, forests, fisheries, broadcasting wavelengths), there is no publicly-known market-price that can readily be applied to estimate the user-value or rent in each case. There are broadly two approaches to taxing them that may be efficient: *ex-ante* and *ex-post*.

4.1.1 Ex-ante: auctioning of rights

Auctioning of rights in advance of any development expenditures has been applied to offshore hydrocarbons in producing fields by the US federal government since 1954 ('cash-bonus bidding'), and by some other authorities

and landowners in North America. The successful oil company pays only what it has bid. So it would seem that bidders can not be deterred by the existence of the auction. No firm has to bid more than it believes it can recover from use of the resource. Since the sum is paid before any development can begin, decisions on exploitation (extent, speed, timing) can not be affected by it, so that the tax can not generate any misallocation. Moreover, the method has the advantage that, as well as collecting revenue, it also allocates the use of the resource to one firm by a method that can readily be protected from favouritism or corruption. Since a resource in the categories we are considering, if it can be rightly claimed by anyone at all, is an endowment of humankind at large, which no person has created and over which (in most jurisdictions) no one has been given reason to believe she or he has purchased a permanent claim, it is entirely fair and reasonable that its *full* property-value should be realized for public purposes.

Auctioning may be applied also to forests, water, fisheries, and wavelengths. It does not seem to have been used for deposits of metal ores. The reason for this exclusion is probably that a considerable outlay is often needed before the mining company can assess the extent, and hence with other information the value, of the deposit, and to make that outlay worthwhile it needs to have an *assured right* to exploit if it should choose to do so, not *a claim that will depend on whether it later bids the most*.

The US has taken *sealed* bids for oil and gas leases in order to minimize the chances of collusion among bidders. There may be reason for using *open* bids in the case of some other kinds of resource such as forests where the location of one developer's lease in relation to those of others may affect the value of the

lease to him. But open bids entail a greater risk of collusion.

It can be presumed that, if there is known or believed to be competition for leases, the bidder will bid close to the full amount that having the lease is worth to him. Subject to that qualification, the highest bid is therefore held to be a good indicator of the rent of the resource. Evidence from the early period of US experience with the auctioning of oil and gas leases [Mead, 1974] suggests that what was collected by the authorities in bids actually *exceeded* what could reasonably be considered the true rent of the resources. A further estimate for the period 1954 to 1977 [Jones *et al.*, 1979, p.887] indicates that, of a total gross sales value of oil and gas from the US Outer Continental Shelf of \$33.4 billion, \$25.3 billion (roughly three-quarters) went to the government as revenue, of which \$19.7 billion was the proceeds of cash-bonus bids.

But is important also to remember that, after the big oil-price rises of 1973-80, the same extractors in the US were held to be making excessive profits not envisaged when they bid for their blocks, and briefly and crudely a tax on these excess profits, one that had not been part of the original deals, was added on. The need for this could have been avoided if there had, *beside the auctioning of rights*, been a provision for a satisfactory *ex-post* tax as outlined below.

In all cases where there are doubts about whether auctioning will yield much revenue, or indeed doubts whether it will go close to *realizing most of the resource-rent in all contingencies*, it can be *combined with other methods*, preferably the *ex-post* devices mentioned below. Added to other taxes, auctioning rights will still not in itself deter investment or lead to social-income losses by distorting allocation.

4.1.2 Ex-post: *taxing discounted-cash-flow or equivalent*

The approach characteristic of Papua New Guinea since the late 1970s, and of Australia for offshore oil and gas since 1985, has been one in which the economic rent of the resource has been estimated, progressively as exploitation proceeds, on the basis of cash flows actually associated with the extraction, which are then discounted (accumulated) at an interest rate that is supposed to approximate to the cost of capital for the activity concerned. As positive net cash-flows over the life of the

operation to date are realized, they are taxed at a proportional rate. So the base on which the tax is calculated has had the cost of capital, as well as the costs of other inputs, deducted. These charges---a so-called 'resource-rent tax'---are applied before corporation tax is assessed, and they become expenses for corporation-tax purposes [Garnaut & Clunies Ross, 1975, 1983; Goss, 1986]. The idea of the resource-rent tax is that its base will represent the financial surplus of the extraction as the investing firm itself (applying discounted-cash-flow appraisal) will assess it. Taken alone, it will approach neutrality in that only the surplus (representing the value contributed by the natural resource), not the normal reward of any other input, such as labour or capital, will be taxed. The rate of the resource-rent tax therefore may be high without serious loss of efficiency. However, it must be well below 100% in order to avoid 'gold-plating' (outlays that are really of a consumption nature for the benefit of management or owners of the extracting firm).

From the viewpoint of the revenue authorities a resource-rent-type tax would fill the role often played in the taxation of mining projects by an *ad-valorem* 'royalty' on the value of the product (or, what would have much the same effect, a government 'share' in the output), or a specially high rate of corporation tax on the extracting firm, or some other special levy. These are all designed to charge the extracting firm for the fact that it has been given rights over the natural resource. There are clear reasons, however, why a number of these alternatives will blatantly depart from neutrality and hence efficiency. An *ad-valorem* royalty on the product, for example, will make further extraction unattractive to the firm well before this would have been the case in the absence of tax. However, in order that a resource-rent-type tax should come close to falling *exclusively* on the economic rent and so avoid distorting effects, the rate at which the discounting of cash-flows is applied for purposes of estimating the tax base should be close to the rate likely to be applied by the extractors in their own decisions.

For oil and gas, and for other auctionable resources, there is no general reason why *both* the cash-bonus *and* the resource-rent tax should not be used *together* in order to overcome any incompleteness of either in its cover of the economic rent. This would not in effect be charging for the economic rent twice. The combined total of the two charges would not simply be the sum of what each

would realize individually. The approach to neutrality of either would not be impaired.

To summarize: it would seem that some form of prior auctioning of rights will be appropriate for water, fishing, forestry, and radio wavelengths---in all of which some reasonable estimate can usually be made in advance of the quality of the resource and the returns to be expected on it---and also (at least in some circumstances) for oil and gas. For metals, prior auctioning may not be appropriate, and in these circumstances a resource-rent-type tax may give the best approach to a charge falling exclusively on the economic rent. If, even where auctioning seems appropriate, there is any likelihood that the price reached by auctioning may fall seriously short of the true economic rent of the resource, a resource-rent-type tax may and probably should be applied as well as the auctioning of the rights.

With *renewable* resources, there should of course also be conditions imposed on the user to maintain or restore the value of the resource, and the lease should have a fixed period.

Note that what has been said here applies most directly to *new* allocations of rights. Where extracting firms have acquired rights under one set of fiscal rules, any *change* in the rules *applying to them* has to be considered carefully for its possible *unfairness* and for the *uncertainty* that it may generate among future firms considering the acquisition of rights.

4.2 Taxes on rental value of land ('unimproved' land value)

Taxation on real property, especially for local-government purposes, is common. But, in order to avoid distorting effects such as the discouragement of building, such taxes should be based on the rental value of the natural resource exclusively, that is on the *unimproved* or *site* value of the land: what the value of the piece of land would be if it had no buildings on it but its circumstances were otherwise unchanged---its value solely on account of its size, natural quality, and position. It is true that much of this value will commonly be due to developments of human origin *around* it, but these are just as much a gift to the holder of the land as is the land itself. (This form of local-government tax is normal in Australia and has been applied elsewhere.) For general purposes of efficient allocation under competitive-market conditions, *ad-valorem* taxation of unimproved rather than improved value has the advantage of neutrality: it does

not discourage building and site-improvement.

Where, as is often the case in and around growing cities, the value of land is expected to rise, land may be held for speculative reasons, and this will tend to raise its price. Any speculative element in the price of land may be held to be due to imperfection in the markets (specifically the absence of a satisfactory futures market [Tideman, 1999]). This raising of the price for reasons other than a rise in use-value is socially inefficient in its tendency to raise barriers to using the land productively. Provided the tax on unimproved value is frequently updated, the higher the proportion of the value of the land a tax collects, the less attractive is holding the land for speculative purposes and hence the more of this speculative element in price will be removed with the barrier to development that it represents. In these conditions the tax is better than strictly neutral in that it removes an anti-productive distortion [*ibid.*].

Land's (unimproved) value may be raised considerably by developments (such as urban expansion or changes in land-use planning) that occur quite independently of any sacrifice or other decision on the part of its owner or user and are often, in part at least, publicly funded. There is a strong case in equity for diverting at least the value of *such gains* to the public rather than leaving it with the lucky owner who happens to be holding the land when they occur. An *ad-valorem* tax on the annual unimproved value of land *that is revised as the market-value changes* goes some way to meeting this requirement. (The higher the rate, the more thoroughly it does so.) (But see also the device expounded in section 5.1 below.) It is no satisfactory substitute to auction land rights for a single once-off sum that allows them to be held in perpetuity. Where the state is already the landowner but contemplates privatization of the *use* of the land, there is a great advantage in not alienating it to private buyers permanently but instead making it available under a lease---on the understanding that the bulk of the payment for the lease will be assessed *ex-post*, that is annually or more often on the current use-value of the land. Unlike an oil-producing block, a piece of land is likely to be *permanently* valuable, and in many urban settings *increasingly* so as time goes on. A lease for a rolling period of years can give the user considerable security of tenure, and there can be formalized provisions for giving a developer the full value of improvements if the land is ever withdrawn from his use.

However, it is obvious that, where land is the principal property of many poor people, any general tax on land that aims to tap part of its economic rent must be applied with extreme moderation. One solution is to exempt from taxation individual holdings of land below a certain value. Also, where land has been bought on one set of assumptions about the taxation that will fall upon it, for the state to increase the burden on it without similarly increasing the burden on other assets might well be regarded as unfair and should therefore probably be done only very gradually.

Much cited as an example of the effect of shifting toward unimproved-value taxation is the case of Pittsburgh in Pennsylvania, which switched the form of its city 'rate' (real-

property tax) so that the burden increased on the value of the land itself and fell on that of *new* structures. A careful study by Oates & Schwab [1997, p.17] observes that 'following the change in regime at the end of the 1970s Pittsburgh experienced a striking building boom, far in excess of anything that took place in other cities of the region'; and they conclude that the change in system was indeed important, as the theory would suggest, because of its effect *in reducing forms of tax other than* that on unimproved land value.

Land as a tax base has the further advantage for the present purpose that revenue derived from it is generally the province of subordinate or local governments, and these often have the responsibility for major social expenditures.

5 VALORIZATION AND DEVELOPMENT CHARGES : LINKING PAYMENTS TO LOCAL BENEFITS AND COSTS

5.1 Valorization

Relating local tax measures closely to benefits received has been advocated as a way of reducing the political objections [P1.9]. A method of doing this was undertaken very seriously in Colombia from the late 1950s [see Doebele & Grimes, 1977]. It was used as a way of financing a number of urban improvements, notably roads, pavements, and sewers. It was known as *valorization*. The charges for any particular work were divided among the owners of properties held to be favourably affected by it. The total charges were not higher than the cost of the improvement (rather modestly assessed). But they were allocated among property-owners *in proportion to* the assessed *benefits* that each received in enhanced value. They were in principle lump-sum levies, but their payment was spread over a period of up to five years. The ratio for each paying household between the sum due and its income determined the length of spread, so that no one had to pay in any year more than a certain proportion of income. Other adjustments were made for the relief of poor property-owners. It was estimated around 1977 that about 80% of sums due for Bogotá had been collected by the end of the statutory five-year period, and that, of those that had run twelve years or more from the date at which the obligation had been incurred, 96.2% had been collected [*ibid.*, p.57].

The assessment of benefits required a systematic use of a variety of different forms of information. Appeals were allowed to *Representatives* who had been elected by property-owners in the city concerned but did not themselves own property within it. For a large project---the Sewage Master Plan in Bogotá---the city was divided into three and each of these parts into up to 100 districts for valorization purposes.

The problem of timing---that the works inevitably took place before much of the levies were paid---was met by various devices. There was a revolving fund, apparently with some initial direct state or municipal finance. Also contractors could be paid in bonds, which they could sell [*ibid.*, p.60]. Property-owners were allowed to pay their dues in these bonds, with discounts for paying early.

On the assumption that the benefits of each of the projects exceeded the costs and that the assessment of relative benefits was accurate and complete, all those involved should have gained. Opposition was mainly from the richer property-owners. Doeberle & Grimes speculate that they may have sensed that they would have done better in a system in which *influence* counted for more. They judge nevertheless that on balance high- and middle-income households probably benefited more absolutely on average than poorer ones---though this may have been due in part to initial peculiarities of the scheme, later changed. Their final verdict is that there were benefits to

all income-groups but that redistributive effects were small and mixed [*ibid.*, p.73]. Various forms of probable gain to poor families from the works concerned, in spite of what they would have to pay in charges as property-owners or in increased rent as tenants, were mentioned. Many infrastructural works are worth, even to poor people, far more than their *pro-rata* cost [see e.g. World Bank, 1994, p.49].

According to the 1994 *World Development Report*, commenting on such schemes,

Important for success are the participation of prospective beneficiaries in planning and managing projects, care in planning and implementation, an effective collection system, and---in many cases---significant advance financing from general government revenues so that works may be started on time [World Bank, 1994, p.51].

5.2 Development charges

A different application along somewhat similar lines is to charge *urban property-developers* in advance an estimate of the *pro-rata* share of the public-sector *cost* of providing additional public facilities (such as water, drainage, sewerage, policing, road maintenance) that their development projects will entail. This type of device has been used in Korea and in North America [*ibid.*].

Insofar as the infrastructural projects considered here have a large 'social' component in contributing to the basic material needs of poor households, these means of funding have a particular value for the present purpose. They place the revenue directly at the disposal of the government agency that has to make the expenditures. In the case of valorization, there is in fact no possibility of diversion. This advantage is added to the manifest fairness and efficiency of the approach.

6 REFORMING PUBLIC-ENTERPRISE PRICING AND MANAGEMENT

The reference here is particularly to the pricing and management of infrastructural services---power, water, sanitation, transport, communication---but what is said refers also to public enterprise in general.

There are two separate issues. Very large additional resources in many countries could be found for public purposes---with additional advantages---by charging for public utilities at their full cost. Also inefficiency and waste in the delivery of infrastructural services leads to considerable reduction of real income; the gains from eliminating this waste could be either passed on to the consumers or retained by the government.

An estimate for the early 1990s [World Bank, 1994, pp.11, 120-1] is that mispricing of power, water and railways alone in developing countries cost the governments \$123 billion of fiscal resources in a year. At the same time technical inefficiencies in power, water, railways, and roads reduced the communities' real income by \$55 billion. These figures can not simply be added, but each can reasonably be compared with the total annual investment on infrastructure in those countries of about \$200 billion. If demand for existing services remained unchanged, *pricing at full cost* could

thus allow this figure to be increased by about 60%, a figure about five times the contribution of overseas-aid-type finance to those countries' infrastructure investment.

This is potentially a huge well of additional resources. Removing subsidies and correspondingly expanding services may work strongly to the net *benefit* of the poor, who would often willingly pay the full average cost [*ibid.*, p.49] rather than be without the service. Management may be improved by a variety of devices, of which straight privatization is only one. Removing subsidies (and the corresponding need to ration services) removes a fertile field for corruption, and for many services it is conducive to environmental improvement.

All this is of great importance; but, because the argument is well-worn and there has been much opportunity and even pressure for developing countries to take advantage of the resources that would be released, the subject will not be pursued further here

Much evidence and guidance on these matters is given in two *World Development Reports* [World Bank, 1992, 1994].

7 COMMUNITY MOBILIZATION

Resources for social development may also be supplied without tapping the public finances--through provision of some or all of the inputs free of charge by the members of the community that is to benefit from the development. Often in these cases, however, the government still has an important role to play as remover of obstacles, networker, catalyst, cooperater [P1.7]. Numerous examples could be given. Two well-publicized and strikingly successful instances may be mentioned here. They have some common features.

Sewerage in Karachi squatter settlements

The story of the Orangi Pilot Project is given briefly in World Bank, 1992, p.109, from which the following outline is derived.

When Akhter Hameed Khan began working in the Karachi settlements he found that a priority for the people was removal of excreta and wastewater from the streets. They wanted a traditional sewerage system and they wanted government to provide it. When attempts to achieve this failed, the Orangi Pilot Project was started with a little outside funding. The business of providing the sewerage was undertaken by the people who were to use it. At the time of the account, about ten years after the start of the project, more than 600,000 poor people in Karachi had been supplied with adequate sewerage services at a cash cost of less than \$50 per household.

The achievement seems to have been due to a combination of *innovative techniques* devised by the engineers and architects on the project; *the elimination of corruption and slackness* associated with government operations; *the supply of free labour* by members of the community; and eventually *a community organization with enough influence* to induce cooperation from the municipal authorities, which extended the trunk sewers. **Community inputs and control**, while not the whole story, were clearly crucial.

The community's support was mobilized and its control exercised through a 'nested' or 'federal' structure of residents' organizations. Each unit of the 'lowest' level of organization (based on the 'lane') consisted of about fifteen households, who elected a 'lane manager'. Lane committees elected members to neighbourhood committees, each of which covered about 600 households. This structure

corresponded apparently to the tributary form of the sewerage system.

Water management in a Sri Lankan irrigation project

At the end of 1980, the Gal Oya Left Bank was part of a huge and troubled irrigation settlement in Sri Lanka. It had over 20,000 farmers who had been settled there from a variety of areas and both major language-communities, many of them regarded as troublemakers in their places of origin. The system was managed from above by officials, and the farmers were notoriously uncooperative. There had been much destruction of irrigation facilities and neglect of necessary maintenance. Irrigation officials in charge were commonly remote and arrogant toward farmers, and also negligent, and a number were believed to be corrupt. Water was used very wastefully, and about a third of farmers situated downstream got no irrigation water at all. Tamils, who were a minority in the area, were represented disproportionately among these unfortunate 'tailenders'. There was considerable mutual hostility among farmers over water disputes. [The story is recorded, with the charm and interest of a novel, in Uphoff, 1996.]

The Gal Oya Water Management Project, starting in March 1981, took place under the auspices of the a government research and training institute (ARTI) and a foreign NGO (a unit of Cornell University), with finance from USAID. The aim was to improve water management through bringing farmers to participate in it--with more cooperative behaviour among farmers and as a result improved performance of local officials. A key element was the appointment of (initially 32) "Institutional Organizers" (IOs), young graduates from farming backgrounds, who would be allocated in small groups to particular parts of the scheme, would get to know the farmers, and gradually, it was hoped, would inspire the creation of farmers' organizations.

These organizations were built up from below, eventually into a structure with four layers, representing the hierarchy of connections within the irrigation network. The lowest level (each unit associated with a field channel), the first to be established, was small enough for personal acquaintance and meeting among the farmers it covered. In this nested

or federal structure related to the physical shape of a network, there are similarities with the Orangi project.

The project met at first with varying hostility and scepticism among officials. It also started in a specially bad year when water was unusually low and conflicts might have been expected to flourish.

Yet, within six weeks, 90 per cent of farmers in a pilot area over 2,000 hectares were voluntarily undertaking a program which they devised themselves, with organizers' encouragement and facilitation. They cleaned channels, some of which had not been cleaned for 15 or 20 years; rotated water deliveries, so that tail-enders would get a fair share of the available water; and saved water wherever possible to donate to farmers downstream who would otherwise receive little or no supply. Such demonstrations of altruism and cooperation are generally considered unlikely. They were quite remarkable because Gal Oya farmers, resettled into the area two or three decades earlier, had previously been known for their conflictual and individualistic behavior, 'even murders over water', ... [*ibid.*, p.viii].

And the process continued and spread over the project area, with concrete and measurable results. 'Within five years, water use efficiency had almost doubled in the Left Bank system' (*ibid.*, p. 9). The same amount of water as before entering the system, now properly husbanded and distributed, had *proved enough to satisfy* virtually all farmers, the majority of whom had regarded themselves as short of water before.

Yet these material achievements (continuing in essentials *at least* for the fifteen years until shortly before the second edition of the book went to press) are perhaps no more remarkable than the changes in attitudes that lay behind

them. It was not uncommon for upstream farmers to go out of their way, getting up at night for example, to make sure that the system of conservation worked, so that downstream farmers would get their share of water. Local irrigation officials came as a matter of routine to treat farmers with respect, and became far more diligent and helpful. Most striking of all are the efforts made on several occasions by Sinhalese farmers to protect the persons and property of Tamil officials, farmers, and fishermen in the face of ethnic violence [*ibid.*, pp.76, 101, 102].

Schemes such as Orangi and Gal Oya are successful in part through being able to bypass the government. Not only do they not depend directly on the public finances but they also escape the corruption, waste and cynicism that frequently go with government operations. They enlist not only people's free labour but also their interest, enthusiasm, and ingenuity. Because they depend on general cooperation, they have to develop a form of organization that will make voluntary cooperation work, and this process can have valuable byproducts, as Gal Oya shows.

But can government in that case do anything to help bring schemes like this into being? First, it can as a matter of policy give approval to such projects and authorize cooperation with them in all the many fields in which they may have a role. Second, there is frequently a vital input that the state can provide without taking initiative away from the community: dealing with the trunk-sewers in the case of Orangi, providing the services of the Institutional Organizers in Gal Oya. Third, because success often depends on a combination of community and government with an NGO as initiator and catalyst, there might be regularized government contact with those NGOs likely to spark community initiatives in social development, so that all three parties may make their appropriate contributions if any such move is projected, and government may ensure that at least it does not obstruct.

8 STABILIZING FISCAL EXPENDITURE

Unplanned and fluctuating government spending is likely to mean that social outlays suffer...

Securing resources for social development is likely to depend on medium-term fiscal

planning. This involves **both** *stabilizing the overall level* of fiscal expenditure as far as possible **and** setting *constant-price or proportional limits* to the various major *categories* of expenditure. If the first of these tasks can be achieved, the second is

comparatively easy---a matter of internal politics---and the purposes of fiscal planning can be fulfilled. So we concentrate on the first: stabilizing overall fiscal expenditure.

...but what can you do if revenue varies wildly?

This presents great difficulties if revenue is fluctuating widely. What is needed in that case is **both**

(a) a consistent attempt on the part of the government to relate fiscal outlays in each period to *trend* or 'expected' revenue (after allowance for *planned* borrowing or repayment or lending); **and** (b) protection or insurance against extreme exogenous fluctuation in fiscal revenue and national income. The second (b) gives the first (a) a much enhanced chance of success, and it may also be used as an incentive for attempting (a).

There are two main exogenous sources of extreme instability to which developing countries may now be subject.

One is the instability arising principally from fluctuations in primary-export earnings but capable of being aggravated by other changes, for example, in prices of food and energy imports, in world interest-rates, and in absentee-worker remittances. We shall call this **type-A** instability. It is the instability against which the IMF's Compensatory and Contingency Financing Facility (CCFF) and the European Union's STABEX and SYSMIN schemes have been directed. It is obviously likely to be most acute in countries heavily dependent on primary exports.

The other, **type B**, is the instability peculiar so far to the 1990s and tending to affect semi-industrialized or industrializing middle-income countries. This is the instability resulting from massive capital-flight and capable of occurring even when macroeconomic variables seem satisfactory. Having imposed disastrous shocks on six major countries (covering a tenth of the world's population), and threatened others, over the five years up to the time of writing, it has to be taken seriously.

Though the same countries may be susceptible to both sources of instability, they demand two quite different modes of treatment.

8.1 Cushioning primary-export economies (for type A) [P2.6]

For type A, the CCFF has made a small and inconsistent contribution to stabilizing the external spending-power of the countries that have resorted to it [see, e.g., Kumar, 1989], while there are studies that suggested that on the whole STABEX had actually been destabilizing [see, e.g., Herrmann, 1983]. Both schemes are now under question.

There must be genuine insurance...

What is wanted is a form of insurance that consistently and to a significant extent blunts the impact of exogenous shocks on total external spending-power. To make this possible, what is needed probably is: (a) an insurance fund to which participating countries make non-repayable contributions when exogenous factors are favourable in relation to trend and receive non-repayable transfers when they are unfavourable, the relative magnitudes of the two for comparable deviations being determined by projections of the relevant exogenous factors across the system in order that the scheme can expect to be self-financing; (b) to this end for each country a composite indicator of exogenous factors affecting income, probably translated into a common measure according to their impact on external purchasing-power; (c) provision by the international community for backstopping of the insurance fund in case, in spite of reasonable planning for self-sufficiency, it should run out of resources.

...and incentives for domestic disciplines to smooth fiscal expenditure...

At the same time, positive encouragement should be given to each participating country to adopt a fiscal discipline, which relates outlays, as suggested above, to revenue 'expected' according to medium-term trends. A decision might be made by the participating and underwriting governments to confine access to the scheme to such countries as have committed themselves to such a fiscal discipline in an approved form. Alternatively privileges within the scheme might be given to countries adopting and maintaining such a fiscal discipline.

...with individual producers also cushioned.

The fiscal-stabilization problem can also be reduced insofar as *the disposable income of individual households* can be stabilized. Where crop earnings vary greatly, the traditional approach has been to use national producer-price-stabilization schemes. These

(though technically quite capable of contributing considerably to stabilization both individually and nationally, as has been shown by certain countries such as Papua New Guinea) have come into disrepute because of their abuse by governments. In response a recently formed International Task Force on Commodity Risk Management, staffed by the World Bank, has been investigating the possibilities of using market devices, such as forwards, futures, and options, in order to provide individual crop-producers, and individual purchasers of imported food and energy commodities, with a measure of stability in the prices they receive or pay. This project has large implications not only for national stabilization but also for the welfare of the individuals concerned, potentially very large numbers.

8.2 Convincingly killing the ‘rapid-capital-flight’ bug (for type B)

The hazard of instability of type B requires measures to stop any rapid speculative capital flight. Because such flight depends on *expectation* that it will happen, measures that make it *appear* impossible or highly improbable will in fact prevent it from happening. Two kinds of measure are likely to serve the purpose: (i) those that discourage capital likely to be speculative or highly mobile from moving *into* the country concerned; and (ii) those that can prevent, or *are publicly recognized as being able and ready to prevent*, any *very rapid* effective-exchange-rate changes of the country’s currency. While improvements in the micro-management of the country’s financial and banking system may reduce the probability of capital flight, there is no guarantee that any particular level of improvement will be enough to convince the holders of mobile capital that rapid depreciation is impossible. Such improvements are likely to be in any case a slow process, and their recognition by those who operate in the financial markets may further lag behind the reality.

Penalizing ‘short-term’ capital inflows...

(i) The first approach appears to have been followed successfully by Chile with its requirement from 1991 until 1998 that any non-equity foreign-capital inflow (later extended by removing the exemption for equity purchase in the case of financial firms) should be accompanied by a fixed-one-year-term, non-interest-bearing deposit in the central bank, amounting to a certain fixed

percentage of the inflow. This was clearly designed to bear much more heavily on mobile funds, than on capital entering with long-term intentions, and it appears to have altered the composition of inflows in favour of the longer term [Eichengreen, 1999, pp.51 ff.]. And Chile did certainly avoid the ‘East Asian’ type of capital flight that affected Mexico and Brazil. Eichengreen stresses that, to be effective, such a deposit requirement should cover as nearly as possible all kinds of inflows. He argues that restrictions on inflows are likely to be more readily enforceable than restrictions on outflows [P1.10].

...and ensuring that rapid capital-flight can not pay.

(ii) The second approach is exemplified by the suggestion from Spahn [1996] mentioned above in section 1.4 that, if the machinery were in place for collecting a universal tax on foreign-exchange transactions, such a tax at a prohibitive rate might be temporarily imposed (cued by an objective indicator) on transactions out of any currency whose effective exchange-rate had fallen more than a certain amount below ‘trend’ (as defined say by a moving average). The mere ‘announcing’ that such a measure was in place, to be used automatically in the stated contingency, would almost certainly do the trick.

In fact, if the propositions in section 1.4 above about the foreign-exchange-settlement system hold true, the central bank *of an individual country acting alone* could have such a mechanism in place against flight out of its own currency, and, by merely announcing the fact, probably avert the danger. (But an internationally agreed and coordinated mechanism might generate more credibility.) Because it is possible to trace all the transactions in a country’s currency that are settled in its banking system, this would probably be a fairly watertight way of identifying currency exchanges, and it would have the advantage over the usual form of restriction of capital outflows that it would come into force (if at all) only temporarily, that it would not require regulatory distinctions among different forms of capital outflow, and above all that the announcement that it was in readiness would very probably remove the necessity of its ever actually being applied. Current conventional wisdom is that a country would be wise to leave some latitude to exchange-rate change and merely to aim by the means mentioned to avert *extreme* movements.

But, even where a country was targeting by other means a more-or-less *stable* rate, there might still be a strong case for the mechanism that we have been discussing as a second line of defence [P2.7].

Priorities

The priorities proposed are listed with the Executive Summary above. They have been drawn up by leaving aside (i) measures that have already been the object of much external pressure or technical assistance; (ii) solutions of a kind likely to be highly specific to individual countries; (iii) projects probably too controversial in the year 2000 to make

their consideration now fruitful. Some of the priority items [P1] do not need international agreement, though coordination between governments may help. Among those that do require international action, a distinction has been made between those [P2] on which negotiation might perhaps begin or proceed forthwith, and those [P3] that may have to wait for greater shifts of prevalent habits and attitudes.

Altogether there is a wide national choice, and also a large and challenging set of international agenda.

Anthony Clunies Ross, December 1999

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