

PROMOTING PRIVATE SECTOR PARTICIPATION IN THE FINANCING OF SUSTAINABLE DEVELOPMENT¹

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EXECUTIVE SUMMARY

Hardly anyone would disagree with the proposition that the private sector has a major role to play in financing sustainable development. The questions are about how this role should be exercised; which are the areas where it can be effective and where is it less likely to make a contribution? In evaluating the actual and potential contributions of the private sector we must look at all dimensions of sustainability – not just the environmental, which has been the focus of previous work in this area. Hence a social and economic assessment is also required.

The paper reviews general trends in private sector finance over the last 10-15 years and goes on to analyse specific trends in private sector finance, beginning with privatisation and infrastructure investment. Privatisation is an important potential source of finance for sustainable development, although it is rarely the main source of provision of key infrastructure services. The experience with private provision of what were previously public sector activities has generally been good with respect to economic sustainability. On the environmental and social dimensions the evidence is less clear but the few examples provided point to some progress on both these fronts. More systematic evidence is needed, however, and there is a concern that mainly the “good side” is documented, often because it relates to the activities of the multilateral institutions.

The second specific trend relates to the financing of global environmental protection. Here much has been promised for some time but relatively little has been delivered. This will change in the next decade, especially if the flexibility mechanisms of the Kyoto Protocol are implemented. It is noteworthy that there is a great deal of interest in the private sector even at this early stage. Other initiatives, such as bio-prospecting, and certification of forest products remain small and are unlikely to become major areas of activity. Nevertheless they may provide important services to some communities and certain niche markets.

The third area relates to the impacts of privatisation on the local environment, where the picture is mixed. Positive aspects include improved incentives for efficient environmental protection through economic instruments and reductions in environmentally damaging subsidies. Standards for the appraisal of investments have also risen, with stricter environmental norms and a more careful assessment of social impacts. The situation has not improved appreciably in developing countries, however, when it comes to capacity for regulating the environment and ensuring compliance. Furthermore, most sustainability indicators have yet to be made operational so that investments can be evaluated with respect to such criteria. Finally, the picture is worse when we look at the growth of private transport and the increased exploitation of renewable natural resources. In both cases the private sector is responsible for much of the investment but it is not responding to indicators of unsustainability.

From this review of the performance of the private sector, a number of obstacles and opportunities have been identified. These are:

- (a) Weak enforcement of environmental regulations;
- (b) Weak economic and regulatory incentives;
- (c) Problems with meeting environmental and social objectives in privatisation schemes;
- (d) Unstable macro-economic conditions and an uncertain regulatory environment;
- (e) Low support for environmental protection;

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- (f) Inequity, lack of transparency and political acceptance; and
- (g) Equity concerns and international political acceptance.

On the enforcement of regulations more resources are needed, especially through external assistance. But this will not be enough; the whole system of regulation, monitoring and compliance has to be changed, with greater use of informal methods and greater involvement of civil society.

On weak economic and regulatory incentives the continued reductions in non-targeted subsidies for resource use need to be maintained. Economic instruments need to be applied at more stringent levels if they are to have an incentive effect. This can only be achieved by example, by showing how such schemes have worked elsewhere and how adverse social and economic impacts can be mitigated.

On the problems of meeting environmental and social objectives in privatisation, the regulatory framework can respond to meet these challenges, as the success stories show. The reasons why other cases have been less successful need to be analysed further. Reviews of programmes indicate that public-private partnerships may work better in meeting broader sustainability goals but they have to be structured in a very precise way if they are to succeed.

The uncertainty issue is a key one for private sector involvement in infrastructure and environmental projects. Unless the level of uncertainty is reduced, private sector involvement will not be forthcoming. In some cases this reduction cannot be made without excessive cost; those are situations where the private sector should perhaps not be involved. In others, a combination of support for a careful appraisal of the projects, clear and declared government policies, and selective government and multilateral/export credit agency risk guarantees are required.

In some countries the level of support for environmental protection is low and the private sector cannot be persuaded to provide the investments for that reason. Where the level of interest is too low because vulnerable groups are being excluded from the polity and individuals are unaware of the effects of the degradation that they are experiencing, the international community can assist in providing the necessary information and in supporting the civil groups that are seeking to bring the issue onto the national agenda. The danger to be avoided in the latter case is being accused of external interference and undermining the efforts to strengthen governmental institutions.

On the lack of transparency and equity the principles are clear. Governments cannot act without some democratic agreement in the area of privatisation. The selection of parties to deliver the services must be undertaken through some kind of competitive process and they must not be seen to be excessively rewarded for their services. Failure to observe these conditions results in lack of success for the projects itself and has ramifications for other privatisation programmes.

Finally, there are equity concerns for acceptance of regulatory measures at the international level. The way to overcome this, and to take advantage of the huge opportunities available for sustainable development as a result of the global treaties is to show, by example, that the schemes can work to everyone's benefit. That implies a gradual process, but one that has started with some optimism in the last few years.

In the end, promoting private sector participation is not mainly about financial resources. It is about attitudes and ways of thinking about the provision of key services. This takes time but the process has started.

I. INTRODUCTION

The role of the private sector in financing, and otherwise promoting, progress toward sustainable development has attracted considerable attention in recent years. The body of writing on the subject has grown substantially, particularly since the 1992 "Earth Summit" in Rio de Janeiro, with various researchers and practitioners contributing to our understanding of the subject area. The role of the private sector has featured prominently in the work of the United Nations' Expert Group on Financial Issues of Agenda 21, as evidenced in the agendas of this and previous Expert Group Meetings (and associated proceedings). A review of the key papers reveals, however, a lack of a unifying framework that brings together the wide range of experiences into:

- (a) Guidelines by which one might evaluate the contribution of a particular private sector project or programme to sustainable development indicators; and
- (b) Methods by which policy-makers can compare alternative methods of finance for the same project or programme and rank them with respect to their contributions to sustainable development.

The literature to date, while useful and enlightening, is largely anecdotal in nature, reporting on success stories and failures with, as is common in such cases, more successes than failures. Moreover it focuses on the contribution of private sector finance to the environmental dimension of sustainability. To be sure, there are partial exceptions. At the 1997 Expert Group Meeting, Jun and Brewer (1997) presented a paper that attempted a review of foreign private capital flows with respect to the economic and social dimensions of sustainability. It noted several problems, such as establishing causation in the correlation between economic performance and foreign direct investment (FDI). These and several other key issues in evaluating the role of the private sector's contribution to sustainable development remain unresolved. The gap is greatest when it comes to the social dimension of sustainability (Gentry, 1998). When does private sector finance promote such sustainability and when does it retard progress in that direction? This question is hardly ever asked, let alone answered.

Before this paper can address the issue in its title, it has to set out some general criteria for assessing the contribution of private sector finance to sustainable development. This is done in Section II. Section III reviews, in the light of these criteria, the contribution that private sector financing has made in the last ten years or so. Section IV focuses on ways in which the role of the private sector could be increased, and channelled, so that it contributes most effectively to sustainable development. Both the opportunities and the obstacles to such a contribution are discussed. Section V concludes the paper with some suggestions for further research that should help formulate better policies in this area.

II. SUSTAINABLE DEVELOPMENT AND THE PRIVATE SECTOR

It is widely accepted that there is no single measure that captures all three dimensions of the concept of sustainability (environmental, economic and social). Furthermore, there is no consensus on how any measures that do exist should be used in an operational context (Bartelmus, 1999). There are, however, useful indicators for each of the three dimensions (Adriaanse, 1993; World Bank, 1997). Environmental indicators of sustainability include measures of pressure on the environment, the ambient state of the environment and the extent of the response to the pressures. Economic indicators include extended measures of capital, encompassing the environmental, physical, human and social. Social indicators seek to measure social capital, as well as inequality, poverty and social exclusion.

The role of the private sector in financing sustainable development has to be seen in relation to all three dimensions. Table 1 below summarises the likely impacts of different programmes and projects when undertaken using private sector finance as opposed to public sector finance. It also indicates the extent to which information is available in the literature on each of these impacts.

Table 1. Likely Impacts of Increased Private Sector Finance on Different Dimensions of Sustainable Development

	<i>Possible Positive Impacts</i>	<i>Data</i>	<i>Possible Negative Impacts</i>	<i>Data</i>
<i>Environment</i>	Increased overall investment in environmental protection	Anecdotal	Lower environmental standards adopted Increase in environmental degradation	Some studies
<i>Economic</i>	Increased growth in GDP Increased accumulation of human capital Sustainable use of natural resources	Some studies Anecdotal Anecdotal	More unsustainable use of natural resources	Anecdotal
<i>Social</i>	Increased employment	Anecdotal	Reduced social provision for key goods and services	Anecdotal

On the environment side private sector financed projects can provide additional resources for investment in environmental protection (Gentry, 1998; Hamilton, 1996) and for investment in products that are more environmentally friendly (Steele and Pearce, 1996). Evidence on the extent to which the increased level of private finance has contributed to these goals is, however, only anecdotal. A formal analysis would require a comparison between investment levels in these areas with and without some

measures that increased private sector involvement and would need some formal statistical analysis. This is not available. Informal evidence provides a number of cases where private sector projects have adopted higher environmental standards than prevailed in that sector generally, and where such finance has contributed to opening up markets for environmentally friendly goods, such as eco-tourism, bio-prospecting etc. By and large the claim that such projects could not have been financed by the public sector is correct, although that does not tell us what measures would lead to the level of finance in these areas increasing to its optimal level. The criteria, therefore, for environmental sustainability should be the increase in environmental quality resulting from the increase in private sector finance relative to a plausible alternative. The latter could be (a) no investment in the sector or product or (b) investment by a less environmentally oriented private or public sector entity.

Similar arguments apply to the possible negative impacts of private sector finance. There are some studies on whether increased foreign investment in developing countries has been motivated by lower environmental standards (Jun and Brewer, 1997; Jha, Markandya and Vossenaar, 1999). Less is known about whether the overall increase in private sector capital investment has resulted in an increase in environmental degradation, or indeed what the appropriate point of comparison should be.

On the economic dimension, increased foreign direct investment (FDI) is correlated with increased levels of growth but the causation is disputed (FDI may be attracted to countries where growth is high in the first place) and there are indications that domestic investment falls in compensation (UNCTAD, 1996; Caves, 1996). At the same time, stories are recounted about the valuable technology transfer and human skill development associated with the increase in FDI. On the impacts of private investment on natural resource exploitation, there are examples of actions that have promoted sustainable use (Steele and Pearce, 1996; Hamilton, 1996), but there are also cases where investors have extracted resources with less care for sustainability and environmental protection (French, 1998). The criteria for assessing the economic dimension should be the increase in output, valued at social prices, resulting from the shift in the investment regime or from the increase in private sector investment relative to some baseline. In doing this, possible changes in other investments as well as the effects of the investment on social and human capital must be taken into account.

Finally, there are the social criteria. Arguably, sustainability is as much about inter- and intra-generational social equity as it is about environmental protection. Yet the case for private sector finance in terms of increased employment or reduced provision of public goods is very sketchy.² Infrastructure projects funded by the private sector require higher returns to induce the investment (Haarmeyer and Mody, 1998). This in turn may raise prices and limit coverage, which could affect the well-being of the poor, or other vulnerable groups, and exclude them from the provision of the services provided by the infrastructure. The extent to which this has happened as the public sector has given way to the private is not well documented. One viewpoint is that there is no real alternative to the (at least partial) provision of services such as electricity, water and sanitation. Hence the social impacts are secondary. But this is not an appropriate position to take. If the services are not affordable and the programmes leave large sections of society unprovided for, their rating in terms of social sustainability will be low. This need not be the case, however, and there are some projects (described below) which have addressed this issue while maintaining the private sector's participation in the finance of key services. Thus, projects should be judged with respect to the social criteria, with no prior view of what extent they have complied with it.

III. AN ASSESSMENT OF THE CONTRIBUTION OF PRIVATE SECTOR FINANCE TO SUSTAINABLE DEVELOPMENT

A. General Trends in Private Sector Investment

There is evidence from which one can analyse the changes in the level of private sector finance of investment in developing and developed countries. Tables 2 and 3 provide some relevant data. Table 2 shows the difference between gross domestic investment and gross domestic savings for different regions. The difference between the two is attributable to external resources. Interestingly, as a percentage, the

² Major studies on this topic explicitly exclude the social dimension. Thus Serageldin and Younis (1996) finesse the issue by titling their study "The Effective Financing of Environmentally Sustainable Development". The discussion of the social dimension is, consequently, very limited.

deficit has not increased in low and middle-income regions between 1980 and 1997. The high-income countries have moved from having net resource inflows to having net resource outflows.

Table 2. Gross Domestic Investment and Gross Domestic Savings

<i>Group/Region</i>	<i>GDI as percentage of GDP</i>		<i>GDS as percentage of GDP</i>		<i>Deficit as percentage of GDP</i>	
	1980	1997	1980	1997	1980	1997
Low Income	20	22	15	17	5	5
Middle Income	27	26	27	26	0	0
High Income	25	21	24	22	1	-1
<i>Low and Middle Income:</i>						
East Asia	32	36	33	38	-1	-2
Latin America and Caribbean	24	22	22	20	2	2
Middle East and North Africa	27	24	38	25	-11	-1
South Asia	21	23	15	18	6	5
Sub-Saharan Africa	24	18	26	17	-2	1

Source: World Bank (1999a), Table 4.9 and Author's calculations

Note: GDI = gross domestic investment; GDS = gross domestic savings; Deficit = GDI minus GDS

While each group is large enough to mask considerable internal flows, the overall picture does not point to a structural shift in the financing of gross domestic investment. This may be thought to be at odds with the data that private foreign direct investment has increased noticeably, at least over the last decade. However, the amounts of FDI are not large compared to these gross resource flows. For example, gross domestic investment in all low and middle income countries was one quarter of their collective GDP in 1997, or about \$1.5 trillion. By contrast FDI in 1996 was \$110 billion or about 7 percent of the total. Hence the largest part of investment by far has come from domestic resources and continues to do so. Regionally, East Asia became a larger net provider of investment resources (reflecting the role of Korea?) and the Middle East became a much smaller net investor outside the region. Other changes are too small to be able to interpret.

The breakdown of investment between the private and public sectors is provided in the data in Table 3. This exercise could not be carried out at the regional level, as data were not available for enough countries. Hence, information has been reported for selected countries. Of the 15 countries looked at, government capital expenditure as a share of GDP rose between 1980 and 1996 for four of them (Korea, Thailand, Chile and Zambia), remained more or less constant in India and Pakistan and fell in the other 9 countries. Non-government capital expenditure rose as a share of GDP in all three East Asian countries, as well as Chile and India. It fell in nine of the countries and remained more or less constant in one (Trinidad and Tobago). This reflects the fact that private sector investment has boomed in selected countries only, a point that has been noted by other commentators. As a share of total investment, the private sector has increased in nine of the 15 countries, fallen in five and remained more or less constant in two (Chile and Botswana). There is no clear pattern to these share changes, except that the transition economies show a major shift to the private sector.³

Previous studies have focussed on the enhanced role of foreign capital flows in promoting investment, particularly FDI. As noted above, the amount of FDI is small relative to total investment. Nevertheless its share has increased over time. In the low-income countries, World Bank estimates are that FDI has increased from virtually zero in 1980, to around 8.5 per cent of total private sector

³ The calculation of the share of the non-government investment is taken as the difference between the total and the government investment. Separate data are given from private sector investment for selected countries and periods. Although the actual percentages come out differently in a number of cases, the broad picture of a varied trend in the share of the private sector remains.

investment in 1997. In middle income countries the share has risen even more, again from zero to about 15 per cent. Interestingly, the increase is to be found in all regions; in 1997 FDI amounted to 20 per cent of private sector investment in East Asia, 11 per cent in Central Europe and Asia (transition countries), 16 per cent in Latin America and the Caribbean, 5 per cent in South Asia and 11 per cent in Sub-Saharan Africa.

In addition to FDI, financial flows to developing countries relevant to investment also include portfolio investment and bank-related finance. Table 4 summarises the changes in all financial flows from 1990 to 1997. Across all developing countries total flows increased nearly seven-fold between those years, with the largest increases in Latin America and the Caribbean (nearly ten-fold) and the smallest increases in East and South Asia (five-fold). The structure of financial flows has also been changing. With the exception of Latin America and the Caribbean, the share of bank finance has fallen substantially and that of FDI and portfolio investment has increased. The shift to FDI has been strongest in relative terms in Eastern Europe (where portfolio investment's share has remained constant) and weakest in Latin America, where the share of FDI has fallen by about 15 per cent. Portfolio investment has gone up most in relative terms in East Asia, Sub-Saharan Africa and South Asia. The composition of financial flows has considerable significance for sustainable development in these countries, as will be discussed below.⁴

Table 3. Composition of Capital Expenditure in Low and Middle Income Selected Countries

Country/Region	Govt. expenditure as per cent of GDP		Govt. capital expenditure as per cent of govt. exp.		Gross domestic investment as per cent of GDP		Govt. capital expenditure as per cent of GDP.		Non-Govt. capital expenditure as per cent of GDP.	
	1980	1996	1980	1996	1980	1996	1980	1996	1980	1996
<i>East Asia</i>										
Korea	17.20	18.60	14.00	23.00	32.00	35.00	2.41	4.28	29.59	30.72
Malaysia	28.50	21.90	35.00	19.00	30.00	43.00	9.98	4.16	20.03	38.84
Thailand	18.80	16.50	23.00	36.00	29.00	35.00	4.32	5.94	24.68	29.06
<i>Europe and Central Asia</i>										
Hungary	56.20	43.20	13.00	9.00	31.00	27.00	7.31	3.89	23.69	23.11
Romania	44.80	31.40	33.00	11.00	40.00	21.00	14.78	3.45	25.22	17.55
<i>Latin America and Caribbean</i>										
Brazil	20.20	33.80	8.00	3.00	23.00	21.00	1.62	1.01	21.38	19.99
Chile	28.00	21.00	10.00	17.00	21.00	27.00	2.80	3.57	18.20	23.43
Trinidad & Tobago	30.90	28.30	39.00	10.00	31.00	22.00	12.05	2.83	18.95	19.17
<i>Middle East and North Africa</i>										
Egypt	50.30	34.30	21.00	19.00	28.00	18.00	10.56	6.52	17.44	11.48
Tunisia	31.60	32.60	30.00	21.00	29.00	17.00	9.48	6.85	19.52	10.15
<i>South Asia</i>										
India	13.30	15.80	12.00	11.00	21.00	24.00	1.60	1.74	19.40	22.26
Pakistan	17.50	23.80	18.00	13.00	18.00	15.00	3.15	3.09	14.85	11.91
<i>Sub-Saharan Africa</i>										
Botswana	31.80	39.40	32.00	19.00	35.00	26.00	10.18	7.49	24.82	18.51
Kenya	25.30	28.90	23.00	12.00	29.00	19.00	5.82	3.47	23.18	15.53
Zambia	37.10	21.40	11.00	33.00	23.00	15.00	4.08	7.06	18.92	7.94

Source: World Bank, 1999 *World Development Indicators* (Washington, D.C.: World Bank); table 4.9 and author's calculations based on tables 4.13 and 4.14

⁴ FDI has been claimed to be superior to equity and portfolio investment because it is less volatile. However, this is not an easy position to sustain. Poor economic policies, which result in an outflow of equity and portfolio investment will also cause a fall in future FDI; the effect of the change in the latter will be more pronounced in the long term.

Overall, we conclude that the picture of the trends in private sector investment is more complex than is sometimes portrayed. Over the last decade or so, the role of the private sector has not increased in relative terms in all countries. Moreover, the trends in public/private sector changes cannot be classified by region or level of development. There has been a substantial growth in private foreign flows but they are still a minor part of total investment or even private investment. However, increases in FDI as a share of the total have been observed in all regions, as has the sum of financial flows (FDI, portfolio and bank finance). The structure of financial flows generally has been towards FDI and portfolio investment and away from bank finance, but Latin America and the Caribbean are an exception to this pattern.

Table 4. Private Capital Flows to Developing Countries

Group/Region	1990				1997			
	Value	Of which shares were			Value	Of which shares were		
	\$ Million	FDI	Portfolio: Equity & Bond	Bank Finance	\$ Million	FDI	Portfolio: Equity & Bond	Bank Finance
Low Income	3,502	32.6	6.3	61.1	17,023	62.6	27.3	10.1
Middle Income	38,398	58.7	7.9	33.4	268,863	55.8	23.9	20.4
<i>Low and Middle Income</i>								
East Asia	17,664	58.6	0.6	40.9	91,188	67.4	23.3	9.3
Europe and C.Asia	7,695	14.3	27.0	58.7	49,875	44.7	27.0	28.3
Latin America and Caribbean	12,411	66.0	8.0	26.0	118,918	51.8	19.1	29.1
Middle East and N. Africa	668	412.7	-22.2	-290.6	8,120	66.1	47.8	-13.9
South Asia	2,174	21.3	11.6	67.1	11,110	42.0	43.4	14.6
Sub-Saharan Africa	1,288	64.8	-2.4	37.7	6,674	78.2	40.5	-18.7

Source: World Bank, 1999 *World Development Indicators* (Washington, D.C., World Bank), table 6.7

B. Specific Trends in Private Sector Finance

In this section we look at specific trends in the role of the private sector, covering privatisation and infrastructure investment, investments related to global environmental protection and investments related to improving or sustainably using the local environment.

1. Privatisation and infrastructure investment

The changing role of the private sector in economic activity can be seen in table 5, which provides the share of economic activity by state owned enterprises for all countries for which data could be obtained. The years of comparison are averages for 1985-1990, and 1990-1996.

The share of state-owned activities has fallen in a number of countries in Latin America and the Caribbean, notably Argentina, Chile, Mexico and Peru. It has risen, or not fallen appreciably, in all the other developing countries. The picture is substantially incomplete, as data are missing for all other countries for one or other of the two periods. It is certain, for example, that the share in economies in transition has fallen substantially, although there are significant differences between countries in this

group. Nevertheless, the data are revealing enough to show that in several major countries in the world the share of state-owned activity has not declined in the last 15 years.

The economic case for privatisation has been made for some time and is largely valid. A shift in economic activity from the public to the private sector results in a reduction in the costs of providing the service and an increase in the resources available for investment, without drawing on scarce public funds. A World Bank study of 60 privatised companies quoted in Panayotou (1998) found privatisation had resulted in an improvement of 11 per cent in efficiency, 44 per cent in investment and 45 per cent in profitability.

Table 5. Changes in Economic Activity for State-Owned Enterprises (1985-1996)

<i>Country</i>	<i>Share of economic activity by state-owned enterprises as percentage of GDP</i>	
	<i>1985-1990</i>	<i>1990-1996</i>
<i>East Asia</i>		
Philippines	2.3	2.2
<i>Latin America and Caribbean</i>		
Argentina	2.7	1.3
Bolivia	13.9	13.8
Brazil	7.6	8.0
Chile	14.4	8.1
Mexico	6.7	4.9
Panama	7.6	7.6
Paraguay	4.8	4.5
Peru	6.4	5.7
<i>South Asia</i>		
India	13.4	13.4
<i>Sub-Saharan Africa</i>		
Botswana	5.6	5.6
Zimbabwe	10.8	11.3
<i>High Income</i>		
United Kingdom	3.6	2.8

Source: World Bank, 1999 *World Development Indicators* (Washington D.C.: World Bank), table 5.8.

While this may be too enthusiastic a picture (similar performance gains are certainly not universal in transition economies, Auty (2000)), improved economic performance is generally expected from privatisation. The concerns are more on the environmental and social side. It is interesting that the World Bank study referred to above does not address either of these. The environmental fears are clearly stated by French (1998, 32). “When it is done wrong, privatisation leaves environmental degradation and social disruption in its wake.” The incentives for a less than acceptable environmental performance are clear. Governments are keen to attract private capital, which tends to demand higher rates of return on its investment than the public sector. This raises the price of the services (although some of the return comes from an improvement in efficiency as well). In the face of such pressures, and given limited environmental management capacity in the government anyway, the authorities may be willing to overlook environmental norms, as these will further raise the costs of provision of the services, or make the projects unacceptable to the private sector.

Examples of private sector projects with potential serious environmental consequences cited by French include power stations with high pollution levels, water supply projects that pay little attention to conservation, hydro projects with large displacement of populations, and gas and mineral development projects that cause environmental damages which would be unacceptable in the high income countries.⁵ The World Bank and other multilateral institutions would claim that projects financed with their

⁵ Private sector investment in mining and extraction of natural resources is particularly large as a share of total investment in Africa.

involvement have to meet strict environmental standards, and that such impacts are not possible. In this they are broadly correct, although some private sector projects, especially in the transport and water sectors, have been subject to criticism. What they cannot do, however, is to influence all privatisation-related activities and, since funds are fungible, countries may go to the multilateral institutions for the “cleaner” projects and to other private sector sources for the less “clean” ones. There is no study that has investigated whether this is true or to what extent it is true.

The above raises the question of how the private sector takes account of the environmental dimension. There is conflicting evidence on this. As Gentry (1998) notes, the traditional view has been that environmental factors have little impact on corporate valuation and the environment is considered a liability, cost or risk. Against this, some recent work has shown a positive link between environmental and financial performance. Earle (1998) reviewed 70 studies in this area and concluded that companies with best environmental practices had a 2 per cent higher stock market return than other companies. The *World Bank Development Report for 1999* reports on a study of stock market prices in Argentina, Chile, Mexico and the Philippines. It finds that when good environmental performance is publicly recognised the share price rises by an average of 20 per cent, while a publicised complaint about pollution results in a fall of 4-15 per cent. If these studies are correct, and if the causation is indeed from better environmental performance to higher share price (which it may not be), then the private sector has some degree of self regulation of the environment. How much this works to protect the environment is, however, still an open question.

On the social side, the concerns about privatisation are that it will result in higher charges and a lack of social provision of the service to poor and vulnerable groups. The fact that private sector enterprises require higher returns is partly due to the higher perceived risk of such investments. Haarmeyer and Mody (1998) note that the equity return on a sample of private power projects is 18-25 per cent and for a sample of private road projects it is 15-30 per cent. These are considerably higher than the returns for public investments, which tend to be around the 10-12 per cent mark. How much of the returns are generated by increased efficiency and how much by higher prices is not answered in the literature but some increase in prices is often expected (although there have been several privatisations where prices have fallen)⁶.

The way to protect the low-income groups and others who would lose out in the face of such changes is through the regulatory framework. Much has been written about how this should be structured (See, for example, Brook-Cowen, 1997). Generally speaking, the more control one seeks over social provision, the more power the regulator needs and the greater the capacity needed to ensure compliance. Tariff determination, including possible cross-subsidisation of rates for low level/low-income users, has successfully been achieved in a number of cases of privatisation. A number of cases are described in Gentry and Fernandez, (1998), French (1998) and Johnstone, Wood and Hearre (1999). These suggest that projects have had some success in meeting all three criteria of sustainability and indeed the social dimension has been given considerable thought in the design of the privatisation. This does not mean, however, that all privatisations have had the same success in social terms – again there is a tendency to pick out the “good cases”. Furthermore, there have been some problems; the case studies in the literature indicate that difficulties arise with respect to:

- (a) Trade-offs between lower average tariffs for the poor who are provided the service and expansion of the service to more poor households;
- (b) Lack of clarity in the agreement about how increased costs of unforeseen environmental regulations will be passed on;
- (c) Difficulties in applying metered tariffs;

⁶ The higher rate of return may be justified when the alternative is public sector funds. The literature on the marginal cost of public funds (Ballard, Shoven and Whalley, 1985) notes that a dollar of public investment costs society more than one dollar because of the distortions it creates in the process of collecting the revenue. Hence if the private sector demands a rate of return of X per cent on its investment, the social cost of provision may be lower than with a public sector that asks for a lower rate, but that imposes a welfare cost on society in raising the revenue.

- (d) Difficulty in getting political agreement on large-scale concessions for privatisation of public services. Transparency in the arrangements for such contracts and ensuring competitive bidding is essential for the long-term success of the project (Gentry and Fernandez, 1998);
- (e) Given the long term nature of the agreement, it is more effective when the contracts are based on performance indicators rather than process indicators (specifying how standards are met) (Gentry and Fernandez, 1998);
- (f) The terms of private sector provision of water and sanitation often ignore the impacts on those outside the scheme -- other users of ground and surface water which is drawn for the project or those receiving untreated waste water resulting from the project (Johnstone, Wood and Hearne, 1999);
- (g) As noted earlier, there are several levels and forms of privatisation. Brook-Cowen (1997) describes them as follows, in increasing order of private sector responsibility: service contract, management contract, lease, build-operate-transfer, concession and divestiture. Apart from divestiture, most involve some form of public-private partnership. Although there are papers describing the merits and de-merits of each, a detailed evaluation of the relative performance of different forms is lacking. In Section IV we discuss when one form is to be promoted in favour of another.

To sum up, privatisation is an important potential source of finance for sustainable development and is growing in popularity, although it is by no means the main source of provision of key infrastructure services and indeed the share of state activity has not fallen in many countries. The experience with private provision of what was previously a public sector activity has generally been good with respect to the economic dimension of sustainability. On the environmental and social dimensions the evidence is less clear but the few examples we have point to some progress on both these fronts. We need more systematic evidence, however, and there is a concern that what is documented is the “good side,” often because it relates to the activities of the multilateral institutions, which are under more careful scrutiny than other private sector initiatives. Furthermore, some sceptics argue that, given poor monitoring capacity in most developing countries, can the privatised companies be expected to continue to provide the services in a way that maintains progress toward sustainability?

2. Investments related to global environmental protection

Following the emergence of the major global environmental issues of stratospheric ozone depletion, climate change and biodiversity loss, nations have recognised the importance of international measures to protect the environment against losses arising from such changes. This requires changes in policy as well as allocations of resources for investment to mitigate the negative impacts and prevent further damage. The ground relating to these issues was well covered in the earlier papers on the financing of sustainable development (Markandya, 1994; Steele and Pearce, 1996; Hamilton, 1996; Panayotou, 1998). The basic messages emerging from that literature are as follows:

- (a) Substantial financial resources are required to initiate actions to achieve targets for environmental protection that must be seen as essential for sustainable development;
- (b) The level of resources is not independent of the policy framework; generally the more market based the policy framework, the less are the costs of achieving any given global environmental targets;
- (c) National governments are not always, or even most frequently, the best agents to implement the programmes for global environmental protection; there is a key role for the private sector;
- (d) Much of the action has to be implemented in developing countries, which lack both the public and the private sector capacity and financial resources to undertake the actions.

As a result, a number of initiatives have been developed over the last 5 years or so. The Global Environment Facility (GEF) was set up in 1990 with the specific purpose of providing financial support

⁷ The failure of the Malaysian Indah Water Konsortium sewerage project and the Pakistan Hub River Power project have been attributed to the lack of transparency and suspicion of corruption.

to initiatives to protect the global environment in developing countries. It has a budget of around \$2 billion over three years. Likewise, the Multilateral Fund was established in 1990 (initially as an Interim Fund) with the objective of assisting developing countries to phase out the use of ozone depleting substances. It has a triennial budget of around \$500 million.

The basic principle of support for both is that they fund the “incremental cost” in any project arising from the increased level of environmental protection (amounting to anything from 7 to 65 per cent of total cost). Although the GEF has always provided significant private sector support, latterly this has increased. The idea is that, with GEF support the private sector is able to leverage funds from other sources. Most such projects go through the International Finance Corporation (IFC) — the private sector arm of the World Bank. Examples include:

- (a) Small and medium enterprise (SME) sector production of efficient lighting in Poland, whereby intermediary institutions receive low cost loans from the GEF, who then provides debt and equity financing for SMEs. The leveraging of the original loan is more than 100 per cent;
- (b) A biodiversity enterprise fund that will invest in sustainable exploitation of natural resources through agriculture, aquaculture, ecotourism and recycling. GEF and IFC could together put up about \$10 million in a fund of \$20-50 million. The fund will invest in projects with a capitalisation of \$40-100 million;
- (c) A \$100-\$200 million Global Renewable Energy Fund to finance projects of less than 20MW. The Fund will start by exploring how concessional finance can be combined with commercial funding to support projects that would otherwise be so small that the transaction costs would exclude them from mainstream finance.

These are only a few of the initiatives that IFC is working on with GEF. The overall contribution to finance in this area of private sector finance remains to be determined, as does the efficiency of the investments – how much additional contribution does the programme make to global targets, and what is the cost per unit of the target? It should be noted that these initiatives were on the agenda three years ago (Hamilton, 1996) and still appeared as proposed projects on the IFC Web Site in 1999.

Other initiatives that involve the private sector include private bio-prospecting programmes, under which pharmaceutical companies pay for the rights for such prospecting in exchange for limitations on development in the areas concerned. In 1991 the well-known deal between Merck and INBio in Costa Rica was signed. The payment amounted to \$1.35 million, as well as royalty deals on any discoveries. Since, then, however, the number of new agreements has been rather limited. Steele and Pearce (1996) and Simpson, Sedjo and Reid (1996) noted the difficulties in this area. The need for a strong scientific base and political stability are necessary precursors. Also, expectations of high receipts for the host country are unrealistic given the nature of the market. In any event, we have not been overwhelmed with new bio-prospecting programmes. There are only a handful referred to in the literature – one or two in Brazil and Argentina and one in Suriname⁸.

Other developments in the private sector finance of global environmental problems include:

- (a) Growth in investment in eco-tourism. No reliable estimate of the potential of this market is available. Currently there are many programmes that label themselves as eco-tourism but their contribution to conservation ranges from negative to possibly large and positive. In most cases the impacts are unknown;
- (b) Various debt-for-nature swaps where NGOs “buy” the right to undertake conservation from a national government in exchange for retiring some its debt from the secondary market;
- (c) Programmes for labelling and certifying forestry products as consistent with sustainable use of forests, through the Forest Stewardship Council. Similar programmes exist through the Marine Stewardship Council for sustainable exploitation of fisheries.

With respect to climate change there have been several initiatives and the situation is evolving rapidly. The Kyoto Protocol in 1997 agreed on three “flexibility mechanisms” for meeting the target reductions in Green House Gases (GHGs) and in moving developing countries onto greater efficiency in

⁸ Steele and Pearce (1996) suggest that the overall revenue to developing countries could be as much as \$1 billion annually. If so, we are less than one percent of the way there.

economic activity with respect to GHGs. Countries are divided broadly into two groups: Annex I Parties, almost all of whom have binding commitments to make reductions for the period 2008-2012; and Annex II Parties that do not have such commitments.⁹ Annex I countries can acquire/transfer emissions among themselves. The instrument for such transfers is called Joint Implementation (JI). The main features of JI are its restriction to Annex I countries with commitments, the inclusion of sinks and the lack of a start date from which projects will be accepted. In addition, these countries can trade emissions rights among themselves although the details of such trading arrangements have not been established. The third mechanism is the Clean Development Mechanism (CDM). This will permit any legal entity in an Annex I country investing in GHG reductions projects in developing countries, and getting credit from some or all of the reductions. The reductions will need to be certified and can be banked from 2000 onwards for the first commitment period. It is unlikely that sinks will be included in the permitted reductions. The full details still need to be worked out, and there are some proposals to limit how much any one country can “buy” in GHG reductions.

All three mechanisms will work substantially through private sector involvement in GHG reduction. Estimates of the cost of all the reductions are uncertain but range widely, from \$22.5 to \$31.6 billion for the year 2010. The share of CDM projects ranges from \$7.5 billion to \$17.4 billion for 2010 or \$25-85 billion for the whole period (Austin and Faeth, 2000). This compares, for example, with current FDI to developing countries in 1996 of \$110 billion and would represent a major increase in such flows. The contribution they would make to sustainable development, however, remains to be seen. The idea behind CDM is that such investment should support “sustainable development” but that is not made operational. It is clear that, in selecting projects for implementation, countries should look to broader indicators than simply the revenue for the sale of GHG emissions. These include ancillary benefits, reductions in unemployment and poverty, and increases in sustainable use of energy. A discussion of criteria for evaluating such projects can be found in Austin and Faeth (2000) and Markandya (1998).

Many institutions are making moves to operationalise the flexibility mechanisms and to develop certification protocols and provide brokerage or “clearing house” facilities for projects¹⁰. One example is the Prototype Carbon Fund (PCF) by the World Bank that is already looking for investors in a pioneering scheme to trade emissions. The Bank has opened it to a select group of investors in industrialised countries and raised sufficient capital in January 2000 to get the scheme up and running. The PCF will operate like a mutual fund, except that the securities traded will be tons of carbon. Investors will finance mitigation activities in LDCs (as JI or CDM). Potential projects, subject to investors' approval, include those in the portfolio of the Bank and the IFC, as well as other agencies. Eligible investments will include promotion of renewable energy, energy efficiency improvement or replacement of “dirty” technologies. The PCF's maximum capacity has been set at \$150 million and officials expect to attract \$75-\$100 million during the first opening. The governments of Finland, the Netherlands, Norway and Sweden have agreed to participate, although none has made a binding commitment to invest. Eighteen corporations have also agreed to sign on including British Petroleum, utilities in Denmark, Finland, Norway and Sweden and major Japanese firms, including Mitsubishi. The Bank, which has sunk \$3 million into the scheme, expects to recover about 80 per cent of its costs through commissions charged on transactions – by its own estimates, trading could reach \$150 billion per year by the year 2020.

3. Investments related to sustainable use of the local environment

As noted earlier, the annual level of investment in developing countries is huge. Most of this has to come from domestic resources, and most of the domestic resources have to come from the private sector. The sustainability implications of the investments can range from positive and benign to extremely negative. There is no overall appraisal of trends in these investments, whether they are getting more or less economically efficient, or more or less environmentally and socially desirable. There are,

⁹ Strictly speaking not all Annex I countries have undertaken commitments. The exceptions are Turkey and Belarus, who are not Parties to the Convention, plus Croatia, Liechtenstein, Monaco and Slovenia.

¹⁰ Earlier papers in the CSD series on this topic refer to Activities Implemented Jointly (AIJ) and Carbon Offset schemes. These were actions undertaken pre-emptively, in the expectation of the flexibility mechanisms under the Kyoto Protocol. AIJs typically involved Annex I and Annex II countries and will not be permitted under the Kyoto Protocol as certified reductions. The amounts involved were, in any event, small compared to the trades expected under the flexibility mechanisms.

however, some indirect indicators which suggest that the situation should be improving, some that indicate no change for the better and point in the opposite direction. The positive indicators are the following:

- (a) The increased use of economic and fiscal instruments, especially the creation of property rights, tradable permits and markets for resources and pollution, pollution and product charges and bonds and deposit refund schemes. In many cases the shift to such instruments results in enhanced economic sustainability, as the costs of given levels of environmental protection decrease (Panayotou, 1999). Furthermore, they encourage enterprises to invest in cleaner technology and to reduce pollution, hence resulting in environmental gains. The impacts in terms of social indicators can be negative, but this can be addressed with relatively easy adjustments to the structure of the economic instrument (Markandya, 2000). There is no overall assessment about the extent to which economic instruments have been adopted, let alone an evaluation of their impacts on the nature of private sector investment and on sustainability indicators. Nevertheless, the trend towards adopting such instruments is encouraging and personal experience indicates that even those countries that were sceptical some years ago (e.g. India) have started to look seriously into the use of such instruments;
- (b) The reductions in environmentally damaging subsidies. Again there are only illustrative figures on trends. Gandhi, Gray and McMorran (1997) estimate subsidies to energy, water, transport and agriculture at around \$870 billion for 1995 or thereabouts. Pearce and Von Finckenstein (1999) estimate world subsidies at between \$655-786 billion for 1995/96. It is generally believed that they have fallen since then, and Pearce and Von Finckenstein (1999) provide an estimate of a fall of 51 per cent since 1990. Interestingly, the smallest falls have been in the OECD countries (21 per cent), while China and other developing countries have reduced subsidies by 58 per cent. The reductions encourage the shift to less resource intensive methods of production which, in turn, imply that investment made by the private and public sectors will generally be more consistent with the goals of economic and environmental sustainability. Some subsidies, however, such as those on kerosene and gas in rural areas, will encourage the supply of such energy and thereby reduce the environmental damage associated with alternative fuels. Hence, not all subsidy reduction is desirable from a sustainable development viewpoint, although one needs to bear in mind the economic cost of providing the subsidy and whether that is economically sustainable. The impact of subsidy reduction on the poor and socially excluded has long been a matter of debate. These resource subsidies largely benefit the better off, but that does not mean that their removal will not hurt some vulnerable groups. Targeted subsidies, such as those offered through rising block tariffs for water and energy offer one solution. Another is to use innovative instruments such as tradable rights, where reductions in subsidies are accompanied by an allocation of rights to use resources in a way that favours the poor. An example would be a reduction in water subsidies being accompanied by an allocation of water rights (which were previously with the state) to user groups;
- (c) The more careful appraisal of investments from an environmental perspective. As noted, multilateral institutions and international banks are moving toward stricter environmental standards in appraising investment projects. IFC (1999) provides an up to date description of what environmental due diligence is practised by the World Bank in its private sector lending. National authorities are also getting stricter, although they are frequently not as demanding as the international institutions. Hence, investments made nationally, especially by SMEs, receive less scrutiny than the high profile projects, yet their impact on the environment could well be greater.

The areas where the last ten years have seen little change in developing countries are:

- (a) The capacity to design, manage and ensure compliance with environmental norms. This remains a major obstacle to achieving sustainable development through the private sector. Although governments have increased their budgetary allocations for environmental protection, the issues to be addressed have gone up enormously, and the net resources remain inadequate. Furthermore, the incorporation of economic decision-making in environmental ministries is still very limited. The consequence is that enterprises are able to ignore compliance, and to get approval for investments that should be subject to greater environmental safeguards. One way around this problem is to use NGOs and civil society groups to assist in the monitoring. Another is to obtain voluntary agreements with industry, through a covenant that requires greater self-policing. Some

success stories such as the Pollution Control Evaluation and Rating (PROPER) programme in Indonesia are discussed further below;

- (b) The use of operational sustainability indicators in investment appraisal. One would not expect the private sector to take much account of sustainability in making their investments, unless there are direct requirements or indirect incentives to do so. While the theoretical literature on such indicators has proliferated, national authorities still make little use of them in regulating how the private sector allocates its investment resources. The same also applies to the appraisal of sectoral policies, such as investment incentives and subsidies to agricultural processing, mechanisation, etc. A proper consideration of the environmental social impacts has not advanced much in the last decade.

Areas where indicators point to a worsening impact of investment on sustainability are:

- (a) Increased investment in private transport, with growing pollution and congestion problems. Almost universally, the indicators in this area are deteriorating and yet there is little progress in providing enough incentives for the private sector (producers as well as users) to re-orient their activities toward a more sustainable policy;
- (b) Use of key renewable resources at rates that are not sustainable. This applies particularly to groundwater, forests and fisheries (Brown and Flavin, 1999). Despite all the fine words at Rio, depletion of these stocks continue at more or less the same rate and the situation has become critical in some regions. Investors continue to exploit them without taking enough account of the implications for the environment and for sustainability.

4. Conclusions on private sector investment and sustainability

This section has looked at the linkages between private sector finance and sustainability under three headings: privatisation, global environmental protection and local environmental protection.

On privatisation, which is increasingly being used to finance infrastructure provision, case studies point to improvements in environmental indicators and attempts to address the social problems, with some success. On the economic front the case studies also indicate increased efficiency, but they do not cover the full range of experience. In transition economies in particular, there have been less positive examples. In the future we need more systematic data. We also need to monitor the progress of these enterprises over a longer period, to be certain that the changes are indeed sustainable.

On global provision, the implementation will be very much in the future. The GEF, through the IFC, has contributed to a growing level of private sector participation in energy efficiency and other areas where there is a global environmental impact. The overall contribution to the environmental targets remains small, however, and information on the efficiency of such investments has not been systematically analysed. Other initiatives, such as bioprospecting, and certification of forest products remain small in terms of their overall impact. The greatest potential for private sector involvement in financing solutions to global environmental problems lies in the flexibility mechanisms of the Kyoto Protocol, especially through the CDM, but this is yet to be realised. It is noteworthy however, that there is a great deal of interest in the private sector even at this early stage.

On the influence of the private sector on the local environment, the picture is mixed. It is positive with respect to improved incentives for efficient environmental protection through the use of economic instruments and reductions in environmentally damaging subsidies. Standards for the appraisal of investments have also risen and now include stricter environmental norms and a more careful assessment of social impacts. The situation has not improved appreciably in developing countries, however, when it comes to capacity for regulating the environment and ensuring compliance. Furthermore, most sustainability indicators have yet to be made operational, so that investments can indeed be evaluated with respect to such criteria. Finally the picture is worse when we look at the growth of private transport and the increased rate of exploitation of renewable natural resources. In both cases the private sector is responsible for much of the investment but it is not responding to signals that the development is unsustainable.

IV. OBSTACLES TO AND OPPORTUNITIES FOR GREATER PRIVATE SECTOR PARTICIPATION IN THE FINANCING OF SUSTAINABLE DEVELOPMENT

In this section we look at the obstacles and opportunities for private sector financing of sustainable development. It is important to begin by noting that not all increases in private sector finance will contribute to sustainable development. Examples have already been given of projects that have seriously damaged the environment, contributed negatively to social sustainability and cost much more in resources than the value of what they produced. Thus, what we are looking for is obstacles to private sector projects that are structured in a way that is consistent with the goals of sustainable development.

From the discussion of the linkages between private sector finance and sustainable development, the following obstacles and opportunities have been identified.

A. Weak Enforcement of Environmental Regulations

Enforcement of environmental laws and regulations remains a major weak point in the environmental protection systems of many developing and transition economy countries. Some regulations are unrealistically strict and impossible to meet, others are outdated, while the enforcement agencies often lack the resources and political support necessary to do their jobs properly. The capacity to identify, prepare and package environmental investments for financing is under-developed and viable projects go unimplemented as a result. In especially short supply are people with the economic/financial skills and expertise needed to undertake cost-effectiveness analysis, business planning and financial/credit analysis.

These factors can be an obstacle to effective privatisation and to adequate local protection of the environment. They can also make it difficult for countries to meet international environmental obligations. These difficulties have been noted in discussion of all these areas of private sector activity.

To overcome the problem, developing countries need much more assistance in capacity building and technical support than they now receive. Multilateral institutions are aware of this and are responding but much remains to be done. Personal experience with Ministries of Environment in many countries reveals chronic under-funding, low morale and inadequate staffing. In addition, the authorities have to depend much more on civil society to ensure compliance. The PROPER programme in Indonesia is an excellent example. Degree of compliance is rated on a colour scheme, which is made public. Information is widely available and local communities discuss and negotiate on poor performance with polluters. The impact on compliance has been substantial and the government plans to extend it from the present 400 factories to 2000 by next year. Following from this, authorities in Colombia, Mexico and the Philippines are starting their own public disclosure programmes (World Bank, 1999b). This is part of a general trend toward informal regulation, which include voluntary agreements as well as eco-labelling and certification schemes (Hafkamp, 1995; Zarrilli, Jha and Vossennar, 1997).

B. Weak Economic and Regulatory Incentives

A number of economic and regulatory incentives, which could and should encourage environmental investments are simply not as effective as they should be. Despite the reductions in resource use subsidies noted earlier, they remain substantial, and hence a disincentive to efficient resource use. Additionally, economic instruments such as pollution charges and fines, which should serve as incentives for enterprises to invest in pollution reduction, fulfil this function poorly because the base rates are usually very low. While such charges and fines do generate revenues which are often used for environmental protection purposes (i.e. through environmental funds), the charge and fine levels are generally so minimal that it is less expensive for the polluting enterprises to simply continue paying them rather than to make investments which would eliminate or reduce emissions. Moreover, some enterprises do not pay charges or fines at all due to financial insolvency, privileged status vis-à-vis regulators, simple non-compliance, etc. This is particularly true in the economies in transition, but applies more generally as well (for Asian experience on economic instruments see Markandya, 1999).

The reforms needed for accelerated removal of subsidies are discussed elsewhere in this volume. On pollution charges and other economic instruments, there is little movement toward more realistic

charges (there are exceptions, such as China). The situation can only be changed by example by workshops and training seminars showing how actual cases have worked effectively and how adverse social and economic impacts have been avoided. Technical assistance in Ministries of Environment and Finance are a necessary complement to any capacity building programme.

C. Problems with Meeting Environmental and Social Objectives in Privatisation Schemes

We noted earlier how privatisation programmes face problems to ensure coverage of the service to poor and vulnerable groups and how they can ignore the environmental impacts on those outside the scheme. These issues can be tackled through the regulatory arrangements, such as using “lifeline rates” and cross subsidisation. The consensus appears to be that where there are substantial social objectives, public-private partnerships are a better vehicle than pure private sector operations, such as exclusive build-operate-transfer, concession and divestiture. Hart (1998) notes that such schemes can also be the appropriate vehicle when:

- (a) The state needs to share in the rents that cannot be collected through taxation;
- (b) It is a step to full privatisation, which may need some monitoring of private sector performance and when the full value of the privatised entity is hard to determine (in which case there is danger that state assets will be undersold); and
- (c) The projects are too risky for the private sector to take them on alone.

Successful public-private partnerships require mutually agreed objectives and targets, clearly defined roles and responsibilities and “Dominant Partner Management” (one of the two parties retains exclusive operational control) and a sharing of asset ownership so that both parties seek to gain appreciation of their assets and protect them from downside risk.

D. Unstable Macro-economic Conditions and an Uncertain Regulatory Environment

In many developing and some transition countries macro-economic conditions are still unstable. Under such conditions investors of all types tend to be very wary given the high risks involved. Moreover, serious economic fluctuations or high inflation can easily undermine investment incentives which might have been created by positive reforms in environmental policy or improvements in institutional arrangements.

Even in countries where macro-economic conditions have stabilised, there often remains considerable uncertainty with regard to future environmental standards. The environmental regulatory systems are evolving rapidly in many countries, with old laws being reformed or sometimes entirely replaced. The pace of evolution varies considerably from country to country and even within countries according to specific law or environmental sector. Generally, markets are developing more quickly than regulatory regimes, resulting in pressures on governments and enterprises to act (i.e. make investments) often without sufficient knowledge as to what standards they will be required to enforce or comply with in the future. While new regulations may be coming down the pipe to replace the old, how do enterprises know what actions to take and investments to make, in order to be “in compliance”? For those Central and East European (CEE) countries in the process of acceding to the EU, standards provide the benchmarks for future environmental regulations. Nevertheless, the accession process, even for the earliest entrants, is expected to last a few (or more) years and the uncertainty will continue for some time to come.

Measures to reduce uncertainty of investments have been discussed extensively in the literature. Whereas in countries with high sovereign credit ratings it is possible for commercial banks to bear the risk, in many developing countries and most transition economies this is not possible. The banking sectors of many developing and CEE countries are still under-developed and under-capitalised, unable or unwilling to extend medium to long-term loans at affordable rates (if at all), inexperienced with

environmental investments and unwilling to assume the perceived risks associated with such investments. The result is that commercial capital is often not available for environmental investments which often require longer pay-back periods than other types of investments and have lower rates of return, or is prohibitively expensive for potential borrowers. In these circumstances opportunities for private sector investment can be created through:

- (a) International institutions reducing investment risk by a careful appraisal of the prospects;
- (b) Multilateral and export credit agencies underwriting political and regulatory risk;
- (c) The central government underwriting risk of default by the local authorities;
- (d) The government declaring its environmental intentions clearly in advance and sticking to them.

Ideally any remaining risk should be borne by someone who has an incentive to minimise his impacts on the project. The danger of moral hazard arises if that is not the case, so that if political risk is subsidised to the investors, they will invest more than would be justified if they had to take account of the risk.

E. Low Support for Environmental Protection

Public and political support for environmental protection activities, and the expenditures they necessitate, is often not strong enough to compel or stimulate investment. Public pressure for strengthened environmental protection is weak in many countries and this translates into low interest and support among politicians and other influential decision-makers. A lack of information and understanding about the true costs and benefits related to environmental protection can lead to other, seemingly more immediate priorities (e.g. meeting basic subsistence needs, paying the rent, maintaining or finding jobs) superseding the relative “luxury” of improving environmental conditions. Environment lobbies in these countries, while gradually becoming more professional and effective, especially as public participation in decision-making becomes more of a reality than a catchy phrase, remain weak compared to other social and commercial interest groups. Until this situation changes significantly, the policy and institutional framework necessary to generate substantially increased environmental investments will be slow in developing.

To some extent these problems reflect the realities of the situation -- there are indeed more important issues whose call on scarce resources should come first. It would be wrong to “force” an environmental agenda on such countries through conditionalities that reflect priorities in the North. Where, however, there are genuine national interests of which people are not informed, or where vulnerable groups are being marginalised, the international community can serve the cause of sustainable development by making this information available to the affected parties. It can also support the civil groups that are seeking to bring the issue onto the national agenda. The danger to be avoided in the latter case is being accused of external interference and undermining the efforts to strengthen governmental institutions such as the Ministries mentioned above.

F. Equity, Lack of Transparency and Political Acceptance

The privatisation discussion noted the difficulties of political acceptance when privatisation is undertaken without transparency or when it is seen to benefit a few people disproportionately. This has been the experience in Russia with much of the state sell-off, especially in the area of natural resources (Markandya and Averchenkova, 2000), in Malaysia with a national sewerage scheme (Gentry and Fernandez, 1998), and in Pakistan with the Hub River Power project (Financial Times, 1998). In many countries the process of privatisation has meant that great wealth was being accumulated at the same time that many people were facing increasingly desperate poverty. This has become a major source of social conflict and a number of researchers have drawn attention to the importance of this phenomenon in explaining the poor growth performance of several countries (Aslund, Boone and Johnson, 1996; Rodrik, 1998). As Rodrick (1998) notes,

“When social divisions run deep and the institutions of conflict management are weak, the economic costs of exogenous shocks...are magnified by the distributional conflict triggered. Such conflicts diminish the productivity with which a society’s resources are utilized in a number of ways: by delaying needed

adjustments in fiscal policies and key relative prices, by generating uncertainty in the economic environment, and by diverting activities from the productive sphere to the redistributive one.”

Another way of looking at the problem is in terms of social capital. As Knack and Keefer (1997) note, where social capital is high, there is less resort to litigation and/or criminal racketeering to enforce contracts. Building up such capital means ensuring that the process is not only transparent, but also that it is equitable and does not result in substantial social exclusion. That in turn depends on the creation of strong democratic institutions and open government.

G. Equity Concerns and International Political Acceptance

The above concerns at the national level are echoed at the international level, where the acceptance of regulatory measures depends not only on their economic efficiency but also on their perceived equity. The Kyoto Protocol is an important case in point. If the flexibility mechanisms are to work, and indeed if the Protocol is to be ratified and implemented, all Parties have to feel that the arrangements are equitable. Presently, some in the US take the view that developing countries should make some commitment to GHG reductions. The EU's position, and that of many of the G77 countries, is that no party should be able to “buy” themselves out of their commitment, by purchasing from another country its excess emissions reductions. Other developing countries are apprehensive about the implications of CDM deals in which the rich countries will dictate terms through controlling certification and having power over the financial institutions.

All these are driven in part by equity concerns. The solution has to be through negotiation and seeing both sides of the case. The imperative of the global problems facing the planet should concentrate the minds of the negotiators and it is encouraging that this complex issue has made as much progress as it has. But much needs to be done. The opportunities for all parties to gain from actions that protect the global environment are great; it will take a strong “demonstration effect” of successful projects from which all Parties emerge satisfied, for the process to gather momentum.

V. CONCLUSIONS

That the private sector has a major role to play in financing sustainable development is something no one would argue with. The questions are about how this role should be exercised; which are the areas where it can be effective and where is it less likely to make a contribution? In evaluating the actual and potential contributions of the private sector we must look at all dimensions of sustainability -- not just the environmental, which has been the focus of previous work in this area. Hence a social and economic assessment is also required.

In the enthusiasm to promote the private sector, writers sometimes give the impression that its role vis-à-vis the public-sector has expanded enormously. Likewise, the trends in globalisation create the impression of a major change in the share of FDI in total investment. Both are only partially true. The public sector has not contracted as a provider of economic goods and services in many developing countries and has only contracted a little in others. FDI accounts for around 7 per cent of total investment although its share has been growing throughout the developing world. The other components of financial flows to developing countries have also increased, and the structure has changed substantially. Bank lending is a smaller share in general (Latin America is an exception) and equity and bond finance has risen in some regions and declined in others.

The paper goes on to look at specific trends in private sector finance, beginning with privatisation and infrastructure investment. Privatisation is an important potential source of finance for sustainable development and is growing in popularity, although it is rarely the main source of provision of key infrastructure services. The experience with private provision of what was previously a public sector activity has generally been good with respect to the economic dimension of sustainability. On the environmental and social dimensions the evidence is less clear but the few examples provided point to some progress on both these fronts. More systematic evidence is needed, however, and there is a concern that what is documented is the “good side,” often because it relates to the activities of the multilateral institutions. Furthermore, some sceptics argue that, given poor monitoring capacity in most developing countries, can the privatised companies be expected to continue to provide the services in a way that maintains progress toward sustainability?

The second specific trend relates to the financing of global environmental protection. Here much has been promised for some time but little has been delivered so far. The expectation is that this will change in the next decade, especially with the flexibility mechanisms of the Kyoto Protocol. It is noteworthy, however, that there is a great deal of interest in the private sector even at this early stage. Other initiatives, such as bio-prospecting, and certification of forest products remain small in terms of their overall impact, and are unlikely to become major areas of activity. Nevertheless they may provide important services to some communities and certain niche markets.

The third area of change for the private sector has been with respect to its impacts on the local environment. Here the picture is mixed. Positive aspects include improved incentives for efficient environmental protection through the use of economic instruments and reductions in environmentally damaging subsidies. Standards for the appraisal of investments have also risen, with stricter environmental norms and a more careful assessment of social impacts. The situation has not improved appreciably in developing countries, however, when it comes to capacity for regulating the environment and ensuring compliance. Furthermore, most sustainability indicators have yet to be made operational, so that investments can indeed be evaluated with respect to such criteria. Finally, the picture is worse when we look at the growth of private transport and the increased rate of exploitation of renewable natural resources. In both cases the private sector is responsible for much of the investment but it is not responding to signals that the development is unsustainable.

From this review of the performance of the private sector, a number of obstacles and opportunities have been identified. These are:

- (a) Weak enforcement of environmental regulations;
- (b) Weak economic and regulatory incentives;
- (c) Problems with meeting environmental and social objectives in privatisation schemes;
- (d) Unstable macro-economic conditions and an uncertain regulatory environment;
- (e) Low support for environmental protection;
- (f) Equity, lack of transparency and political acceptance; and
- (g) Equity concerns and international political acceptance.

For each of these, actions are proposed to overcome the obstacles and exploit the opportunities.

On the enforcement of regulations, more resources, especially external assistance, are needed. But this will not be enough; the whole system of regulation, monitoring and compliance has to be changed, with greater use of informal methods and greater involvement of civil society.

On weak economic and regulatory incentives, the continued reductions in non-targeted subsidies for resource use need to be maintained. Economic instruments need to be applied at more stringent levels if they are to have an incentive effect. This can only be achieved by example, by showing how such schemes have worked elsewhere and how adverse social and economic impacts can be mitigated.

On the problems of meeting environmental and social objectives in privatisation, the regulatory framework can respond to meet these challenges, as the success stories show. The reasons why other cases have been less successful need to be analysed further. Reviews of programmes indicate that public-private partnerships may work better in meeting broader sustainability goals but they have to be structured in a very precise way if they are to succeed.

The uncertainty issue is a key one for private sector involvement in infrastructure and environmental projects. Unless the level of uncertainty is reduced, private sector involvement will not be forthcoming. In some cases this reduction cannot be made without excessive cost; those are situations where the private sector should, perhaps not be involved. In others, a combination of support for a careful appraisal of the projects, clear and declared government policies, and selective government and multilateral/export credit agency risk guarantees are required.

In some countries the level of support for environmental protection is low and the private sector cannot be persuaded to provide the investments for that reason. To some extent this may be a reasonable ordering of priorities and it would be wrong to "force" an environmental agenda on such countries through conditionalities that reflect priorities in the North. In other cases, however, the level of interest is

too low because vulnerable groups are being excluded from the polity and individuals are unaware of the effects of the degradation that they are experiencing. In such case the international community can assist in providing the necessary information and in supporting the civil groups that are seeking to bring the issue onto the national agenda. The danger to be avoided in the latter case is being accused of external interference and undermining the efforts to strengthen governmental institutions.

On the lack of transparency and equity the principles are clear. Governments cannot act without some democratic agreement in the area of privatisation. The selection of parties to deliver the services must take place through some kind of competitive process and they must not be seen to be excessively rewarded for their services. Failure to observe these conditions results in lack of success for the project itself and has ramifications for other privatisation programmes.

Finally, there are equity concerns for acceptance of regulatory measures at the international level. This applies to all parties, not just the developing countries. The way to overcome this, and to take advantage of the huge opportunities available for sustainable development as a result of the global treaties is to show, by example, that the schemes can work to everyone's benefit. That implies a gradual process, but one that has started with some optimism in the last few years.

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