

Ten Observations on Climate Change and Green Growth by Simon Maxwell

Appendix 1

Effects of mitigation policies (in annex 1 countries) on developing countries: '+' indicates positive effect, '-' indicates negative effect, '+/-' indicates indeterminate effect

	Trade	Capital Flows	Aid/Development Finance	Technology	Growth
Carbon taxes	<p>+</p> <p>Production and hence exports to countries with no carbon taxes (leakage)</p> <p>-</p> <p>slower global growth reducing global trade opportunities overall</p> <p>- Higher price of carbon imports</p> <p>+ / - shifts in comparative advantage and knock on impacts on other economic sectors transmitted through changes in real effective exchange rate</p>	<p>+</p> <p>Carbon leakage increases FDI to countries with no carbon taxes esp. those with a good investment climate</p> <p>-</p> <p>Less investment in carbon intensive industries in mitigating countries</p>	<p>+</p> <p>If countries with taxes will allocate revenues from a carbon tax to developing countries</p>	<p>+ / -</p> <p>Depends on overall impact on FDI and incentives for low carbon investment</p>	<p>+ / -</p> <p>Depends on impact on FDI, technology transfer & trade patterns</p>

<p>Emission trading schemes</p> <p>Similar impacts as carbon tax plus:</p>	<p>+ Reduced cost of mitigation minimises growth sacrificed and trade opportunities lost</p> <p>?</p> <p>increases in trade in CERs amongst participating countries, but affect on other trade not clear</p>	<p>+ More investment in abatement in countries with low cost abatement opportunities</p>	<p>+ ETS could be implemented so that a share of proceeds are used as aid flows to poor countries</p>	<p>+ More cross border investment in energy efficiency leads to more technology transfer and productivity growth</p>	<p>+ Faster growth through increased trade, FDI and possibly also aid if revenues are used for that purpose.</p>
<p>Border tax adjustment</p>	<p>- Exporters of products to sectors affected by emission targets in developed countries face loss of export revenues</p> <p>- Lower global growth and welfare due to increased protectionist tendencies.</p> <p>+ Reduced import prices for affected products in non-</p>	<p>- Less carbon leakage</p>		<p>- Less technology flows</p>	<p>- Reduced trade, capital flows and technology flows leads to lower growth</p>

	mitigating countries				
Carbon labelling	+ / - Depends on impact on competitiveness which in turn depends on methodology used for labelling, carbon intensity of production, and ability to obtain certification.	+ / - A well designed carbon labelling scheme could create incentives for production of different parts of the supply chain to move to lower emission locations, which may be in developing countries. High carbon exporters lose investment.	+ Aid may help cover certification costs with knock-on benefits in other areas	+ Carbon labelling could increase transfer of green technologies	+ / - Depends on impacts on export opportunities and technology transfer.
Liberalisation of environmental goods and services	+ Lower tariffs generate welfare gains for importers, and export opportunities for exporters. Will lead to more trade in EGS benefitting developing countries trading in EGS			+ EGS liberalisation would lead to technology transfer to developing countries through increased trade and developed country exports	+ EGS liberalisation leads to faster growth through new export opportunities and spillovers from imports.
REDD+	+ If fungible with carbon	+ Financial inflows (FDI)	+	+	+

	<p>markets, then countries implementing CERs can sell credits to countries with emission targets, perhaps through intermediaries</p> <p>- If high aid inflows results in Dutch disease may damage competitiveness of some economic sectors</p>	<p>used for mitigation, in those countries able to deliver forest-sector emissions reductions</p>	<p>Development finance, in those countries able to deliver forest-sector emissions reductions</p> <p>- Through possible Dutch Disease effects unless appropriately managed</p>	<p>Technology transfer through FDI</p>	<p>Spillovers from FDI and financial inflows if used wisely may stimulate growth for recipient countries.</p> <p>- if generates significant Dutch Disease</p>
CDM	<p>+ Countries implementing CERs can sell credits to countries with emission targets, perhaps through intermediaries</p>	<p>+ Financial inflows (FDI) to countries with mitigation opportunities and good investment climate.</p>		<p>+ Technology transfer through FDI</p>	<p>+ Spillovers from FDI increase growth</p>
Technology transfer	<p>+ Increased technological capacities may increase capacity to export</p>	<p>+ Increased technological capacities may increase capacity to export and hence attract investment.</p> <p>- mandatory technology transfer might hamper FDI</p>	<p>+ If aid supports transfer of energy efficiency technologies</p>	<p>+ Whether FDI or aid induced, there will be more technology flows</p>	<p>+ More technology flows raise productivity and growth</p>