



## Trade and the Global Commons

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### **Globalised trade externalities**

In 1947, 23 countries sign the General Agreement on Tariffs and Trade (GATT)<sup>1</sup>. 45,000 tariff concessions are made, influencing over US \$10 billion in trade, about one fifth of the world's total<sup>2</sup>. As a result, the global economy almost quadruples and world trade grows by a factor of 12 between 1960 and 2005.

Parallel to this tremendous economic globalisation and growth, social inequality and environmental degradation increase. Nowadays, although average global income reaches US \$5,100 per person a year, 2.8 billion people (2 in 5) survive with less than US 2 dollars a day (US \$730 a year). 1% of the world's wealthiest persons earn as much income as the poorest 57 per cent<sup>3</sup>. 60% of the world's ecosystems are in decline or degraded to an extent that we can no longer rely on their services. Global carbon dioxide emissions have quadrupled, causing an unusually large number of extreme weather events. If the current tendency goes on, three and a half billion people will live in countries facing "water stress" and have less than 1,000 liters of water per person per year by 2030<sup>4</sup>.

This social and environmental disruption causes significant financial losses worldwide<sup>5</sup>. Inherent to poverty, lack of trust is a check to economic growth<sup>6</sup>. More than 112 countries are rated with a low Human Development Index (HDI), thus preventing the formation of human capital and a stable force of qualified workers<sup>7</sup>. On its part, the Munich Re Foundation - one of the world's leading re-insurance companies - estimates that 2005 has witnessed the largest financial losses ever as a result of weather-related natural disasters. The heavy rainfall and floods that struck China, India and Eastern Europe, the record number of storms and hurricanes that hit the Americas, the heat waves and severe droughts that plagued many parts of the world and the stunning reduction in sea ice observed in the Arctic resulted

<sup>1</sup> [http://www.wto.org/English/docs\\_e/legal\\_e/gatt47\\_01\\_e.htm](http://www.wto.org/English/docs_e/legal_e/gatt47_01_e.htm)

<sup>2</sup> WTO, *Understanding* (2003), p. 15.

<sup>3</sup> IISD, UNEP, *Environment* (2005), p. 1 (<http://www.iisd.org/trade/handbook/>).

<sup>4</sup> *Stern Review* (2006), p. v ([http://www.hm-treasury.gov.uk/media/8AC/F7/Executive\\_Summary.pdf](http://www.hm-treasury.gov.uk/media/8AC/F7/Executive_Summary.pdf)).

<sup>5</sup> WORLD BANK (2006), <http://siteresources.worldbank.org/INTWDR2006/Resources/477383-1127230817535/082136412X.pdf>

<sup>6</sup> "Virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time. It can be plausibly argued that much of the economic backwardness in the world can be explained by the lack of mutual confidence" (ARROW, "Gifts", p. 357, quoted in KNACK, KEEFER, "Does social Capital", p. 1252).

<sup>7</sup> Since 1993, UNDP uses the HDI to measure life expectancy and the levels of literacy, education and standard of living.

in a bill amounting to more than US\$ 200 billion<sup>8</sup>. The Stern Review (2006) projects that the costs of extreme weather-related events alone could reach 0.5 to 1% of world GDP per annum by the middle of the century. This proportion will keep rising if the world continues to get warmer<sup>9</sup>.

### ***The Environmental Economics Theory***

In 1973, stunned by the dramatic economic results due to the lack of crude after the Fourth Arab-Israeli War, western economists became concerned about the decline of environmental resources (in quantity as well as quality) and the “limits to growth”<sup>10</sup> they engender. They created therefore a subfield of economics called “Environmental Economics”, which aims at using economic instruments to preserve environmental resources. Environmental economists believe that the global market is distorted by externalities, i.e. the goods exchanged miss valuing the social and environmental impacts they generate. The price of traded items does not reflect their total cost, which shows the inefficiency of the market<sup>11</sup>.

To make the market more effective, environmental economists propose to internalize the external costs not taken into account – for example, the air, soil or water pollution or noise nuisance created by a firm in the course of its production. They believe that incentives and dynamic measures are more efficient than normative instruments, perceived as too static. They privilege a liberal approach, promoting ownership rights and individual responsibility. Among others, they support the privatization of environmental goods and encourage the creation of new markets.

The privatization of environmental goods is based on Garrett Hardin’s thesis “the Tragedy of the Commons” (1968). In substance, its conclusion stands along the same line as Aristotle’s: “For that which is common to the greatest number has the least care bestowed upon it. Everyone thinks chiefly on his own, hardly at all of the common interest”<sup>12</sup>. Environmental economists agree that the privatization of natural resources strongly encourages their preservation. Natural resources become thus marketed goods, governed by market laws: the rarer, the more expensive. Indeed, the holder of an environmental resource is encouraged to invest in the conservation of his good and to preserve it as long as its price rises on the market. By ensuring the preservation of contemporary resources and favoring its transmission to future generations, the privatization of the environment represents a sustainable approach of worldwide development.

In the 1980s, the environmental economics theory is supported by western policy makers. Margaret Thatcher in the UK and Ronald Reagan in the US enshrine market liberalization to become the economic and political orthodoxy; environmental resources follow the trend. In the 1990s, specific markets are dedicated to environmental goods. Among others, in 1997, the carbon dioxide emission market is created in order to mitigate global warming. Countries exchange three types of emissions reduction certificates: “certified emission reduction” certificates – in return of an environmentally sound project in a developing country; “emission reduction units” certificates – after financing such a project in a country with an economy in transition – and “assigned amounts units” certificates – sold and bought by developed countries and countries with transition economies. In the end of a determined period of time,

<sup>8</sup> UNEP, *GEO*, p. 3.

<sup>9</sup> *Stern Review* (2006), p. viii ([http://www.hm-treasury.gov.uk/media/8AC/F7/Executive\\_Summary.pdf](http://www.hm-treasury.gov.uk/media/8AC/F7/Executive_Summary.pdf)).

<sup>10</sup> MEADOWS D., *Limits to Growth*, New York, 1972.

<sup>11</sup> The *Stern Review on the Economics of Climate change* (2006) states: “climate change is a result of the externality associated with greenhouse-gas emissions – it entails costs that are not paid for by those who create the emissions” (*Stern Review*, p. 23). Also, during the World Economic Forum held in Davos in 2007, UK environment minister David Miliband called global warming a market failure (<http://news.bbc.co.uk/2/hi/business/6302019.stm>).

<sup>12</sup> Aristotle’s comments on Plato’s *Republic*, <http://www.cavehill.uwi.edu/bnccde/PH19C/tutorial10.html>

the purchasers of these certificates can subtract the amount of emissions they bought from the total of dioxide carbon they emitted and therefore comply with their international carbon dioxide reduction engagement.

### ***Detractors of the Environmental Economics Theory***

The debate over an economic and market-based approach to deal with environmental and social issues has become subject to sharp criticism. To some, this approach gives polluters the *right* to pollute, which is seen as immoral and unethical. To others, the privatization of environmental goods does not internalize social and environmental costs, yet it polarizes the access to natural resources. It is therefore seen as discriminating towards those who cannot afford to pay for the use of these resources.

Concretely, in the case of global warming, detractors point out the inefficiency of the Kyoto Protocol. Developing countries can sell as many “certified emission reduction” certificates as they wish, given that the Protocol does not impose any upper limit regarding the amount of emissions they deliver<sup>13</sup>. The risk of increasing the number of industries in these countries and therefore of participating in global warming is thus significant. Indeed, although the new-built factories will be technologically efficient in terms of carbon dioxide emissions, they do not generate air pollution given that they are, for the moment, inexistent. Yet, the social and environmental externalities will not be thwarted if the global temperature rises: it will create enormous movements of population<sup>14</sup>, a great number of refugees to manage and more expenditure to mitigate the extreme weather-related natural disasters. According to the adversaries of market-based instruments, a greater implication of the states as regulators of economic systems would therefore be sound.

Also, the majority of NGOs involved in developing countries fight against the privatization of the environment. They fear the monopolization of the latter by the rich and the denial of access for those who cannot pay to use these resources. Such a situation occurred in Ecuador in 2006, in the Andean community of Jima: a wealthy landowner bought the upstream part of a river, although it was used downstream by an indigenous community in order to irrigate its fields. The owner of the river cut the water flow, created a basin for his own use and thus destroyed all the crops of the indigenous farmers downhill<sup>15</sup>. Contrary to the theory, the privatization of natural resources can be, in practice, inadequate in terms of social wellbeing, equity and environmental preservation. In Ecuadorian civil society, liberal instruments are not popular if not accompanied by a normative frame and a tight regulation system.

Thirdly, non environmental economists raise the difficulties faced by scientists, economists and policy makers to evaluate social and environmental externalities. The International Union for the Conservation of Nature (IUCN) indicates that the total economic value of an ecosystem includes four criteria: a “direct value” – outputs that can be consumed directly such as fish, wild food, medicines, etc., an “indirect value” – ecological services such as flood control, carbon sequestration, climate control, etc., an “option value” – the premium placed on maintaining resources and landscapes for future possible direct and indirect use and an “existence value” – the intrinsic value that we, as human beings, attribute to the environment depending on the cultural, aesthetic, bequest significance we grant it<sup>16</sup>. Although two of these criteria are relatively easy to estimate (the direct and indirect values), the second two depend and rely on our sensitiveness. They are totally subjective and also an object of controversy. Therefore how to target the “right” price of any good?

<sup>13</sup> In order not to cut down their development.

<sup>14</sup> *Le Temps*, January 25, 2007, p. 18.

<sup>15</sup> For further information on this issue, you can contact me: [carine.dunand@imd.ch](mailto:carine.dunand@imd.ch)

<sup>16</sup> <http://www.unece.org/env/water/meetings/ecosystem/Presentation/Perrot-maitre.ppt>

## **A Future Agenda**

In 2007, policy makers have all recognized that globalisation has social and environmental affects on third parties. In her opening address at the 2007 World Economic Forum in Davos, German Chancellor Angela Merkel stated that it was time “to give globalisation a human face”<sup>17</sup>. The 2007 G8 motto is “Growth and Responsibility”. The Stern and the IPCC reports on climate change have been widely acknowledged. The theories based on globalisation, social inequality and environmental degradation have now been swallowed.

But time is running out. We have to move forward and to take action. Academics, policy makers and the private sector now bet on the private-public partnerships (PPPs) to face globalised trade externalities. Will this new paradigm be efficient enough to reverse the current collateral effects of globalisation<sup>18</sup>? The answer to that question might come sooner than expected.

### **To learn more about Trade and the Global Commons:**

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<sup>17</sup> Merkel, “Opening Address” (2007), [http://www.weforum.org/pdf/AM\\_2007/merkel.pdf](http://www.weforum.org/pdf/AM_2007/merkel.pdf)

<sup>18</sup> See the Corporate sustainability management programme at IMD, <http://www.imd.ch/research/centers/csm/index.cfm>