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"Summary of article by Paul Ekins: Trading Off the Future: Making World Trade Environmentally Sustainable[1]"

"Globalization" is one of the most significant trends of our times, and can be seen in almost every facet of human life. Perhaps this trend is most clearly visible with regard to the economy. World trade increased elevenfold between 1950 and 1990. This increase is twice as fast as world product, which increased only fivefold during the same period. A principal actor in world trade is the large transnational corporation. The turnover of the world's 100 largest corporations now exceeds the GDP of almost half of the countries in the world. A no less significant trend has been the degradation of the global environment, which is a result of much of this economic activity. In the context of these changing conditions, international trade is currently being rethought and restructured. Paramount in this thinking should be the relationship between trade, environment and development.

BASIC TRADE THEORY

In most recent discussions of international trade, free trade has been incorrectly assumed to be an unequivocally superior choice, regardless of the circumstances involved. A reexamination of basic trade theory, however, reveals that current discussions of the superiority of free trade are more dogmatic then scientific.

The theory of trade originated with the 19th century classical economist David Ricardo. The principal tenets of his theory were based on the distinct notions of specialization and comparative advantage. Individuals, firms, and nations all have the choice to produce smaller quantities of a diverse array of goods, or to *specialize* in the production of greater quantities of a few goods that they produce well (because of talent, geographic location, economies of scale, historical circumstances, etc.). With specialization, surpluses of the goods that are produced can be traded for those goods that either cannot be produced, or that are not produced because of specialization. Thus, specialization tends to increase the number, variety and value of goods and services. Lower overall costs of production in some area may be said to give a country an *absolute advantage* in that area; however, it is not necessary for a country to have an absolute advantage in any area for it to benefit from trade. The theory of *comparative advantage* suggests that, in a situation with two countries and two goods, if each country chooses to specialize in the production of that good which has the greatest relative cost advantage compared to another country, then both countries will gain from trade between them. This conclusion is held to be valid for multi-good, multi-country situations.

The theory of comparative advantage rests on assumptions which include:

1) **No externalities:** If costs of production are externalized, a product will be underpriced and appear to have more of a comparative advantage than it really does.

2) **Stable prices:** Several countries may assume that they have a comparative advantage in a certain good and increase its supply substantially. However, if demand for these goods is inelastic, the market could be "flooded" and prices would fall, changing the distribution of comparative advantages.

3) **Equally dynamic comparative advantages:** Some types of production have more dynamic comparative advantages than others, e.g., production of chemicals versus bananas. Countries with less dynamic comparative advantages (banana producers) may not be able to develop their economies and could become "locked into economic stagnation" and inequality.

4) **International immobility of factors of production:** Inherent in Ricardo's theory is the assumption that a country's capital and labor will stay within its borders to produce according to the country's comparative advantage. If they become mobile, trade will increasingly be based on absolute rather than comparative advantage. In the effort to remain competitive, countries will experience pressure on wages, environmental laws, and working conditions.

WHAT GAINS FROM TRADE?

The gains from trade occur because countries specialize in production and trade according to their comparative advantage, which increases the total volume of goods. However, several qualifications are necessary with regard to this extra product and the benefits it yields. To begin with, in less industrialized countries a large amount of subsistence production and consumption occurs. When subsistence production, which is not accounted for in economic accounts, is shifted to production for trade, which is included in these accounts, a false amount of gain is perceived; "the actual gain is the traded product less the subsistence product it replaced."(3) Second, increased consumption does not necessarily improve social welfare. Gains from trade should be related to social welfare functions before any welfare determinations are made. Third, trade involves winners and losers, and the gains from trade are unequally divided. It cannot be assumed that those who lose will be compensated; the stronger trading partner may set the terms of the exchange, leaving the weaker with few gains from trade. Lastly, specialization can lead to dependency. For example, the demand for a specialized exported product could decrease, but a shift to domestic production may be costly. Moreover, production for export is often dependent on external financing. Repaying the high foreign debt that results often requires structural adjustment programs, which in turn require more export-led activity. Rather than exporting to meet domestic needs, countries may be forced to export in order to repay debt, making it even harder to shift production to meet domestic needs should this become desirable.

THE REALITY OF TRADE

It is clear that many of the assumptions underlying the theory of comparative advantage currently do not hold. The level of unaccounted environmental degradation indicates that externalities abound. With regard to the second and third assumptions, i.e., stable prices and equally dynamic comparative advantage, the UNCTAD Secretariat has reported that:

> The price index of principal non-fuel commodities exported by developing countries fell by a staggering 50% in real terms between 1979/81 and 1988/90. . . . The main reason for these price declines is over-supply of almost all commodities due to productivity improvements and export subsidization especially in developed countries, and to increased production in developing countries prompted by debt-service obligations and structural adjustment efforts. There has also been a fall in demand for some commodities as consumers move to synthetics or technologies that need fewer commodity inputs.[2]

Concerning the last assumption, the international mobility of factors of production, although labor has not been very mobile, capital mobility has never been greater than today.

Trade in the real world is increasingly based on competitive advantage in the market, with results which diverge significantly from the classical theory of comparative advantage, whereby the strong get stronger at the expense of the weak. Instead of prosperity, the weak's experience of increased trade has often been low commodity prices, poor terms of trade, high debt service, protected Northern markets, and an increasingly degraded environment. The North is also affected as unemployment and underemployment in the South put pressure on wages worldwide. There is a danger that trade will increasingly become a "zero sum game" rather than the "positive sum game" of traditional trade theory.

TRADE AND ENVIRONMENT

Trade institutions have long ignored the linkage between trade and the environment. Recently this linkage has been recognized, but trade proponents tend now simply to claim that free trade will cause more economic growth, which will in turn increase the demand for environmental protection and provide more resources to fund such protection. This benign outcome is, however, unlikely, for several reasons. First, economic growth creates more absolute environmental damage. Second, in many cases the additional resources that *could be* allocated for environmental protection *are not* in fact so allocated. Third, much environmental degradation cannot be repaired. Fourth, countries with comprehensive environmental protection will experience increasing pressure to reduce this in the name of competitiveness.

David Pearce has argued that externalizing the cost of environmental damage is actually a subsidy that is as economically distorting as any financial subsidy.[3] But for environmental externalities to be treated as such a subsidy would require major changes in GATT's trading rules. Trade also damages the environment through its dependence on transportation. It has been estimated that trade accounts for nearly one-eighth of world oil consumption, which is a major cause of environmental degradation. Again, if this degradation was internalized, trade - and indeed entire systems of production and consumption - could look radically different. Finally, changes in property rights due to trade may be among its most important environmental effects. For example, when land is primarily used for subsistence crops, small farmers and indigenous people are usually left undisturbed. However, when land can be used to generate cash through exports, pressure to expropriate it increases. The original owners may then migrate to and cultivate marginal land, causing enormous environmental degradation.

Trade can also contribute to improving the environment in some cases. If consumers demand products that are environmentally benign, some countries will produce or import such goods for competitive reasons. More empirical research is needed to reveal how trade actually affects the environment in the long run. Without this understanding, uncritical support for trade is as dangerous as its uncritical rejection.

TOWARD SUSTAINABLE TRADE

The notion that the global environment is at risk is an almost undisputed fact. If the international trade regime were to suddenly collapse, much hardship would certainly result, but a collapse of the world's environmental systems would be much worse. It is in this context that policies should be devised to make trade (and economic activity in general) environmentally sustainable.

Many trade theorists and the GATT Secretariat have argued that the best way to address domestic environmental degradation is through domestic policy. This is correct in principle; however, such policies may not be politically feasible given the increased pressures of international competition. Comprehensive environmental protection may only be politically feasible if trade policies protect domestic industries from foreign competitors with lower environmental standards. It has also been argued that international treaties are the best way to approach global environmental problems but such treaties are very difficult to ratify and enforce. Trade policies have an important role in overcoming these difficulties.

It will not be easy to adapt the world's trading rules to promote sustainable development. In any negotiations to do so, other North/South issues will play a large role. Many Southern countries fear that measures in the area of sustainable development in GATT negotiations are yet another avenue for trade discrimination against the South, where many of the worst effects of environmental degradation occur. In addition, environmental protection regulations could impose higher short-term costs which many Southern countries cannot absorb. With these considerations in mind, Arden-Clarke has advocated recycling revenue from environmental tariffs on goods from developing countries back to those countries to provide funds for improving the environmental sustainability of their economies.[4]

Finally, it should be realized that the present highly integrated world economy dominated by transnational corporations bears little relation to the post-war world economy in which GATT's rules originated. Models of perfect competition have even less relevance now than then. The world needs to create a trading system that is predicated on civil, political, economic and social human rights, as well as social justice and environmental sustainability.

Notes

1. This article is adapted from the introductory article by Paul Ekins, Carl Folke and Robert Costanza to a special issue of Ecological Economics 9 (January 1994): 1-12.
2. UNCTAD, "Commodities: A Struggle to Survive," paper UNCTAD/PSM/CAS/380/ADD.12, UNCTAD, Geneva, 1992, 1.

3. David Pearce, "Should the GATT be Reformed for Environmental Reasons?" CSERGE Working Paper GEC 92-06, CSERGE, University of East Anglia/University College London, 1992, 21 and 29-30.
4. C. Arden-Clark, International Trade, GATT and the Environment (Gland, Switzerland: World Wide Fund for Nature, 1992).