

GENERAL SECRETARIAT

Round Table on Sustainable Development

Sustaining Whose Development? Analysing the International Effect of National Policies

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18-19 November 2003

This document is a background paper for the Round Table on Sustainable Development meeting which has as its theme "Sustaining whose development?". The meeting will take place at OECD headquarters, 2 rue André Pascal, 75016 Paris on 19th November, starting at 9.30 a.m.

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Sustaining Whose Development? Analysing The International Effect Of National Policies

A Project Of The Round Table On Sustainable Development¹

Background

The last decade has witnessed intense interest in measuring the sustainability of human development. What politicians and policy makers mean by “sustainability” varies. There is still no agreed definition.² And notwithstanding the extensive treatment accorded to sustainable development by the Rio Earth Summit and subsequent gatherings to review and elaborate Agenda 21³ and develop the “Plan of Implementation” from the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg,⁴ there is still no definitive content to the sustainable development agenda.

This has posed problems for policy makers who want to measure whether or not their policy settings are leading, overall, to more sustainable outcomes. In trying to include a sustainable development component in its regular reviews of member economies, the OECD, for instance, was reduced to nominating a selection of mainly economic and environmental performance measures against which countries could choose to be assessed.⁵ Where more comprehensive indicators have been proposed (such as the European Commission’s structural indicators⁶), the basis on which any overall judgements can be made remains problematic. And when a basis for an overall judgement has been provided (as with the World Bank’s Genuine Savings index⁷ or with Redefining Progress/WWF’s ecological footprint⁸), the interpretation of the results in a policy context has been controversial.

None of this means that sustainable development as a concept has not been useful in marshalling under one broad heading a large number of issues that had formerly been treated separately. Common to all approaches is a concern to understand the totality of economic, social and environmental consequences flowing from the process of economic development, and the differing policy trade-offs that alternative policy choices offer.

One practical problem is that there is no unique and widely accepted point of leverage from which to assess sustainability. Thus, the European Commission has spoken of “economic growth [that] supports social progress and respects the environment, social policy [that] underpins economic performance, and environmental policy [that] is cost-effective.”⁹ Such a formulation, admittedly an elegant one, can only take us so far. It is also rather limited in the sense of underplaying the need to protect and enhance the environment. It cannot determine limits to the trade-offs that may be attempted between these so-called “three pillars” of sustainable development. It may be possible to specify some bio-physical limits with respect to environmental policy. But many policy trade-offs confront ethical, rather than scientific questions. As such they are routinely the subject of lively political debate and do not lend themselves to resolution by analysis. The formulation also neglects the potential for complementarities – ways to find the synergies between economic, environmental and social initiatives.

The present paper does not seek to enter the debate on what the appropriate boundaries of sustainable development might be as a device for marshalling policy coherence across economic, social and environmental fields. These may well lie beyond reach. Rather, it focuses on another problem; namely,

that even if we could definitively identify and agree on some key elements whose measurement would tell us whether we were pursuing more or less sustainable development, current approaches to their measurement are largely confined to the national level.

Yet talk of “globalisation” has made the idea that national economies do not exist in isolation commonplace. The impacts of economic activity in a single economy – and the consequences of the policies administered to govern that economy – are not confined within national borders. It is not uncommon for some economic assessments to examine economy-to-economy effects. Concerns about over-valued currencies and their trans-boundary impacts, for instance, are already a familiar part of day to day commentary. Similarly, much analysis of the development prospects of poorer countries focuses on public and private flows of capital. And some of the most pressing environmental concerns that have mobilised inter-governmental action involve the projection of externalities whose impact on the oceans and atmosphere are truly global. Put very simply, many of the issues on the sustainable development agenda involve trans-boundary impacts.

Current, nationally based attempts to measure the “sustainability” of policies offer only limited insights into the impact (positive or negative) that countries are having on global sustainability. Similarly, although some internationally based attempts¹⁰ to measure transboundary impacts of national policies do seek to examine some trade-environment linkages, they are relatively limited in scope and analytical depth.

Whether impacts on global sustainability are the result of conscious policy decisions or simply the cumulative pressures imposed by the way people live and use resources, they do not form a significant part of the standard assessments on which most indicators of sustainability rely. That has not stopped governments from committing themselves to achieve significant goals (such as those enumerated at the WSSD). But we have no way of measuring whether or how far some of these goals are being achieved. Furthermore, in some cases, nationally-conceived policy responses can end up either simply displacing a problem (such as air pollution) to another part of the world or, alternatively, generating perverse and unintended consequences beyond the national focus of the authors of the policy.

This project, therefore, starts from the premise that indicators revealing the national-level picture need to be complemented by analytically and statistically respectable measures which describe the developmental, environmental and social externalities that are imposed beyond national borders by economic growth. These externalities may be positive or negative. To fail to take them into account in assessing the “sustainability” of an economy (whatever the criteria chosen), is to present a very partial picture which runs the risk of being significantly misleading. By taking them into account, we may not only influence domestic policy but also shed light on the wisdom of some internationally agreed measures.

The Global Dimension of Sustainable Development

From its inception some 15 years ago, the idea of sustainable development has attempted to embrace two quite distinct sources of political anxiety – not always happily. In developed economies, most attention has been directed to the consequences of material affluence, most particularly environmental degradation. By endorsing sustainable development as a goal, politicians have sought to assure their voters that continued economic progress need not be bought at the price of environmental despoliation.

Politicians in developing countries share a desire to de-couple economic development from environmental damage. But they are acutely aware that development will involve significant resource use and they have been adamant that they should not be expected to limit their sovereign rights to transform natural resources in the pursuit of higher living standards. And if there are limits to resources held in common (such as the atmosphere or oceans) they are not prepared to accept that their claim to those resources is necessarily pre-empted by the lifestyles of developed world economies.

To some extent, the Rio Summit in 1992 represented a compromise between the twin aims of reducing environmental damage without limiting the development rights of developing countries. (The actions of developed countries indicate that they do not regard their rights to development as limited either, although they hope to achieve future development by achieving a lighter “footprint”). But it is impossible to talk about sustainable development without acknowledging the distributional claims that lie behind this debate. They typically find their way into treaties under the rubric of “common but differentiated responsibilities” but the nature of that differentiation remains contentious.

If there is a formal bridge between these differing conceptions of sustainable development and the distributional issue raised by them, it is to be found most explicitly in the field of development assistance policies. Developed economies undertook at Rio, and even more explicitly at Monterrey, to make significant additional transfers to assist the development prospects of developing countries and to do so in a way that set these economies onto a more sustainable trajectory. They also pledged to take the lead in reducing the impact of their own resource use on the planet.

At the same time that this view of the way forward was developing, the liberalisation of trade and capital flows meant that the interconnectedness of developed and developing countries received a powerful boost. Investment flows are now larger than official development flows in some regions. And significant economic development in developing countries was driven by the migration of production from developed to developing economies. In short, the development of many of the fastest growing economies in regions like Asia and Latin America became even more closely linked with the consumption demands of developed countries.

In short, the nature of development and the externalities associated with it have become so globally entwined that it has become less and less useful to try to characterise what is happening in purely national terms. Development does not take place behind sealed borders crossed only by development assistance payments providing some sort of redistributive hand-up; and the environmental and social consequences of resource-heavy consumption are the same whether they originate in wealthy economies or in rapidly developing enclaves in the old “South.” Living standards being aspired to in the latter are taking on similar characteristics to those long pursued in the “North..

These consequences of so-called “globalisation” – and the limited means individual governments have to influence them – are one of the reasons why we need better information about the trans-boundary effects of economic activity and its regulation by governments. There is little point signing global treaties binding governments to take domestic action if in doing so they simply transmit the problem to another jurisdiction.¹¹ Similarly, there is little point trying to promote development in one sphere if it is being undercut by conflicting policies in another. Looking at things “in the round” applies as much at the global level as it does at the national level.

The Project

Against this background we have analysed nationally collected data in a way that enables us to say something about the way in which trans-border impacts can reinforce or undermine the sustainability of economic activity. We have gathered our material together under the heading of “data sets.” These are bundles of data that tell us about various aspects of our global interconnectedness and interdependency. They have been chosen by us and in part by the sponsors of the project to highlight some of the previously unrecorded effects of cross-border flows on issues that have been prominent on the sustainable development agenda.

Our choice of trans-border impacts has been guided in particular by the subject matter of a number of recent international declarations – namely, the Monterrey Consensus on Finance and Development.¹² the

WTO Doha Development Agenda,¹³ the WSSD Plan of Implementation and the Millennium Development Goals.¹⁴ The key issues chosen for the development of data sets include:

WSSD: Changing Unsustainable Patterns of Production and Consumption

The Plan of Implementation agreed at the WSSD in Johannesburg notes the importance of “changing unsustainable patterns of production and consumption” and to this end urges the identification of “specific tools, policies, measures and monitoring and assessment measures...”¹⁵ While some work has already been undertaken in this area, particularly by the OECD,¹⁶ it remains narrowly focussed (e.g. on household consumption).

It is not difficult to understand how governments can affect production and consumption patterns – they do it all the time by means of taxes, regulations and subsidies. But in a world without significant borders, the impact of these domestic measures is much harder to trace. Production may be transferred outside the country and beyond the reach of regulations while the importation of goods not subject to similar regulations may permit the overall environmental impact of consumption to remain unchanged, or even deteriorate.

Currently, there are no comprehensive data sets available to policy makers which can offer insights into these kinds of issues. That said, human impact on a range of sustainability-related pressure points, not least climate change,¹⁷ can be charted through trade flows reflected in consumption patterns. Analysing the carbon embedded in imports, for instance, enables us to develop a more complete picture of the impact countries are having, not simply in terms of their own production of CO₂, but also through their “consumption” by tracing and measuring the import of products with significant embedded carbon.

The Doha Development Agenda: The Case of Services

A key focus of the recent Cancun trade talks was the need to reduce and/or eliminate agricultural support in developed countries. There are other aspects of the Doha Development Agenda, however, which are of growing interest to developing countries. The Doha Ministerial Declaration notes, for instance, that the negotiations on services should be designed to promote “the economic growth of all trading partners and the development of developing and least-developed countries.”¹⁸ Unfortunately, however, the role and importance of services in economic growth, particularly in developing countries is poorly understood.¹⁹

While many may have heard of the use of India-based call centres by US and UK-based companies among others, few people are aware of the growing dynamism of software development in that country, or the proliferation of regional financial services provision from countries like South Africa, Colombia and Namibia. Even fewer policy makers are aware that, while the share of services in global GDP rose by five percentage points between 1980 and 1998, the increase for developing countries was nearly twice that.²⁰

If the Doha Development Agenda is to be taken at face value, OECD country negotiators should be taking account of precisely where it is that developing countries stand to make the greatest gains. But the data to inform such thinking is only now being developed on a systematic basis. We do not know, for instance, where the comparative advantage of developing countries lies in services trade. Nor do we have a clear sense of which aspects of the GATS negotiations are potentially the *most* beneficial to developing countries. As a result, trade negotiators have little systematic information with which to make sense of the possible direction of future negotiations.

Aside from revealing a rather surprising picture of the share of services in the overall trade of developing countries, the data set assembled for this project provides important insights into both where comparative advantages lie and where potential gains might be realised. It also suggest that an emphasis in the negotiations on liberalising developed world restrictions on travel and related services is likely to deliver the greatest immediate economic gains to developing countries.

The Monterrey Consensus and Foreign Direct Investment

It has become commonplace to assert that increasing flows of foreign direct investment (FDI) to developing countries will deliver greater aggregate growth and raise income levels. Thus through the Monterrey Consensus governments agreed to “increase their support for private foreign investment” noting that FDI is a “vital complement[s] to national and international development efforts.”²¹ While this is obviously true, an examination of the data assembled here indicates that over eighty-five per cent of FDI in 2000 went to OECD countries. Of the fraction going to developing countries, a small number of middle income economies dominate the list of destinations for FDI. The majority of developing and, especially, low income countries effectively miss out on the benefits which FDI confers.

Moreover, the Monterrey Consensus understated the importance of some other factors. Data showing the extent to which profits generated locally in developing countries are actually repatriated to parent companies in OECD countries is a case in point. The figures compiled here suggest that while inflows may appear significant, outflows can be up to half of the inflows. A focus on FDI inflows alone therefore is insufficient. By factoring outflows into measurement of FDI flows, a more complicated picture emerges.

Meeting the Millennium Development Goals (MDGs): ODA and Remittances

In a range of international commitments, such as the WSSD Plan of Implementation²² and the Monterrey Consensus,²³ OECD countries have said that they want to assist developing countries to achieve the MDGs. To assist policy makers in those countries seeking to target their assistance towards the MDGs, data sets which track commitments and country contributions could be useful. Important OECD work has begun in this area and some of the key elements are presented here.

The Monterrey Consensus also urges developing countries to mobilise domestic financial resources for economic development.²⁴ The problem is that significant proportions of these resources may be devoted to servicing debt on ODA loans. The data set assembled for this project sheds light on the extent of this problem. Such information could usefully inform policies which seek to consider the burden of debt repayment compared to domestic tax revenue.

An often neglected aspect of development-related assistance is the cumulative effect of repayments of past loans falling due. Including this information reveals a clearer picture of the real net benefit of ODA loan disbursements. A substantive underlying problem is revealed: developing countries are borrowing to repay earlier loans. The alternative is for governments to devote a significant proportion of current revenues to debt repayment. The sobering data assembled here indicate that the Heads of States' exhortation in MDG 8 to develop a global partnership for development remains a distant prospect.

The MDGs also have something to say about investing in education and capacity building. But here again, a currently unquantified problem blurs the issue. On the one hand, the MDGs exhort developing countries to raise skill levels. On the other hand, there is a perception that migration to OECD countries is substantial and increasing. Just where does the balance lie?

Despite commonly held perceptions in many OECD countries, only three per cent of people live in a country other than their country of birth. New and ground-breaking data assembled for this project provides some startling insights. There is a polarisation of migration flows. One relatively small group of people moves within OECD countries and another, much larger, group moves within non-member countries. Only about a quarter of all migrants move to OECD countries from non-member countries

A recent paper tabled at the WTO by Argentina, China, Colombia, Egypt, India and others makes the developing country case for greater liberalisation by OECD members of their immigration rules. The paper specifically notes that liberalisation of immigration rules could generate significant economic gains for developing countries.²⁵ An important component in generating such gains relates to remittance flows.

There is no doubt that a liberalisation of GATS Mode 4, to deploy the technical jargon, would result in increased remittance flows. What has been missed up until now is the fact that it is actually OECD countries who do rather well out of remittances. Of the nine countries that dominate the recipient table for remittances, seven are OECD members, with France ranking second only to India in overall terms. Nor are OECD countries the only ones providing remittances. The oil producing countries of the Middle East are the source of over a quarter of global remittances; Malaysia is the source of more remittances than any OECD country except the USA. A clear-headed and methodologically rigorous data base such as the one presented here will be of significant value to services negotiators working on the movement of people in the context of GATS-related discussions. Moreover, the same data base is relevant to the work of policy analysts thinking through the role remittances might play in helping achieve the MDGs, or in development more generally.

Conclusion

Taken together, the data sets assembled for this project do not provide a definitive picture of what “sustainability” might mean at the global level. Arguably, no data set could provide this. What they do provide to policy makers, however, is a step towards a rigorous and statistically respectable picture of the sustainably-related nuances of globalisation and to identify areas for improvement and trade-offs over time. Specifically, these data sets help policy makers think more clearly about the trans-boundary effects of decisions made at the national level. Moreover, the data yields new and important insights into the international targets and objectives which Ministers and Heads of States have committed themselves to. In this way, the work illuminates the way forward in answering the key questions which we asked at the outset: what sort of development and whose development are we really sustaining, and how sustainable is it?

Above all the project demonstrates that it is surely time to stop relying solely on nationally-based measurement systems alone. Complementary measures are urgently needed which can help us identify how and where potential solutions lie which can head off human and environmental pressures that are well described but are unlikely to evolve tidily according to a timetable or with predictable consequences.

In some cases the information could help countries to enhance their international commitments. In others, they might reveal these commitments to be lacking in value. The information itself can be used to support a variety of propositions. Countries are, understandably, always cautious about exposing themselves to new statistical measures and these will be no exception. Countries will appear better under some measures, worse under others.

But it would be a mistake to see the value of this new statistical material in such a light. If anything, it should cause us to think twice before persisting with a simplistic “beauty contest” approach to national assessment. The reality of our age is that the world’s economies and societies are becoming increasingly inter-connected. That phenomenon has been matched by a proliferation of multi-lateral initiatives. Yet they have often been launched with remarkably little information at hand to support their aims. Understanding and describing the interconnectedness that has given rise to this multilateralism can add real value to the quality of future decision-making.

Endnotes

¹ Many people assisted in the course of this project and the preparation of this report. In particular we wish to express our thanks to Dr Ralph Chapman, Dr Murray Ward, Nadim Ahmad, Andrew Wyckoff, Karen Tréanton, Dr Mathis Wackernagel, Tolani Britton, Deborah Guz, Brian Hammond, Simon Scott, Jean-Pierre Garson, Jean-Christophe Dumont, Annika Swanson and Tyler Beckelman.

² For an example of the ongoing discussion, see Reinhardt, F (2003) "Tests for Sustainability" in Cornelius, P, K Schwab and M Porter (Eds.)(2003) *The Global Competitiveness Report 2002-2003*. World Economic Forum. New York: Oxford University Press. <http://www.weforum.org/>

³ The Rio Declaration and Agenda 21 are available at: <http://habitat.igc.org/agenda21/index.htm>

⁴ WSSD (2002) Plan of Implementation, United Nations, New York, The full text is available at http://www.johannesburgsummit.org/html/documents/summit_docs/2309_planfinal.htm.

⁵ OECD (2002a) *Sustainable Development: A Framework for Peer Reviews and Related Indicators*, OECD, Paris (SG/SD(2002)3).

⁶ See for instance, European Commission, (2001) *Measuring Progress towards a More Sustainable Europe: Proposed Indicators for Sustainable Development*, European Commission, Brussels.

⁷ Hamilton K, (2000) *Genuine Saving as a Sustainability Indicator*, World Bank, Environmental Economics Series

⁸ See in particular WWF, Redefining Progress, UNEP, WCMC (2000), *Living Planet Report 2000*, WWF-World Wide Fund for Nature, Gland, Switzerland.

⁹ European Commission, (2001) Communication from the Commission: *A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development*, European Commission, Brussels, 15 May (COM (2001) 264 final).

¹⁰ See for example, recent OECD environmental performance reviews such as that of the Netherlands (2003).

¹¹ That said, in circumstances where, as with the Kyoto Protocol, there is a plausible mechanism for actually paying for cheaper action, such as emission reduction, in those other jurisdictions (viz, the Clean Development Mechanism, CDM) This is in principle a constructive and cost-reducing mechanism and one worth noting. Unfortunately, this may be undermined by poor policy design and implementation in developing countries, and (not least) inertia about changing patterns of consumption in developed countries. On both counts, it risks ending up simply becoming an excuse for inaction in developed countries.

¹² The full text of the Monterrey Consensus is available at: <http://www.un.org/esa/ffd/aconf198-11.pdf>

¹³ The full text of the Doha ministerial Declaration is available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm

¹⁴ The Millennium Declaration (available at <http://www.un.org/millennium/declaration/ares552e.htm>) launched the Millennium Development Goals. These can be accessed at <http://www.un.org/millenniumgoals/>

¹⁵ WSSD (2002) Plan of Implementation, United Nations, New York, paragraph 14 (a) refers.

¹⁶ On this point see the detailed analysis presented in OECD (2002b), *Towards Sustainable Household Consumption? Trends and Policies in OECD Countries*, OECD, Paris.

¹⁷ IPCC (2001) “*Climate Change 2001: The Scientific Basis*”, Working Group I Third Assessment Report, IPCC, Geneva. See also, the report by the US National Research Council (2001) *Climate Change Science: An Analysis of Some Key Questions*, USNRC, Washington. The report notes that “Greenhouse gases are accumulating in the earth’s atmosphere as a result of human activities causing surface air temperatures and subsurface ocean temperatures to rise.” The report is available at http://www.epa.gov/globalwarming/publications/actions/us_position/nas_ccsci_01.pdf

¹⁸ Paragraph 15 of the Doha Ministerial Declaration refers.

¹⁹ OECD (2002c) *GATS: The Case for Open Services Markets*, OECD, Paris. See also Vitalis V, (2003) The Development Impact of Developed-World Policies on Developing Countries: The Case of Trade, chapter in *The Effect of Rich Countries' Policies on Poor Countries*, Washington, Transaction Press and the World Bank.

²⁰ World Bank (1999) *Entering the 21st Century – World Development Report, 1999/2000*, Oxford University Press.

²¹ Paragraphs 20 and 21 of the Monterrey Consensus refer.

²² Chapter II (Poverty Eradication) of the Plan of Implementation refers.

²³ Paragraphs 4 and 39-46 in particular of the Monterrey Consensus refer.

²⁴ Paragraphs 10-19 of the Monterrey Consensus refer.

²⁵ Argentina, Bolivia, Chile, China, Colombia (et al) (2003) Proposed Liberalisation of Mode 4 Under GATS Negotiations, WTO, Geneva (TN/S/W/14, 3 July)

Data Set One

Measuring Embedded Carbon

“Changing Unsustainable Patterns of Consumption and Production...This would require action at all levels to identify specific tools, policies, measures and monitoring and assessment mechanisms.. (Johannesburg Plan of Implementation, Chapter III, paragraph 14(a))

Indicator

- *The amounts of CO₂ generated by consumption as compared with the amounts generated by domestic production*

Background

The overwhelming majority of OECD countries have signed on to the Framework Convention on Climate Change and the Kyoto Protocol which seek to reduce CO₂ emissions. Not surprisingly, therefore, every indicator project underway internationally includes a country's carbon emissions in its measurement set.²⁶

Yet the current focus on country carbon emission levels alone tells only part of the story. Conclusions about a country's global impact in sustainability terms may be distorted by the fact that current measures do not take into account the carbon intensity of trade flows. A country's measured emission levels, for instance, may be misleadingly low in the context of sustainability if it produces very few emissions but imports large quantities of goods whose production has entailed significant emissions. A national-level indicator which does not take into account trade flows can give a misleading underestimation of the emissions caused by a country's consumption patterns.²⁷ The corollary is that countries that generate significant emissions in producing goods for export are asked to carry a heavier responsibility in meeting emission reduction targets if they are requested to reduce emissions but the final destination of the goods lies abroad.

The size of CO₂ emissions embodied in imports and exports is significant, both in relative and absolute terms. The very latest work by the OECD referred to above suggests that the largest net outflow of emissions embodied in exports came from China and to a lesser extent Russia. In these countries, emissions from production exceeded those from consumption by 360 million tonnes of carbon dioxide and 232 million tonnes respectively, figures which are larger than the total production of many of the (mainly OECD) countries listed in Annex I of the Kyoto Protocol.

For Netherlands and Norway, over half of the emissions resulting from production are embodied in exports. For Norway and Sweden, imports contain over half as many emissions again as domestic production. For another five countries, exports contain more than 30 per cent of total emissions produced and a similar number of countries import emissions which are over 30 per cent of domestic emissions. The extent of carbon-intensive trade underlines how misleading an indicator that measures only the carbon generated in domestic production processes can be.

Sample results

Table 1 shows the implicit carbon content of production and consumption for a number of countries.²⁸ The figures for the carbon impact of consumption are calculated as those for production less the carbon

content of exports plus that for imports. When a country's figure for production is higher than that for consumption, the country is in effect generating carbon dioxide to meet the consumption needs of other countries.²⁹

Table 1:: Carbon dioxide emissions from production and consumption

Country	Domestic production Mt CO ₂	Exports Mt CO ₂	Imports Mt CO ₂	Domestic consumption Mt CO ₂	Exports as % of production	Imports as % of production
Australia	279	47	31	263	16.8	11.1
Canada	493	155	101	439	31.4	20.5
Czech Republic	126	44	19	100	34.9	15.1
Denmark	58	22	21	57	37.9	36.2
Finland	56	25	23	54	44.6	41.1
France	355	86	139	408	24.2	39.2
Germany	866	193	254	927	22.3	29.3
Greece	73	10	13	76	13.7	17.8
Hungary	57	16	16	57	28.1	28.1
Italy	398	60	107	445	15.1	26.9
Japan	1 100	102	289	1 287	9.3	26.3
Korea	364	75	113	402	20.6	31.0
Netherlands	174	97	77	155	55.7	44.3
New Zealand	25	6	9	27	24.0	36.0
Norway	35	20	19	34	57.1	54.3
Poland	328	62	20	286	18.9	6.1
Spain	235	45	62	252	19.1	26.4
Sweden	53	23	30	60	43.4	56.6
United Kingdom	536	110	123	549	20.5	22.9
United States	5 421	289	552	5 684	5.3	10.2
Other OECD	814	243	284	856	29.9	34.9
Brazil	258	24	32	266	9.3	12.4
China	3 068	463	102	2 708	15.1	3.3
India	672	74	24	623	11.0	3.6
Russia	1 440	256	24	1 208	17.8	1.7

Source: See footnote 28

Policy implications

A set of data which complements national-level information by illustrating the volume of carbon embedded in trade flows would give a more genuinely “global” account of the problem. Further, such a supplement to current approaches would provide a useful balance to the incomplete picture of progress on sustainability being presented by most OECD countries at the national level.

In international policy terms, an entire chapter (III) of the WSSD Plan of Implementation³⁰ is devoted to the question of changing unsustainable patterns of production and consumption. In the absence of a way of measuring the trans-boundary effects of such patterns, policy-making will be driven by production impacts to the exclusion of consumption ones. This data set offers policy makers a way of making sense of where the pressure points lie. In this context, policy makers could use the data set to consider where best to direct technical assistance and technology transfer. Thus, for instance, a country with a high level of embodied carbon in its imports may want to use the data base to identify which developing countries are generating the carbon to meet its consumption needs. It could then target development assistance and technology to assist in cleaning up (or updating the technology) used by the carbon-intensive sector in question.

More generally, the data set could usefully inform policy-makers determining the best way forward in international climate change-related negotiations. Currently, for instance, there is a substantial effort underway by a range of formal (e.g. UNFCCC, OECD Annex I Experts Group) and “informal” (e.g. CCAP Future Actions Dialogue, Pew Centre, various NGOs) groups on how the international climate change policy regime may change for the post-2012 period. One key criterion (among others) being explored is that of “responsibility.” One example of such thinking is the so-called “Brazilian Proposal” which seeks to establish responsibility for future mitigation action. This can be a dynamic concept, e.g. what is the attribution in 2020 of “historical” emissions from x date to predicted increases in mean global temperature in 2100? In this way, the attribution of developing countries’ emissions becomes increasingly important. But should developing countries be “responsible” for consumption by rich industrialized countries? In the end this is a question about equity. It is subjective and controversial. But if it is to be debated sensibly, we will need robust data about emissions on both a production and consumption basis.

Many of the agreements to date have foundered or are at best making heavy weather towards implementation precisely because the full economic consequences were not well understood at the time they were negotiated. Any post-Kyoto discussions will need to be informed by a much better appreciation of the global nature of the problem and the linkages that trade creates.

Major new extension for 2004

To date the work has concentrated on the effects of changing consumption patterns and changes in the origin of production across countries. A major new initiative will be to examine the impacts of technology on production within a country. This will permit analysis of demands on the environment with a more pronounced time dimension showing the consequences of each of the following three factors, (i) less harmful production techniques, (ii) changes in consumer demand, (iii) changing patterns in international trade.

Endnotes

²⁶ Other greenhouse gases and effluent to water supplies are also important but given the tight time frame for the project (eight months), the emphasis has been on the generation of carbon dioxide.

²⁷ See Rutherford T, (1992) *The Welfare Effects of Fossil Carbon Reductions: Results from a Recursively Dynamic Trade Model*, Economics Department, Working Paper No 112, OECD, Paris. For the earliest incarnation of this work see in particular Wyckoff A W and J. M. Roop (1994) “The Embodiment of Carbon in Imports of Manufactured Products: Implications for International Agreements on Greenhouse Gas Emissions,” *Energy Policy*, March 1994, pp. 187-194.

²⁸ Ahmad N,(2003) *A Framework For Estimating Carbon Dioxide Emissions Embodied In International Trade Of Goods* OECD, Paris. The paper is available at <http://www.oecd.org/doc/M00042000/M00042108.doc>.

²⁹ The figures are calculated according to the economic structure and carbon intensity of the country of origin of the goods. The results presented here concentrate primarily on the carbon embodied in products via the direct and indirect use of electricity.

³⁰ The full text of WSSD (2002) Plan of Implementation, United Nations, New York is available at http://www.johannesburgsummit.org/html/documents/summit_docs/2309_planfinal.htm.

Data Set Two

Transfer and Consumption of Natural Resources

“...accelerate the shift towards sustainable consumption and production ... within the carrying capacity of ecosystems” (Johannesburg Plan of Implementation, paragraph 14)

Indicator

- *The transfer of natural resources from countries with natural endowments to other groups of countries is changing over time*

Background

In the past, economic growth has led to an expansion in the exploitation of natural resources. Since these are not uniformly distributed, there may be a disparity between those countries with significant natural endowments and those without such endowments but an increasing reliance on the resources.

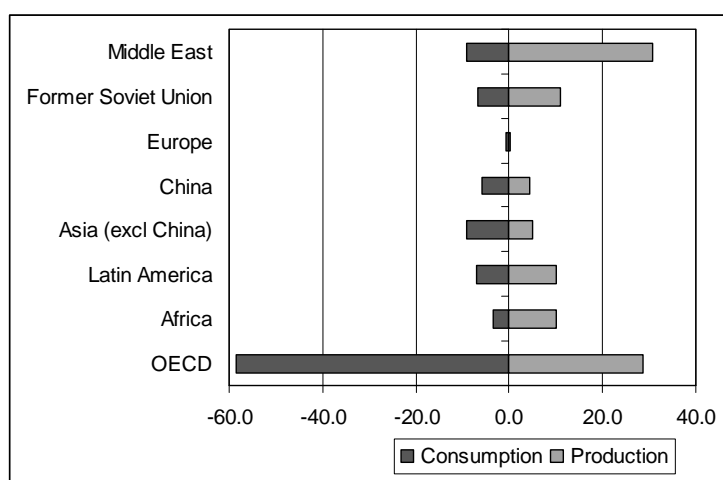
Of particular relevance in sustainable development terms are projections that global energy use, which is based in large part on the exploitation of natural resources like oil, gas and coal among others, is expected to expand by more than 50 per cent by 2020.³¹ Moreover, demand for fossil fuel energy in China and East Asia will expand more quickly than elsewhere at a rate of more around 2-3per cent per annum.³² By 2020, transport alone will account for more than half of global oil demand.³³ The non-renewable fossil fuels resource base is expected to be sufficient to meet demand to 2020, though problems beyond that point are foreseen for natural gas, and possibly oil.³⁴

In this context, the question policy makers need to ask is whether there is a way to fulfil the agreement made in Johannesburg to respect the “carrying capacity of ecosystems” when consumption of natural resources is unevenly distributed and may exceed the global systems’ ability to meet burgeoning demand from developing countries seeking quite legitimately to raise incomes and living standards to OECD levels.

Sample results

Table 2 shows the share of world production and use by geographical regions for the year 2000. OECD countries include some oil rich ones and produce almost 30 per cent of the global supply of oil. On the other hand, they consume almost sixty per cent of the total. The Middle East produced just slightly more than 30 per cent of global supply but consumed less than ten percent. Africa, Latin America and the former Soviet Union all consume rather less than they produce but China and the rest of Asia, like OECD countries, consume more than they produce.

Table 2: Percentage of world production and use of oil for geographic regions in 2000



Source: IEA

Table 3 shows how the use of oil and oil based products per head of population has changed since 1971. Consumption in OECD countries is marginally lower now than in the early seventies. For China, it is three and a half times as much. The columns at the right of the table, though, show that although the per capita use in OECD countries has not risen, it still accounts for the vast majority of global usage though the share in 2000 at 62 per cent was considerably lower than the 74 per cent in 1971. In global terms, the reason the per capita consumption in 2000 was only 92 compared with 100 in 1971, is because of the massive fall in consumption in the FSO and Eastern Europe following the collapse of their economies in the early nineties.

Table 3: Per capita consumption of oil and oil products by geographic region

	Percentage of area consumption in 1971							Percentage of world total	
	1971	1973	1978	1997	1998	1999	2000	1971	2000
Middle East	100	109	124	168	170	166	170	2.2	6.1
FSU	100	116	150	58	58	56	56	11.0	4.9
Europe	100	113	145	99	96	89	88	1.3	0.9
China	100	125	200	310	319	335	359	1.8	6.6
Asia excl China	100	116	132	247	242	251	250	3.1	9.6
Latin America	100	110	116	122	122	120	119	4.6	6.5
Africa	100	108	124	127	126	128	128	1.7	3.2
OECD	100	113	112	97	97	98	98	74.2	62.2
World	100	112	114	92	92	92	92	100.0	100.0

Source: IEA

Policy implications

The central policy implication of this data set is that, if as expected, consumption in a range of developing countries begins to increase at similar rates to China, and if China and Asia continue to increase their use at similar rates as in the recent past, then the modest per capita reductions in OECD usage is likely to be more than compensated by increases in the rest of the world. Policy makers will want to reflect on whether the decline in OECD usage is moving swiftly enough and, perhaps more importantly, whether developing countries can be assisted to achieve growth without the kind of dependence on oil which characterised growth in OECD member countries. Policy makers will want to reflect for instance, on the transferability

of technology related to renewable energy resources and assist developing countries to improve the efficiency (and thus oil-dependency) of their production processes.

Total fossil fuel subsidies by OECD economies amount to \$57 billion³⁵ with those for non-OECD countries standing at \$94 billion. On the other hand, total subsidies for renewable energy sources (including nuclear power) in OECD countries, are \$25 billion, while in developing countries the figure is negligible.³⁶ Through the provision of such support, governments are effectively subsidising pollution and global warming, as more than 60per cent of all energy subsidies flow to oil, coal and gas.³⁷ Another important policy implication therefore is the role which a decline in energy-related subsidies might play in affecting consumption patterns by encouraging alternative and renewable sources of energy.

Endnotes

³¹ International Energy Agency (2000a) *World Energy Outlook*, IEA, Paris

³² IEA (ibid) and IEA (2000b) *Key Energy Statistics*, IEA Paris

³³ IEA (2000a) and World Business Council on Sustainable Development (2001) *Mobility 2001: World Mobility at the End of the Twentieth Century and its Sustainability*, WBCSD, Geneva.

³⁴ IEA (2000a). Please Note: The IEA assessment is premised on a steady price increase in oil to \$28/barrel in 2020 to facilitate further capital investments. There is some debate as to whether this assumption is realistic (for the most recent consideration of this see in particular Persson T A,(2002) *Modelling Energy Systems and International Trade in CO₂ Emission Quotas*, Department of Physical Resource Theory, Masters Thesis, Chalmers University, April

³⁵ All monetary amounts in the paper are in current US dollars unless otherwise specified.

³⁶ All figures for the value of the subsidies cited are from Van Beers C and A de Moor (2001), *Public subsidies and policy failures*, Edward Elgar, Cheltenham and International Energy Agency (1999) *Looking at Energy Subsidies: Getting the Prices Right*, *World Energy Outlook*, Paris, IEA

³⁷ Van Beers and de Moor (ibid).

Data Set Three

Environmental Demands of Agricultural Production

“... delinking economic growth and environmental degradation through improving efficiency and sustainability in the use of resources and production processes, and reducing resource degradation, pollution and waste. All countries should take action, with developed countries taking the lead...”
(Johannesburg Plan of Implementation, paragraph 14)

Indicator

➤ *The demand for differing types of agricultural production across groups of countries.*

Background

In terms of environmental consequences, agricultural production can be viewed as requiring either cropland or grassland for grazing animals. Cropland yields crops for human consumption, crops for consumption by animals which are crop-fed as well as non-food products such as tobacco and cotton. Grassland is used to raise animals which occupy permanent pasture. They provide not only meat but also dairy products, hides and wool.

A feature of increasing prosperity is the increase in demand for meat as a regular item of diet. Since crops represent more efficient production of food than animals, this increase leads to increasing environmental demand for agricultural production.

When a country's demand for agricultural products exceeds its existing capacity, two options are open, either to import the products for which there is excess demand or to intensify production at home. In many developed countries, especially in Europe where land is scarcer, this may lead to more intensive farming with potentially damaging environmental effects.

Sample results

The basis of the ecological footprints included in the “Living Planets Reports”³⁸ provides a way to examine the differences in the demands on the environment made by different groups of countries and how these are met. Table 4 shows in percentage terms the demands on the world's cropland and grassland by different groups of countries, by geographic area and by income group and the capacity of these groups of countries to meet this demand³⁹.

Low income countries, with about forty per cent of the world's population, control only about a quarter of the world's cropland. OECD countries with under half that population demand over one third of cropland products. However, for none of the groups is the difference between the demand for cropland products and the capacity to produce them startling different. (There is of course wide variation between countries within each of the groups.) Looking at the demand for grassland, though, the demand in Asia and the Pacific is much lower than the potential supply, a surplus which is balanced by over demand in other geographic regions.

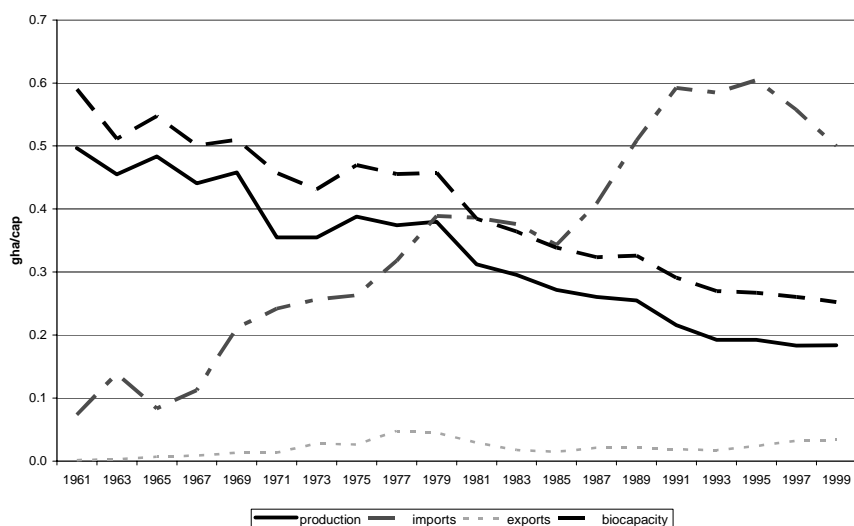
Table 4: Percentage of demand and supply of products from cropland and grassland, 1999

	Demand		Supply		Percentage	
	Cropland	Grassland	Cropland	Grassland	Supply - Demand Cropland	Grassland
<i>World by geographic region</i>						
Asia and the Pacific	31.5	17.7	31.0	31.1	-0.6	13.5
Middle East and Central Asia	4.8	4.8	3.7	2.3	-1.1	-2.5
Africa	10.3	18.7	9.0	10.9	-1.3	-7.7
Latin America and the Caribbean	7.4	22.7	8.9	16.3	1.6	-6.4
Central and Eastern Europe	9.1	4.2	8.5	2.5	-0.6	-1.7
OECD countries	36.9	31.9	38.8	36.8	1.9	4.9
<i>World by income level</i>						
OECD countries	36.9	31.9	38.8	36.8	1.9	4.9
Middle Income Countries	37.9	48.3	36.5	52.9	-1.4	4.6
Low Income Countries	24.9	19.7	24.6	10.2	-0.3	-9.5

Source: Derived from Living Planet Report, 2002

New research work⁴⁰ using the same basic concepts permits an examination of the evolution of demand over time. In this respect the case of Korea is particularly useful since it displays the characteristics of a country whose standard of living has increased dramatically over the period considered, 1961 to 1999. This is shown in Table 5 where all information is in per capita terms⁴¹. Production and potential production (capacity) decline steadily over time but imports rise dramatically, reaching the same sorts of levels as in OECD countries in the mid 1990's before falling back somewhat in response to the Asian financial crisis.

Table 5: Evolution of demand for agricultural products in Korea, 1961 to 1999



Source : See Endnote 40

Policy implications

Together these illustrations show the increase in demand for agricultural products as living standards rise and the increase in demand for meat products which are less efficient food products in environmental terms. Possible solutions to the need for increased food supplies from countries with less environmentally

harmful agricultural practices raises the obvious policy-related issue of the links between subsidies for agriculture and their environmental effects. Such links are complex and vary greatly. Direct links, for instance, are where the subsidy is conditional on the production or use of a particular substance that can have negative environmental effects. At the other end of the spectrum are subsidies which are decoupled from production levels.⁴² Policy makers may therefore wish to reflect on the way in which subsidisation affects production patterns. In particular, greater consideration to decoupling of support payments and/or reductions in the levels of support may present a useful way forward. The information presented above reveals in particular that subsidies for meat production (and the related practice of dairy farming) represent a particular item for possible closer examination in terms of the greater environmental intensity of animal products. However, this does not obviate the need for policy makers to consider the broader implications of crop yields.

Another important policy implication of the work presented above is how and whether this could direct greater attention to the issue of certification and eco-labelling schemes. Over the past decade consumers, particularly though not exclusively in OECD countries, have become increasingly interested in learning more about the way in which their purchasing decisions may affect the environment. One of the responses to this “green consumerism” has been the expanded use of eco-labels and certification programmes. The appeal of this market-oriented mechanism for sustainable development is clear: it simultaneously informs consumers about the environmental impact of their consumption while providing producers with a way to extract a price premium by accurately translating the mood of consumers into environmentally friendly product development. These schemes are generally developed by producer associations and NGOs and can help create a market for the additional environmental qualities associated with changed production methods. Care must be taken, however, that such schemes do not run foul of WTO rules⁴³. In this context, a further policy implication of the information outlined above is to focus policy makers attention on the way in which WTO rules handle eco-labelling programmes and to reflect on the problems such schemes can pose in a trade context, as well as in terms of their real environmental effectiveness.⁴⁴

Major new initiative

Work is going on within the OECD on the identification of environmentally harmful subsidies, mainly in the field of agriculture, and to determine a framework within which alternative policies to remedy these can be examined. It is proposed that this work could be extended to examine the consequences of barriers to trade in a similar manner. This would permit progress in the quantification of the effects of specific tariffs and other trade restrictions as well as providing a simulation framework within which to explore alternative policies.

Endnotes

³⁸ World wide Fund for Nature (WWF), UNEP World Conservation Monitoring Centre, Redefining Progress, Center for Sustainability Studies, *Living Planet report, 2002*, Gland, Switzerland.

³⁹ This table is based on an assumption that the same type of land is equally productive everywhere so that demand for an individual product can be related to an average spatial requirement regardless of whether the product is domestically produced or imported and a land area of a given type has the same potential yield wherever in the world it is located. Thus the results incorporate the effects of the natural environmental productivity of land for a given purpose but not socio-economic factors which cause the actual yield to differ. For more discussion on this aspect, see Wackernagel, M, C Monfreda, N B Schulz, K-H Erb, H Haberl, F Krausmann, *Calculating national and Global Ecological Footprint Time Series: Resolving Conceptual Challenges*, Land Use Policy, accepted to appear in (April?) 2004.

⁴⁰ Wackernagel M, C Monfreda, K-H Erb, H Haberl, 2004. *Ecological Footprint time series of Austria, the Philippines, and South Korea for 1961-1999: Comparing the conventional approach to a true-area approach*. Land Use Policy, accepted to appear in (April?) 2004.

⁴¹ This chart includes all biotic resources and not just cropland and grassland, though these dominate the totals.

⁴² The OECD has already launched work on the technical aspects of environmentally harmful subsidies, including through the organisation of two technical workshops in 2002 and in 2003. A good overview of the range of international work to date provided by Porter G, (2002) *Subsidies and the Environment: An Overview of the State of Knowledge*, Joint Working Party on Trade and the Environment, COM/ENV/TD(2002)59, OECD, Paris

⁴³ On the potential for labels to run afoul of the WTO see in particular, the outline and analysis provided by Chang W S, (1997) GATTing a Green Trade Barrier, *Journal of World Trade*, 31, pp. 137-159. See also Appleton (ibid), Charnowitz S, GATT and the Environment: Examining the Issues, *International Environmental Affairs*, 1992 4 (3), pp. 203-33, and more recently, Charnowitz, S., "A Critical Guide to the WTO's Report on Trade and the Environment", *Arizona Journal of International and Comparative Law*, 14, 1997)

⁴⁴ For a more detailed discussion of the discriminatory and trade distorting nature of many such labelling schemes, see OECD (2003) *Developing Country Access to Markets Under Selected Eco-labelling Schemes*, OECD, Paris, and Vitalis V, (2002) *Private Voluntary Eco-labels: Trade Distorting, Discriminatory and Environmentally Disappointing*, OECD, Paris)

Data Set Four

Forestry and the Demand for Carbon Sequestration

“Sustainable forest management of both natural and planted forests and for timber and non-timber products is essential to achieving sustainable development”

We are now persuaded that the basic information we hoped to use here is not sufficiently robust to produce a reliable indicator at the moment. Instead we will discuss possible developments in this area at the meeting

Data Set Five

Measuring the Importance of Services

***“...Trade in Services Shall be Conducted with a view to Promoting the Economic Growth of all Trading Partners and the Development of Developing and Least-developed countries”
(Doha Ministerial Declaration, paragraph 15)***

Indicator

- *The expanding role of services in economies at differing stages of development and their increasing importance in exports.*

Background

One aspect of developed-developing world trade relations which remains relatively under-explored in terms of sustainable development is the trade in services. Traditionally, services were produced face-to-face. Trade in services implied either the provider or the consumer of the service having to travel abroad. Increasingly, however, developments in information technology and communications mean that services can be produced at a distance. Call centres and software development are two of the most prominent examples of this trend. This has raised the possibility of services provision moving to lower labour and factor cost locations.

It is not surprising then, though not well known, that the provision of services is an area of increasing economic importance to developing countries.⁴⁵ Services as a share of global GDP rose by five percentage points between 1980 and 1998 but the increase for developing countries was nearly twice that.⁴⁶ In short, the pattern of services trade is changing significantly over time and this shift has important economic implications for developing countries. The gains from liberalizing services trade are likely to be at least as great as those for liberalizing trade in goods for two reasons. First, levels of protection are higher in the services sector; and second, liberalization is likely to create additional positive spill-overs derived from the associated movement of labour and capital. In this context, the global welfare effects of services trade liberalization are believed to be at least as large as those associated with the full liberalization of goods trade, or around \$130 billion annually.⁴⁷

Sample results

The classic form of service provision by middle income countries has been in the form of tourism. The project has divided trade in services into that part accounted for by travel (though including business travel as well as tourism) and other services. The results for some selected countries are shown in Table 6. This shows that the ratio of trades in other services to goods for the developing countries shown are comparable to, and in some cases exceed those of some OECD countries. India's proportion of other services, for instance, exceeds that of the United States.

Table 6: Share of trade in travel and other services as a proportion of trade in goods, 2000

Country	Percentage	
	Travel	Other services
India	7.35	35.15
USA	12.64	25.49
Japan	0.73	14.33
Brazil	3.29	13.96
Canada	3.76	10.01
Malaysia	5.09	9.07
Thailand	11.02	9.4
OECD average	7.85	18.74

Source: IMF Balance of payments data base

What is even more interesting is the way these ratios change over time in some cases. Again India is the leading example but Brazil also is showing a steady increase over time as shown in Table 7

Table 7: Ratios of trade in other services to trade in goods, India and Brazil, 1995 to 2000

	1995	1996	1997	1998	1999	2000
India	13.42	13.06	17.42	25.66	31.18	35.15
Brazil	11.1	8.23	9.42	12.35	11.59	13.96

Source: IMF Balance of payments data base

Policy implications

By understanding that for many developing countries services *are* of increasing interest, OECD country policy makers can begin to think about how to focus development assistance towards a possible expansion of the services sector through technical assistance, infrastructure projects related to services delivery, technology transfer and so on. Moreover, the identification through hard data of the growing significance of services trade should lead development assistance policy makers to consider whether the trade-related technical assistance which is overwhelmingly focussed on TRIPS-related negotiations and agriculture negotiations is appropriate. It may be time to consider gradually re-focusing a proportion of this assistance to assist developing countries in their GATS negotiations.

More significantly in policy terms, perhaps, is the proportion of services trade which is tourism and travel-related. These are important sectors for many developing countries. They are internationally traded. The mechanism for this is through commitments in GATS on, for instance, commercial presence for international hotel and travel companies. By using the data set to identify those countries with the greatest stake in commercial presence-related negotiations, OECD countries who want to fulfil their Ministers' commitments on using services as a way of promoting growth could make a start by reflecting on the range of restrictions placed on travel and tourism-related aspects of their GATS commitments. Specifically, the growing role of tourism and travel in the service sectors of developing countries might focus OECD policy attention on the need to prevent anti-competitive practices, such as the discriminatory use of information networks, ancillary services to air transport, predatory pricing and the abuse of dominance through exclusivity clauses, refusals to deal (e.g. on ticketing etc), tied sales and quantitative restrictions.

Endnotes

⁴⁵ OECD (2002) *GATS: The Case for Open Services Markets*, OECD, Paris. For a more detailed outline of the linkages between trade (including services), growth and sustainable development see also Vitalis V, (2003) The Development Impact of Developed-World Policies on Developing Countries: The Case of Trade, chapter in *The Effect of Rich Countries' Policies on Poor Countries*, World Bank, Washington, *forthcoming*

⁴⁶ World Bank (1999) *Entering the 21st Century – World Development Report, 1999/2000*, Oxford University Press.

⁴⁷ Figure cited by Dee P and K Hanslow (2000), *Multilateral Liberalization of Services Trade*, Australian Productivity Commission Research Paper, Canberra. They derive this from their study which projects world welfare improvements of more than \$260 billion annually as a consequence of eliminating all post-Uruguay Round barriers to trade. They estimate that around \$50 billion would come as a consequence of agricultural trade, \$80 billion from manufacturing trade liberalization, and the remainder from services trade liberalization.

Data Set Six

Foreign Direct Investment: Inflows and Outflows

Foreign Direct Investment is a “vital complement[s] to national and international development efforts.” (Monterrey Consensus, paragraph 20)

Indicator

➤ *The extent to which profits generated locally are repatriated to parent companies abroad*

Background

One of the transmission mechanisms which may help developing countries achieve the Millennium Development Goals is private investment. Moreover, many of the most important decisions that will affect the fate of the world’s forests, oceans, freshwater, and climate, to name a few – and determine the development prospects of billions of people – are already being made by trans-national corporations and investors. Indeed, the OECD Guidelines for multinational enterprises (MNEs) acknowledge this precise point and support the potential for positive contributions to societies in which MNEs operate.⁴⁸

The Monterrey Consensus also notes that investment is an important route through which developing countries can become more deeply integrated into the world economy. The most sought after element is foreign direct investment (FDI). This offers developing countries access to finance, technology, design and marketing outlets.⁴⁹ FDI is also the vehicle through which an enterprise from one country provides finance to launch an enterprise in another country. This may be a local branch of an international chain of companies or may be a one-off enterprise, perhaps with some foreign and some domestic financing. In both cases, the share of profits generated by the local enterprise representing the share of foreign financing is shown as an outflow of income from the local economy to the financing country. Even if some or all is re-invested in the local economy, it is still a measure of the claims on GDP by other countries. The importance of this issue is neglected in the Monterrey Consensus and this omission is difficult to understand given the striking data presented for this project.

Sample results

Table 8 shows the flows of FDI by geographic region over the five years to 2000 and the proportionate distribution in 2000. Over the five years, FDI directed to developing countries doubled from approximately \$100 billion a year to \$200 billion. At the same time, FDI in OECD countries increased by more than five times from \$228 billion to \$1 282 billion. In other words, the share of FDI remaining in OECD countries rose from 70 per cent in 1995 to over 85 per cent in 2000. The \$200 billion which reached countries other than OECD was not evenly spread. China, including Hong Kong, received half of it. Malaysia, Philippines, Thailand, Singapore and India accounted for \$16 billion of the \$18 going to the rest of Asia. Argentina and Brazil together received \$34 billion. Israel received \$4.5 billion of the \$6.5 going to the Middle East. Very little FDI reached low income countries.

Table 8: Total foreign direct investment reported

	\$billion						
	1995	1996	1997	1998	1999	2000	% in 2000
OECD	228.7	247.3	297.3	517.4	883.3	1 282.0	86.0
Africa	5.0	5.3	9.8	7.5	9.7	7.5	0.5
China (incl Hong Kong)	35.8	40.2	44.2	58.3	63.3	100.3	6.7
Other Asia	28.7	31.9	35.7	23.3	27.2	18.6	1.2
Europe other than OECD	5.5	7.5	13.0	13.0	12.6	11.1	0.7
Middle east	3.2	5.8	8.0	9.3	4.9	6.5	0.4
Western Hemisphere	21.0	35.2	53.4	61.6	75.5	63.8	4.3
World	327.9	373.0	461.4	690.4	1 076.6	1 489.8	100.0

Source: IMF balance of payments data base

Foreign direct investment is not a philanthropic flow. The investor expects a return to his investment and this takes the form of profits and dividends earned in the country where the investment is made but due abroad. The more successful the investment, the greater the return and thus the greater, in absolute terms, the outflow. The amount of profits due to foreign investors can represent a significant outflow as illustrated in the case of Peru in Table 9. (Peru was chosen as an example simply as one of the countries considered by the project which is a developing partner of one of the project sponsors.)

Table 9: Capital inflows from FDI and matching repatriation of profits in Peru

	\$million						
	1995	1996	1997	1998	1999	2000	2001
FDI in Peru	2 557	3 471	2 139	1 644	1 940	810	1 144
Dividends and profits from Peru due abroad	834	676	925	221	18	344	131
% return on investment	32.6	19.5	43.2	13.5	1.0	42.5	11.4

Source: IMF Balance of payments data base

Policy implications

It is widely assumed that significant amounts of FDI flow from OECD countries to non-members because, among other things, their labour costs are much lower. An examination of the data assembled here, however, does not bear this out. Smaller cost differentials and other factors make OECD countries favourable destinations for FDI. In fact, the flow of FDI within the OECD has actually increased. Moreover, a small group of middle income developing countries including China account for the lion's share of FDI flows. Part of the driving force behind the Monterrey Consensus was the proposition that modest aid flows are compensated in part by relatively greater private investment flows. The data indicates that this has happened to the extent envisaged. The problem is that this occurred only in a minority of middle-income developing countries. Low-income developing and least developed countries have been *unable* to benefit from private capital flows as they continue to be relatively unattractive to investors. As a consequence, these countries are becoming increasingly dependent on aid, and reductions in the provision of public capital flows have a concomitantly negative effect on these countries. This is perhaps the most obvious and practical application of the data as it raises interesting policy questions as to why certain countries remain uninteresting as a destination for FDI and what might be done about this.

By being able to identify the "winners and losers" in terms of FDI flows, policy makers should be in a better position to begin identifying why it is that certain countries continue to attract FDI while others do not. Flanking measures to assist the development of economic frameworks, for instance, which could improve the prospects of FDI attraction *and* retention could then be designed with specific countries in mind. One way forward may be to examine how to improve the synergies between ODA and FDI flows.⁵⁰

This is specifically mentioned in the Monterrey Consensus where Ministers agreed to “promote the use of ODA to leverage additional financing for development, such as foreign investment...”⁵¹ Possible policy options may include exploring whether there is scope for a formalised dialogue (as opposed to simply information sharing) between ODA agencies, developing country governments and the private sector (including both foreign investors and domestic firms).

It is generally assumed that FDI flows benefit the destination country. This underlies the Monterrey Consensus which describes FDI as a “vital complement” of economic development and is uncontentious. What is frequently not understood, however, is that while FDI represents a means of expanding investment in a country, the corollary is that there must be a return on the investment which goes back to the source country. By understanding the significance of current outflows compared with FDI inflows, policy makers will have a clearer picture about the importance of FDI flows in terms of developing country growth. That said, it is worth making the point that the fact that retained dividends are regarded as an outflow is in part an artifact of the way these payments are recorded. The reality is that their reinvestment is a major source of on-going development and the continued presence of these companies is a source of technology and management skills that would not otherwise be there.⁵² In this context, OECD policy makers may wish to reflect on ways in which investment guarantee schemes and other public programmes might be able to support the activities of companies prepared to invest in, for instance, least developed economies. In this way policy makers could utilise the data base to identify those least developed countries with the highest inflow-outflow ratio, with a view to focussing development assistance or (for instance) investment guarantee schemes on specific sectors of need (e.g. building human capital).

Endnotes

⁴⁸ The Guidelines are part of a broader OECD investment instrument: the Declaration on International Investment and Multinational Enterprises. The Recommendations contained in the Guidelines’ text provide guidance on appropriate business conduct across the full range of MNE activities. They are supported by implementation procedures in the participating countries, which comprise all 30 OECD member countries, and three non-Member countries (Argentina, Brazil and Chile). Further information can be found in OECD (2001) *The OECD Guidelines for Multinational Enterprises*, OECD, Paris. The Guidelines can be accessed at the following site: <http://www.oecd.org/pdf/M000015000/M00015419.pdf>.

⁴⁹ Institute of Development Studies (1999) *International Investment Treaties and Developing Countries*, Institute of Development Studies, Trade and Investment Background Briefing 9, mimeo, Sussex

⁵⁰ For a private sector perspective see also the World Business Council for Sustainable Development (2002) *Investing for Sustainable Development: Getting the Conditions Right*, WBCSD, Geneva (available at: <http://myleadnet.lead.org/repository/489.pdf>). See also Vitalis V, (2003) Official Development Assistance and Foreign Direct Investment: Improving the Synergies, chapter in *Foreign Direct Investment for Development: How to Attract it and How to Benefit*, OECD, Paris.

⁵¹ Paragraph 43 of the Monterrey Consensus refers.

⁵² See for instance, UNCTAD (1999) *Foreign Direct Investment and the Challenge of Development*, United Nations, New York and the seminal analysis by Barro, R .J and X Salai-I-Martin (1995) *Economic Growth*, New York, McGraw Hill.

Data Set Seven

Official Financing, Debt and Taxation

“Mobilising and increasing the effective use of financial resources...will be our first step to ensuring the twenty-first century becomes the century of development for all.”

(Monterrey Consensus, paragraph 3)

Indicator

- The level of debt repayment underwritten by the Government as a proportion of government taxation revenues.

Background

Developing countries often seek Official Development Assistance (ODA) and other official financing to finance infrastructure development or public enterprises. This assistance is sought with a view to maximising positive spill-overs, including the creation of conditions favourable for FDI inflows.⁵³ Where official financing is used for public infrastructure development, however, there are generally no profits directly generated by the investment. Rather it is the wider economy through the expansion of GDP which is supposed to benefit from the improved infrastructure, i.e. through improved roads facilitating internal transport or better trained staff resulting from higher levels of education. This is an important point because it is not well understood that a proportion of ODA⁵⁴ is actually in the form of loans, albeit concessional ones. These have to be repaid along with official loans which do not qualify as ODA. In short, using official assistance other than grants is not a costless policy. Repayment restricts the extent to which government receipts can be used in full to further economic development.⁵⁵ The data assembled here suggests that when compared with developing countries' domestic tax revenues, the proportion of debt repayments can be significant. This has obvious implications for the sustainability of economic growth in those countries.

Sample results

Table 10 shows the repayments of principal and interest by Peru⁵⁶ on official financing compared with its tax revenues for the years 1998 to 2000. In recent years, interest on the loans has been significantly greater than the repayment of principal. Together repayment of principal and interest account for a significant share of the revenue raised by government in the form of taxes.

Table 10: Official financing payments and government tax receipts, Peru

	\$ million		
	1998	1999	2000
Repayments	574	583	825
Interest	748	898	914
Total payable	1322	1481	1739
Government tax revenue	8532	6982	7090
Per cent	15.5	21.2	24.5

Source: World Bank, Global Development Finance, 2003;
IMF Government Finance Statistics data base

Policy implications

The data set presented by this project sheds light on how significant debt servicing of official financing is in proportion to taxation revenue. Such information could usefully inform policies which seek to consider the burden of debt repayment compared to domestic tax revenue. Moreover, the data sets enable realistic insights into the amount of room for manoeuvre governments might have in deploying the receipts from government revenue for growth purposes and how much is pre-committed to meeting debt repayments. Using this information, policy makers working on the Paris Club (and other) debt renegotiations would be better informed about the real capacity of countries to meet the MDGs and maintain growth.

Moreover, policy makers in OECD countries could use the data base to inform the future direction of development assistance policy to individual developing countries. By understanding the extent to which a given country is diverting tax revenue to pay for official loans, policy makers might reflect on the need for longer grace periods for repayments, debt forgiveness programmes, or reducing the component of the official financing provided which must be repaid.

Major new development

Lending is always negotiated in hard currency. Levels of international debt and the burden on countries of consequential interest and repayment flows change as a result of exchange rate fluctuations, especially dramatic devaluations in response to domestic hyper-inflation and periodic renegotiations of the terms of the loans and packages of debt forgiveness. It is proposed to extend the present work to distinguish the effect of these factors from flows resulting from new lending and existing loans not subject to these changes

Endnotes

⁵³ Hjertholm P and H White, (2000) *Survey of Foreign Aid: History Trends and Allocation*, Institute of Economics, University of Copenhagen, Discussion Paper, March. See also Commission for Sustainable Development (2001) *Financial Flows Statistics*, United Nations Department of Economics and Social Affairs, Background Paper Number 19, April

⁵⁴ The OECD Development Assistance Committee defines official development assistance (ODA) as flows to developing countries and multilateral institutions provided by official agencies, ... each transaction of which meets the following test, (a) it is administered with the promotion of the economic development and welfare of developing countries as its main objective; and (b) it is concessional in character and conveys a grant element of at least 25 per cent. In essence, if the concessional element of the assistance is 100 per cent, that is no repayment is required, then the flow is treated as a grant. If the concessional element, whether a reduced interest rate, very long maturity or grace period, is less than 25 per cent, then the flow is treated as an "other official flow" (OECD, *Geographical distribution of financial flows to aid recipients*, various editions, annex on definitions)

⁵⁵ In general, two sets of payments are due on official financing. The first is repayment of the original loan. These repayments exclude any grant element of the principal and reflect any grace period before repayment of principle is due. The second set of flows concerns interest. The rate of interest will be affected by any concessionality in the loan, for example a lower than market rate of interest due or the effects of a grace period before interest becomes payable.

⁵⁶ Peru was selected at the request of one of the project's sponsors.

Data Set Eight

Lending and Repayment

“Deal comprehensively with developing countries’ debt problems through national and international measures to make debt sustainable in the long term.”

(Millennium Development Goal 8)

Indicator

- *The extent to which new lending exceeds repayment of principal and interest and which countries receive these net flows*

Background

This data set complements that of data set seven. Other things being equal, the profits repatriated from an FDI investment project will rise with domestic inflation but be unaffected by exchange rate fluctuations (except in so far as these have knock-on effects on inflation). Interest due on official financing, on the other hand, is unaffected by domestic inflation but seriously affected by exchange rate movements since the interest due is specified in hard currencies and the revenue from which it is paid is in local currency. The data set presented here takes this into account and offers a more complete picture of the various positions of developing countries in terms of their borrowing and the relationship between principal and interest rates.

Sample results

Table 11 and Table 12 show the positions of low and middle income countries over the period 1995 to 2000. They show the level of new loans actually made (disbursements) as well as the two sorts of return flows due, repayment of principal and interest as described under indicator set seven. The net inflow to a country or group of countries can thus be calculated as the level of disbursements less repayments of principal and interest flows. This flow can be separated into that part relating to international agencies, the Bretton Woods institutions and regional development banks, for example, and bilateral loans agreed with specific developed countries. These figures combine both ODA and other official lending. Although all ODA must have a concessional element, typically this will be larger for low income countries than for middle income countries. Also the degree of concessionality for multilateral lending is often greater than for bilateral lending.

Table 11 shows that for low income countries, there are net outflows for most of the years from 1995 to 2000. However, there are net inflows from multilateral agencies which are more than offset in most years by the net outflows due to bilateral lenders. For middle income countries (shown in Table 12), outflows in 2000 were more than half of new disbursements. In effect countries are borrowing to repay earlier loans.

Table 11: Official financing flows for low-income countries

	\$ billion					
	1995	1996	1997	1998	1999	2000
Disbursements	18.3	18.6	19.0	20.1	19.5	15.9
Repayments	12.5	13.7	13.9	11.6	10.4	11.8
Interest	8.5	8.2	7.5	7.5	7.6	7.6
Net inflows	-2.5	-3.3	-2.5	1.0	1.6	-3.5
From multilaterals	1.4	0.9	2.1	3.0	2.7	1.0
From bilaterals	-3.9	-4.2	-4.6	-1.9	-1.1	-4.5

Source: World Bank, Global Development Finance, 2003

Table 12: Official financing flows for middle income countries

	\$ billion					
	1995	1996	1997	1998	1999	2000
Disbursements	47.9	37.2	41.9	43.4	40.7	37.7
Repayments	31.8	39.4	37.3	31.9	34.2	37.4
Interest	21.6	22.3	20.5	19.8	20.4	20.8
Net inflows	-5.5	-24.4	-15.9	-8.3	-13.9	-20.5
From multilaterals	-3.8	-1.5	1.7	7.7	0.4	-5.0
From bilaterals	-1.7	-22.9	-17.6	-16.0	-14.3	-15.4

Source: World Bank, Global Development Finance, 2003

Policy implications

This data reveals that the net benefit from official financing for many developing countries is actually relatively small, given that repayments and interest rival and in some cases exceed the net inflow of disbursements. In a policy sense, this information complements that presented in data base seven. In particular, it provides useful policy-related insights to both borrowers and lenders about possible directions for the re-structuring of ODA-related assistance. For instance, by understanding the extent of the repayment burdens in bilateral (and multilateral) terms, policy makers can consider possible amendments to repayment schedules and application of grace periods or greater concessionality. Additionally, this data set could (with data set seven) complement the information available to inform the work of negotiators at the Paris Club (and other) negotiations on debt rescheduling.

Data Set Nine

ODA Targeted at Specific Millennium Development Goals

*“Ensure that all boys and girls complete a full course of primary schooling”
(Millennium Development Goal 2)*

*“Reduce by two thirds the mortality rate among children under five” and
“Reduce by three quarters the maternal mortality ratio”
(Millennium Development Goals 4-5)*

*“Halt and begin to reverse the spread of HIV/AIDS;
“Halt and begin to reverse the incidence of malaria and other major diseases”
(Millennium Development Goal 6)*

*“Reduce by half the proportion of people without sustainable access to safe drinking water”
(Millennium Development Goal 7)*

Indicator

- | |
|---|
| <ul style="list-style-type: none">➤ Percentage of bilateral aid targeted at specific Millennium Development Goals |
|---|

Background

The Millennium Development Goals were established in September 2000 as a way for countries to monitor progress in achieving a set of core development needs. Each of the goals has been subsequently endorsed, *inter alia*, by the Monterrey Consensus and the Johannesburg Plan of Implementation. The target date for the fulfilment of the targets considered here is 2015.

MDG 2 relates to *education*. Currently, 113 million primary age children in developing countries do not attend school⁵⁷ and the projected trend is not encouraging in terms of fulfilling the MDG. This suggests that some 100 million primary school age children will not be in school by 2015.⁵⁸ Nearly 60 per cent of children not in school are girls.⁵⁹ While enrolment rates are gradually improving (though not in line with the target), the quality of education is not. Funding for infrastructure, teacher training and updated teaching materials continues to decline in real terms in countries encompassing nearly one billion people.⁶⁰ It is believed that the cost of enrolling all children in primary school to meet this MDG is in the range of \$8-15 billion by 2015.⁶¹

With reference to the MDG on *health care*, while mortality rates for children under five and infants fell by more than 50 per cent between 1960 and 1990⁶² the rate of progress has since slowed. Further, for a range of developing countries covering some 600-800 million people, infant and child mortality rates have actually fallen behind the target.⁶³ The average annual incremental cost of intervening in childhood illnesses is estimated at \$5 billion by 2007, \$12 billion by 2015.⁶⁴ The maternal mortality ratio remains more or less at 1990 levels. The goal for all pregnant women to have access to prenatal care and trained attendants during childbirth has not materialised. Only 29 per cent of South Asian births and 37 per cent of sub-Saharan African births are attended.⁶⁵ In 2002, UNICEF concluded that this target is unlikely to be met since “no other changes in global maternity ratios have been shown.”⁶⁶ The projected average annual incremental cost of intervening in maternity related illnesses to meet this MDG is expected to be \$4 billion by 2007 or an additional \$5 billion by 2015⁶⁷ In terms of the MDG on HIV/AIDS malaria etc, the prognosis is similarly bleak. In 1998, up to 45 per cent of deaths in Africa and South East Asia are thought to have been the result of infectious diseases.⁶⁸ For all low and middle income countries, almost 33 per cent of deaths were the result of preventable/and or treatable conditions, maternal and perinatal conditions and

nutritional deficiencies. The annual death toll from these diseases is 16 million. In just 20 years, HIV/AIDS has caused an estimated 22 million deaths and infected a total of 58 million people.⁶⁹ The health prospects of the poorest billion people in the world could be radically improved by spending an average of \$26 billion between now and 2007.⁷⁰

Quantifying progress towards the MDG target on *water and sanitation* is difficult. What is clear is that in 1950, the global per capita availability of fresh water stood at 17,000 cubic metres. By 1995, this figure had fallen to 7,000 cubic metres.⁷¹ Most ground water sources are being replenished very slowly at recharge rates ranging between 0.1 per cent and 0.5 per cent.⁷² Reliable assessments of the cost of meeting the water and sanitation target do not exist.

The data set assembled at the OECD and presented below provides a means of assessing the way in which OECD DAC members are targeting their assistance.

Sample results:

The results, shown in Table 13 indicate that the percentage of ODA being targeted directly at the achievement of the MDGs is very small. The data also reveal that in terms of the education and water targets, higher income and upper middle income countries are receiving the most significant levels of assistance (although they remain small in overall terms). Interestingly, the least developed countries, (LDCs) whom one would assume have the most significant difficulties in terms of the water targets, are receiving the least assistance.

Table 13: Percentage of bilateral aid targeted at specific MDGs

	Education	Health and population	Water supply and sanitation
LDC	9.2	8.5	3.1
Other low-income	8.1	6.5	8.0
Lower middle income	7.4	3.9	8.5
Upper Middle income	12.4	1.7	24.9
Higher Income	22.0	0.0	1.0
All developing countries	8.4	5.6	8.3

Source: OECD, International Development Statistics data base, 2003

The magnitude of the problem to meet the MDGs is illustrated in Table 14 where the annual cost of several goals discussed in the background section is compared with the bilateral aid levels shown in Table 13.

Table 14: Cost of meeting the MDGs, compared with current expenditure

	\$billion	
	Annual expenditure required	Contribution from bilateral ODA
MDG (education)	8 to 15	3
MDG (health)	46	2
MDG (water)	Unknown	3

Source: Column 1 from sources quoted in the background section; Column 2 as Table 13

Policy Implications

All OECD DAC members have reiterated their commitment to the MDGs at various inter-governmental fora, including the Millennium Summit, the Monterrey Conference on Financing for Development and WSSD. Unfortunately, however, the data reveal that only a very small proportion of ODA provided by these countries is actually being targeted to assist developing countries to achieve specific goals. What is unclear is whether this is because policy makers have made a conscious decision to direct aid disbursements elsewhere, or whether recipients do not require this kind of assistance. Moreover, of immediate policy interest is the point that in terms of the education and water targets, those with arguably less need for such assistance are receiving more than low income and least developed countries. Policy makers may wish to reflect on whether such targeting is efficient and effective in terms of meeting the relevant MDGs before 2015.

By combining this data set with those presented by this project on debt repayment and the debt/taxation revenue ratios, policy makers have access to a more complete picture about how and in which direction development assistance needs to be targeted. The primary consideration will be the extent to which ODA funds should be directed to the MDGs. This might imply modifying ODA objectives with a view to concentrating on developing human capital in addition to, and possibly at the expense of, the existing concentration on enhancing physical capital.

Endnotes

⁵⁷ See in particular United Nations (2000) *Freedom From Want*, United Nations, New York

⁵⁸ OECD (2001) *The DAC Journal: Development Cooperation: 2000 Report*, OECD, Paris

⁵⁹ UN (ibid)

⁶⁰ UNESCO (2001) *Monitoring Report on Education for All*, Paris, October and UNESCO/UNICEF (2000). The UNESCO/UNICEF report also revealed that in many sub-Saharan schools primary schools didn't have adequate furniture, running water or basic teaching materials, such as blackboards, exercise books.

⁶¹ These figures are within the range cited by a range of authoritative sources, including UNESCO (2001), OECD (2001) *ODA Demand and Supply: Current Perspectives*, OECD, Paris (DCD/DAC(2001)29/REV2) and by the High Level Panel on Financing for Development (2001) *High Level Panel Report on Financing for Development*, United Nations, New York, June (particularly the appendix at http://www.un.org/reports/financing/report_full.htm#appendix)

⁶² IMF (2002) *World Economic Outlook*, IMF, Washington (and available at <http://www.imf.org/external/pubs/ft/weo/2002/01/index.htm>).

⁶³ UNICEF (2002) *The State of the World's Children*, UNICEF, New York

⁶⁴ These figures are in 2002 \$ and drawn from Sachs J D, (2001) *Macroeconomics and Health: Investing in Health for Economic Development*, Report of the Commission on Macroeconomics and Health, WHO, Geneva

⁶⁵ UNICEF (ibid)

⁶⁶ Idem.

⁶⁷ Sachs (ibid)

⁶⁸ Idem

⁶⁹ Idem

⁷⁰ These are drawn directly from Sachs (ibid), though his list is longer and includes widespread causes of child mortality, malnutrition which exacerbates those diseases, other vaccine-preventable deaths and tobacco-related disease. For reasons of space these have not been included.

⁷¹ OECD (2001) *OECD Environmental Outlook*, OECD, Paris

⁷² World Resources Institute, United Nations Environment Programme, United Nations Development Programme and the World Bank (1999), *World Resources 1998-99*, Oxford University Press, New York

Data Set Ten

Migration and Remittances

“We acknowledge the issues of particular concern to developing countries... to enhance their capacity to finance their development, including...the movement of natural persons.”

*“It is also important to reduce the transfer costs of migrant workers’ remittances and create opportunities for development-oriented investments, including housing”
(Monterrey Consensus, paragraphs 18 and 28)*

Indicator

- *The pattern of flows of remittances between different groups of countries, classified by income level and region.*

Background

International liberalisation has progressed apace with respect to the movement of capital, goods and services. Significant constraints remain, however, with regard to labour mobility. Moreover, the sense of an “international migration crisis” has profoundly affected the way in which policy makers, particularly in OECD countries, consider the issue.⁷³ And by the end of the 1990s, perceptions of immigration pressure were elevated to a global security issue.⁷⁴ At the same time, growing evidence that declining and ageing populations in developed economies are placing strains on welfare (e.g. pension) systems has forced serious consideration of the way in which immigration restrictions are applied.⁷⁵ Ironically, it is precisely those countries most affected by the strain placed on their economies by ageing populations which appear the most determined to restrict and prevent migration.

In conjunction with discussions on migration, the question of remittances has increasingly been brought to the fore as a possible complement to development assistance policies. A point which the Monterrey Consensus also makes.⁷⁶

An informed analysis of the impact of migration and their consequent remittances on both the home and foreign countries involved requires a data set which shows nationality and residence of migrants and the country of origin as well as the destination of remittances. Construction of such a new data set was the starting point for this part of this project.⁷⁷

Sample results

Table 15 shows the pattern of migration globally in 2000. Two out of five migrants in OECD countries come from other OECD countries. Only one quarter of world wide migrants come from the rest of the world to OECD countries. For every one migrant who comes to an OECD country, more than two stay in the rest of the world.

Table 15: Global migration flows, 2000

Millions			
	<i>Migrants from</i>		
<i>Migrants to</i>	OECD	Rest of the world	Total
OECD	22.2	34.1	56.3
Rest of the world	2.5	77.9	80.4
Total	24.7	112	136.7

Source: Project data set

Table 16 shows the corresponding figures for remittances. This shows that one third of remittances stay within OECD countries but a slightly greater proportion of flows are entirely within the rest of the world, many of them coming from oil-rich countries in the Middle East.

Table 16: Global remittance flows, 2000

\$billions			
	<i>Remittances going to</i>		
<i>Remittances from</i>	OECD	Rest of the world	Total
OECD	37.2	29.3	66.5
Rest of the world	0.7	42.0	42.7
Total	37.9	71.3	109.2

Source: Project data set

Table 17 shows the largest providers and recipients of remittances in 2000. The USA was the largest single provider at \$26.8 billion but the oil exporting countries of the Middle East together provided somewhat more at \$29.4 billion. Malaysia, at \$3.8 billion, provided more than any single OECD country except the USA. Nine countries account for 45 per cent of receipts and seven of these are OECD countries. Among developing countries, only India and the Philippines received more than \$3 billion.

Table 17: Largest providers and receivers of remittances

Major providers of remittances		Major recipients of remittances	
			\$ billion
Middle East	29.4	India	9.2
USA	26.8	France	8.6
Malaysia	3.8	Mexico	7.6
Germany	3.2	Philippines	6.2
France	2.7	Turkey	4.6
Japan	2.5	Spain	3.4
Switzerland	1.7	Germany	3.4
UK	1.3	Belgium	3.3
		Portugal	3.2
Other OECD	28.3	Other OECD	3.8
Other non-OECD	11.1	Other non-OECD	55.9
Total	110.8	Total	109.2

Source: IMF balance of payments data base

Policy implications

Improving the coherence of migration and development policies is the main policy implication of this data set.⁷⁸ The evidence that a significant proportion of remittances remain within the OECD should prompt policy makers in those countries to reflect on the paradigm currently used to consider migration and remittance-related policies.

OECD policy makers may also wish to reflect on how to improve the efficiency of remittance transfers. Remittances are often delivered with depressing inefficiency as a consequence of high transfer fees and poor exchange rate offerings. The removal or at least reduction of the significant government-imposed transaction charges (up to 15 per cent of the total) in countries like Germany and France on remittances sent to Latin America and Asia would be a step forward. As the Monterrey Consensus noted improving remittance transfer is an important issue, but change has been slow.

Other policy questions which arise from this data relate to the way in which ODA flows could be used to leverage and improve the allocation of remittances.⁷⁹ This is an issue of growing interest. Through the use of data sets seven and eight as well as this data set, policy makers could reflect on where such assistance might best be targeted. How, for instance, could ODA be used to assist in developing and mobilising diaspora resources? One way might be for ODA funds to be used to seed diaspora organisations in source countries and task them with assisting in the efficient transfer of remittance flows. Moreover, by using the data base to identify the main developing country recipients of remittances (and the source countries), policy makers could reflect on the use of what has become known as the “Diaspora Model.” This integrates past and present citizens into a web of rights and obligations in the extended community defined with the home country as the centre.⁸⁰ Indeed, developing country governments as well as OECD members have seen the advantage of seeking to cultivate ties with the diaspora, seeing them as a source of investment, overseas market openings, foreign exchange, expertise and political support. In policy terms this raises questions, for instance, about the restrictive nature of many OECD countries with regard to dual nationality.

Endnotes

⁷³ OECD (2003) *Changes and Challenges: Europe and Migration from 1950 to the Present*, OECD, Paris and International Organisation for Migration (2002) *The Migration-Development Nexus: Evidence and Policy Options*, IOM, Geneva

⁷⁴ Zolberg A, (2001) “Beyond the Crisis”, in Zolberg A and P M Benda (eds), *Global Migrants, Global Refugees: Problems and Solutions*, Berghahn Books, New York. See also Weiner M, (1995) *The Global Migration Crisis: Challenge to State and to Human Rights*, Harper Collins, New York

⁷⁵ On the pressures declining populations place on immigration, see in particular chapters 2, 3 and 5 of Ghosh B (ibid) and Harris N (2002) *Thinking the Unthinkable: The Immigration Myth Exposed*, Tauris, London.

⁷⁶ Paragraph 18 of the Monterrey Consensus refers.

⁷⁷ There are of course other important issues concerning migration which are of policy concern. The question of “brain drain” is of particular significance. This has not been addressed, however, as it is the subject of complementary on-going work at the OECD.

⁷⁸ The European Union has begun to think about this issue with the establishment of the “High Level Working Group” in 1998 to prepare action plans on border control, coordination of aid, and reallocation of aid flows to six major source-countries and regions. Underlying the assignment was the concept of “co-development” put forward originally by France, which recognized that the source and destination countries of migration occupy a single transnational space. There remains considerable suspicion among some of the source partners that the goal is much more strongly to control migration than to contribute to development.

⁷⁹ On the contribution of immigration earnings for development compared with capital and human resources, see for instance, Hendricks L, (2002) *How Important is Human Capital for Development? Evidence from Immigrant Earnings*, *American Economic Review*, vol 92 (1).

⁸⁰ Bhagwati J, “Borders Beyond Control,” in *Foreign Affairs* (Jan/Feb 2003)

Annex on country coverage

Given the abbreviated time-line for this project (eight months), it was not feasible to cover all countries in the world. A first step, therefore, was to select a sub-set of countries which provide a reasonable picture of trends at a global level. In addition to the 30 member countries of the OECD, another 27 countries were selected, mainly on the basis of population but also with an eye to regional distribution and level of development as judged by income level.

The cut off point in per capita income in 2000 for the high income band was over \$9 265.⁸¹ All but seven of the OECD countries fall into the high income band along with 27 other states. These include Singapore, Bahrain, Kuwait, Qatar and the United Arab Emirates and a number of small, high income tax shelters and some territories dependent on other countries. The 23 OECD countries included account for well over 90 per cent of total population and income in the high income group.

Seven OECD countries were treated by the World Bank as upper middle income countries in 2000. These are Czech Republic, Hungary, Korea⁸², Poland, Mexico, Slovak Republic and Turkey. Adding Malaysia, Brazil, Argentina, Venezuela, Chile and South Africa, another seven large upper middle income countries, with per capita income over \$2 995, again covers over 90 per cent of population and income in that group.

The ten most populous lower-middle income countries, with per capita incomes over \$755 account for nearly 90 percent of both population and income. By selecting ten of the twelve most populous low income countries, coverage of about 75 per cent of the population in this group and about 80 per cent of income is achieved. The two large countries excluded are Congo and Myanmar for reasons of data paucity.

The proportionate coverage by region and income band is also consistently high. Tables 1 and 2 attached show the list of selected countries cross-classified by region and income band and the proportionate coverage by population and GDP.

Endnotes

⁸¹ The World Bank divides countries of the world into four income bands; high income, upper middle income, lower middle income and low income. Roughly speaking, high income countries account for 15 per cent of global population but 80 per cent of income. A further ten percent of global population falls into the upper middle income bracket and earns roughly ten per cent of global GDP. The remaining three-quarters of the world's population share the remaining ten per cent of GDP but even here there is considerable inequality with one third of people receiving seven per cent of income and forty per cent of people left to share only three per cent of global income.

⁸² Korea has since moved to the high income band.

Table 1: Proposed coverage by income group and region (World Bank definitions)

Region	Low income			Lower-middle income			Upper-middle income			Regional total		
	No countries	Population 2000 (mn)	GDP bn \$ 2000	No countries	Population 2000 (mn)	GDP bn \$ 2000	No countries	Population 2000 (mn)	GDP bn \$ 2000	No countries	Population 2000 (mn)	GDP bn \$ 2000
East Asia and Pacific												
Total	8	379.1	189.7	11	1 405.4	1 283.1	4	70.6	551.3	23	1 855.1	2 024.1
Selected	2	288.9	183.6	3	1 398.8	1 277.0	2	70.5	551.2	7	1 758.3	2 011.7
% selected		76.2	96.8		99.5	99.5		99.9	100.0		94.8	99.4
Europe and Central Asia												
Total	8	106.5	58.9	12	232.2	380.2	8	135.7	496.4	28	474.3	935.5
Selected	1	49.5	31.3	1	145.6	259.6	5	129.8	472.4	7	324.9	763.2
% selected		46.5	53.1		62.7	68.3		95.7	95.2		68.5	81.6
Latin America and Caribbean												
Total	2	13.0	4.0	15	142.2	228.4	15	360.4	1 706.1	32	515.7	1 938.5
Selected				2	68.0	136.7	5	344.8	1 650.1	7	412.7	1 786.8
% selected					47.8	59.9		95.7	96.7		80.0	92.2
Middle east and North Africa												
Total	1	17.5	9.3	10	244.2	337.1	5	33.4	197.7	16	295.2	544.2
Selected				4	186.7	287.0	1	20.7	173.3	5	207.5	460.3
% selected					76.5	85.1		62.0	87.6		70.3	84.6
South Asia												
Total	7	1 354.8	588.0	1	0.3	0.6				8	1 355.1	588.6
Selected	3	1 285.1	565.7							3	1 285.1	565.7
% selected		94.9	96.2								94.9	96.2
Sub-Saharan Africa												
Total	38	608.2	166.7	4	3.7	6.8	6	47.0	143.2	48	658.9	316.7
Selected	4	256.0	67.8				1	42.8	127.9	5	298.8	195.7
% selected		42.1	40.6					91.0	89.3		45.3	61.8
Total low and middle income												
Total	64	2 479.1	1 016.6	53	2 028.1	2 236.1	38	647.2	3 094.7	155	5 154.4	6 347.5
Selected	10	1 879.5	848.3	10	1 799.0	1 960.3	14	608.7	2 974.8	34	4 287.2	5 783.4
% selected		75.8	83.4		88.7	87.7		94.0	96.1		83.2	91.1
High income countries												
Total										52	879.2	24 359.2
Selected										23	850.5	24 053.3
% selected											96.7	98.7
World												
Total										207	6 033.5	30 706.7
Selected										57	5 137.7	29 836.7
% selected											85.2	97.2

Source: World Bank WDI web site. Some of the GDP totals are understated because of missing data and percentage selected is correspondingly overstated.

Table 2: Countries to be included other than the 23 OECD countries in the high income category

	Low income	Lower-middle income	Upper-middle income
East Asia and Pacific	Indonesia Vietnam	China Philippines Thailand	Korea Malaysia
Europe and Central Asia	Ukraine	Russian Federation	Turkey Poland Czech Republic Hungary Slovak Republic
Latin America and Caribbean		Colombia Peru	Brazil Mexico Argentina Venezuela Chile
Middle east and North Africa		Egypt Iran Algeria Morocco	Saudi Arabia
South Asia	India Pakistan Bangladesh		
Sub-Saharan Africa	Nigeria Ethiopia Tanzania Sudan		South Africa

Bold: OECD member countries

Bold Italic: CCNM countries