

An ecological-economic assessment of deregulation of international commerce under GATT

Herman Daly *, Robert Goodland

S-5043, Environment Department, The World Bank, Washington, DC 20433, USA

"We are now faced with the need to consider the extent to which the GATT... can adequately cover the requirements of governments to pursue environmental objectives using policies which may affect trade, but which do not degenerate into protectionism with another name."

Arthur Dunkel
Director General, GATT, 1991

"In the run-up to UNCED (1992), the Northern countries have tried to remove the issue of trade from the agenda. This position is untenable."

Mostafa Tolba
Director General, UNEP, 1991

Abstract

This paper discusses the ecological-economic implications of deregulation of trade as promoted by the General Agreement on Tariffs and Trade (GATT).¹ This includes both environmental² and socio-economic factors such as standards of living and equity. We outline fifteen overlapping problems with deregulation or "free" trade. We argue that many environmental problems cannot be resolved equitably, efficiently, or sustainably by unregulated markets, and that there is no alternative to public intervention in certain situations. We repeat the 1987 Brundtland Commission's question of how far into international trade should regulation penetrate (WCED, 1987)? The Commission's call for GATT's environmental reform³ has not yet been heeded.

* Corresponding author. Present address: University of Maryland, School of Public Affairs, College Park, MD 20742, USA.

¹ The views here presented are those of the authors and should in no way be attributed to the World Bank or any of its affiliated organizations.

² Environment here is used in the World Bank sense, and includes human ecology, health, safety and related social concerns.

³ GATT should "...reflect concern for the impacts of trading patterns on the environment and the need for more effective instruments to integrate environment and development concerns into international trading arrangements" (WCED, 1987).

On the contrary, GATT resisted such calls. “So far the contracting parties to GATT have been unable to agree whether or not environment should be on their agenda,” wrote Arden-Clarke as recently as 1991 (Arden-Clarke, 1991b). By convening their 1971 Working Group on Environment and Trade for the first time in October 1991, GATT may be progressing on this front. This paper investigates the conflicts between GATT’s target of deregulation of international trade on the one hand, and the rapidly growing body of law protecting the environment on the other. Conflicts with traditional concepts of equity and efficiency are also noted.

Key words: International trade; GATT

1. Introduction

Major welfare gains can be achieved through international trade, and trade-induced competition can lower costs by increasing efficiency as well as, unfortunately, by lowering standards so that any regulation of trade for environmental purposes needs to be approached with all due caution.⁴ Developing nations need greatly more welfare gains from trade, efficiency, or other sources. We are aware of the difficulties of finding a reasonable balance between two sometimes conflicting and important goals. We believe nations should not strive to maximize “welfare gains from trade”, but rather maximize total welfare gains, not only from trade, but also from domestic production of non-traded goods, and especially from maintenance of natural capital. It is possible to overemphasize trade as well as to underemphasize it. We suspect that the former error is currently more prevalent.

We are concerned that global economic integration via free trade will favor a privileged minority at the expense of the majority in both industrial and developing countries. The latter depend for foreign exchange to a high degree upon trading natural resources and unprocessed commodities. We support the case for improving environmental quality and sustainability, and for decreasing pressures on developing countries to liquidate their natural resources. We question some of the links in the “spiraling positive feedback loop” view: that trade promotes growth, growth helps the environment, the environment helps growth, which in turns helps trade, which then helps growth again. We seriously consider the possibility that laborers in industrial countries might have their wages competed down to Third World levels through “free trade” and capital mobility. The optimistically hoped-for upward equalization of world wages at the level of industrialized countries would imply unsustainable rates of resource throughput.

If markets were perfect and capital were immobile internationally, then unregulated trade in products would be to the advantage of all nations. But with prices that commonly do not reflect social and environmental costs, and with highly mobile capital, unregulated trade can be harmful to nations. We seek to redress the imbalance between the case for unregulated trade (i.e., “free trade”) which is made repeatedly (Bhagwati, 1988, 1991; GATT, 1991, 1992a, b, c; Low, 1992), and the rarely offered environmental and social case for a degree of regulated trade. The case for unregulated trade is dominant and widely-held, as compared with a minority alternative view for

⁴ Countries with closed economies usually have worse environments than countries with more open economies. The counter-argument is that many closed economies are or were not democratic market economies. It is difficult to separate the influence of basic market orientation internally from the degree of openness of the economy. Imperfections of unregulated trade include monopolies, blocs, indivisibilities, high transport costs assumed to be zero in the model of unregulated trade, and so on. On the imperfection inherent in strong-weak relationships, R. Feinberg, President of the Inter-American Dialogue, testified before Congress (29 April 1992): “When a smaller nation enters into a free trade area with a much larger partner, it will confront strong pressures to bind its exchange rate and interest rate – hence its macroeconomic policies – to those of its senior associate”.

some degree of regulated trade.⁵ We are not defending all existing trade regulations, most of which serve narrow interests. The current presumption or “default position” is that free trade is the best policy unless proven otherwise in particular cases. This presumption is based on the economist’s demonstration that nations can mutually benefit from specialization and trade according to comparative advantage, even if one country has an absolute advantage in producing all goods. This argument is quite correct, given its assumptions, but one of the assumptions, namely capital immobility between countries, seems to have been forgotten in recent discussion even though it was explicitly emphasized by David Ricardo. Since today’s world is certainly characterized by a high degree of capital mobility, we regard the comforting conclusions about mutual benefit from free trade and global integration drawn from comparative advantage to be unwarranted. Rather we come to the same conclusion or default position as J.M. Keynes (1933):

I sympathize, therefore, with those who minimize, rather than those who would maximize, economic entanglement between nations. Ideas, knowledge, art,⁶ hospitality, travel – these are the things which should of their nature be international. But let goods be homespun whenever it is

reasonably and conveniently possible; and, above all, let finance be primarily national.⁷

2. Terminology

We follow the World Bank’s use of the term “environment” to include human ecology and social aspects. We see a spectrum between the extremes of mandatory unregulated trade and autarky. Both extremes are best avoided; we seek a middle way. Culbertson (1991) is the clearest in stating that: “Free trade is foreign trade not subject to regulation by the nation’s government”, that is, mandatory deregulation of the nation’s foreign trade similar to deregulation of its banks or airlines. The term “free trade”, as Culbertson points out, is a rhetorically persuasive label for “deregulated international commerce”. Who can be against freedom? Likewise, the neutral name for the pejorative “barriers to trade” is regulation of trade. Foreign trade has always been regulated by governments. Governments are expected to be more responsive to the needs of their citizens than are profit-seeking transnational corporations (TNCs). But now, since, say, World War II, governments are not as strong as they were and governance is slipping. Multinational corporate trade has burgeoned (within-firm transfers across

⁵ For example, Professor Jagdish Baghwati (1988, 1991), a leading advocate of free trade and of GATT, does not mention environment in his most recent books on trade and protectionism. Trade regulation vs. deregulation is only part of the equation. A fundamental supplement to deal with environmental priorities (Daly, 1991a,b, 1992; Goodland et al., 1991) is full cost pricing of environmental assets, internalization of external costs, environmental and social standards, revitalization of domestic competition through trustbusting, and international agreements. This supplement is important because pollution can worsen more in economies closed to international trade than in more open economies (*Am. Econ. Rev.*, 1992, May: p. 480).

⁶ Exactly what GATT seeks to privatize and nationalize under Trade-Related Intellectual Property Rights (TRIPS).

⁷ Sir Roy Harrod, the official biographer of Lord Keynes, wrote (Acheson et al., 1972) that Keynes also held and expressed this conclusion over a decade later during the 1945 Bretton Woods conference, but that he “...became enthusiastic for the World Bank at the eleventh hour...”, presumably because the emphasis was on reconstruction of Europe. Keynes and others fully expected the World Bank to have discharged its duties and dissipated its assets within 10 years (Harrod, 1951). Third World development was not at all focussed on at Bretton Woods. Although the first loan for a developing country, Chile, was in 1948, the Bank did not become a substantial supplier of loans until the late 1950s. Harrod (1951, p. 610) wrote: “In his own mind, he (Keynes) had formerly come to favor some degree of autarky as the *sine qua non* for domestic experiments in full employment policy”. Therefore, we question Lionel Robbins’ (1972) assertion that Lord Keynes’ position, held at least between 1933 and 1945, was a “temporary aberration of a noble mind”.

national boundaries now rival the volume of between-firm international transfers). Marketization is sweeping Eastern Europe and the Commonwealth of Independent States (CIS), and privatization is sweeping through the world.

We sharply distinguish throughput growth and development. By “growth” we mean the dictionary definition of increase in size by the assimilation or accretion of materials. To remind readers of this, we often refer to growth as “throughput growth”. On the other hand, to “develop” means to expand or realize the potentialities of, to bring to a fuller, greater or better state. Sustainable growth is a bad oxymoron (Daly, 1991b); environmentally sustainable economic development is arguably the most important goal for humanity (Goodland et al., 1991). Efficiency improvement is development. When something grows it becomes quantitatively bigger; when it develops, it becomes qualitatively better, or at least different. We advocate accelerating both growth and development for developing countries as a matter of urgency, and we advocate accelerated development (but not throughput growth) for industrial countries.

Legitimate regulation of foreign trade by sovereign states is often stereotyped as “protectionism” or dubbed as “import restrictions that damage the nation and the world”, reflecting special interests. “Protectionists” are often portrayed as acting out of anti-social selfishness, having an urge to harm some nation, or being indifferent to foreign poverty. Protectionism is also viewed as the only alternative to “free trade”. Such stereotyping is unwarranted. However, we would be willing to accept the label of “protectionist” if it were understood that what we want to protect are: efficient national policies of cost internalization; health, insurance, and safety standards; and a reasonable minimum standard of living for citizens. Historically these benefits have come from national policies, not from global economic integration. Protecting these hard-won social gains from blind standards-lowering competition in the global market is what we are interested in – not the protection of some inefficient entrepreneur who wants to grow mangoes in Sweden.

3. History of GATT

GATT was signed in 1947, started work in 1948, and now includes 108 countries,⁸ which account for more than 90% of all international trade. Originally it was designed to be a UN agency of trade, but national sovereignty fears were so great that a treaty was never approved. Those early fears are worth remembering in the present context. Instead, 30 nations entered into a trade contract, which has become an accretion of rules and deals. Most of GATT's articles are authorizations to impose a range of trade restrictions – but always within GATT's limits. This contract has been extended and interpreted over the years through seven “rounds” of negotiations. During this period the average tariff on manufactured goods fell from 40% to about 5%. World trade volume increased fourfold.

In 1948, the world supported less than half as many people, with about one-quarter the world's gross product and energy use of today. Environmental concerns were understandably less prominent. “Environment” appears nowhere in the mandate of GATT. GATT created an Environmental Working Group in 1971, but its first substantive meeting was held only in January 1992. In 1971, the GATT Secretariat confirmed the inadmissibility of raising tariffs to take account of pollution abatement costs. GATT refused to adopt the “Polluter Pays Principle” (PPP) which was adopted by the OECD Council in 1972 (recorded in the Superfund Dispute Panel report). Disputes have tended to be settled narrowly on

⁸ The International Trade Organization (ITO) was originally part of the 1944 Bretton Woods trio. The International Monetary Fund (IMF) would be responsible for international payments, the International Bank for Reconstruction and Development (IBRD) for financing reconstruction, and the ITO for commercial policy. Unlike the other two, the ITO failed to gain ratification. In its place remained the more limited GATT, originally intended as a temporary expedient (Acheson et al., 1972).

GATT technicalities, rather than on a broad assessment of the environmental and natural resource conservation implications. We understand Finger's definition of GATT as "a creaking assemblage of mercantilist parts rigged to defend free trade". GATT does not offer views on environmental or social goals (prison labor excepted, see Section 4.1.3). In short, GATT has consistently failed to keep up with the global environmental crisis. On 18 February 1992, GATT's Council was criticized by 35 member countries that it had not done enough to protect the environment.

A critical point is the extent to which GATT is independent of governments. GATT is composed of governments. In theory, of course, it is not independent. It is not a supra-national organization. However, in practice, contracting parties agree to abide by GATT's articles and rulings so that GATT forces governments to comply with its rulings. When GATT's Dispute Panel rules in favor of a complainant, that nation is authorized to retaliate. Such retaliation tends to favor the major trading nations. In the balance of interests, powerful nations are pitted against weak trading partners.

GATT does not constitute an international treaty, but has a legal status. GATT rules need not block adoption of improved environmental policies because a two-thirds majority (69/103 countries) is sufficient to amend rules or grant a waiver. This makes leadership on environmental concerns difficult. A few deeply concerned nations cannot muster that majority. Hence, the leadership recently shown by Japan and most of the European Community in unilaterally committing themselves to stabilize atmospheric carbon dioxide emissions at 1990 levels by the year 2000, has not been able to influence GATT. Much less does it seem likely for GATT to take such leadership.

Industrial nations increased trade barriers during the past decade (Thomas and Nash, 1991). Europe, Japan and the U.S. expanded the coverage of non-tariff barriers (NTB). The volume of industrial country imports covered by NTBs now affects approximately one-fifth of all their imports.

4. The case that deregulation of trade would be environmentally and socially harmful

No policy prescription commands greater consensus among economists than that of free trade based on comparative advantage. Economists have long treated free trade as a basic "default position", presumed good unless proven otherwise in specific cases. We argue that this presumption is unwarranted – not that trade or even free trade is always bad – but rather that the default presumption should be in favor of national production for national markets. We marshal our arguments into some fifteen issues, grouped into three broad categories. These categories represent the three basic goals of all economic policy: (1) Allocative Efficiency, (2) Distributive Equity, and (3) Ecologically Sustainable Scale. The first two are longstanding goals; the third is of recent recognition and stems directly from the realization that the economy is, in its physical dimensions, an open subsystem of a materially closed, finite, and nongrowing ecosystem. To be sustainable, the scale (population times per capita resource use) of the economy must not grow beyond the biophysical capacity of the ecosystem to regenerate raw material inputs and to absorb waste outputs. Many of our fifteen issues impinge on more than one category, and our classification is by major impact. Even that is sometimes rather arbitrary. Nevertheless, the classification helps to distinguish arguments about allocative efficiency from those about distributive equity from those about ecological sustainability, even when a single action influences all three goals.

4.1. Mainly allocation issues

4.1.1. Unregulated trade conflicts with internalization of external costs

There is a sharp conflict between an international policy of unregulated trade and a national policy of internalization of external environmental costs. A country that internalizes environmental costs into its prices will be at a disadvantage, at least in the short term, in unregulated trade with a country that does not internalize environ-

mental costs. Therefore, national protection of a basic policy of internalization of environmental costs constitutes a clear justification for tariffs on imports from a country which does not internalize its environmental costs.⁹ This is not “protectionism” in the usual sense of protecting an inefficient industry, but rather *the protection of an efficient national policy of internalization of environmental costs*. Economists argue that trade restrictions are a “second best” policy for achieving environmental ends. True enough, but the problem is that the “first best” policy of domestic internalization of environmental costs will be undercut by international competition if not protected by a compensating tariff (Daly, 1992). There is a clear inconsistency between a national policy of cost internalization and an international policy of deregulated trade with non cost-internalizing nations. Until the price of traded goods reflects their full environmental and social costs in each trading country, unregulated trade will undermine efficient national policies of internalizing external costs.

In addition to the allocative effects of free trade with a country that does not internalize external costs, there are also distributive and scale effects. The non-internalizing country will increase its share of world output at the expense of the internalizing country (hardly an improvement in global efficiency), and also its scale of total resource use. The within-country distributive effects in the non-internalizing country would favor producers who fail to internalize costs, and would harm the general public who bears these external costs. Within the cost-internalizing country the distributive effects are indeterminate, but

in some countries any overall reduction in economic activity seems to be borne disproportionately by labor.

Of course, if all trading countries adopted the same rules of cost internalization, this objection to free trade would be overcome. But we feel that compensatory tariffs would be necessary during the long negotiations required to harmonize rules. Furthermore, the existence of tariffs would itself encourage the very agreements needed to effect their removal, if the gains from trade are really as great as commonly thought. Also efforts at “harmonization” may reveal fundamental disharmonies that are best tolerated.

4.1.2. Dumping

Dumping is a special case of the preceding problem, involving only a single commodity. If an exporter sells a particular product for less than the product costs to make, or sells abroad for less than the price at home, and if such “dumping” causes injury in the importing nation, GATT permits duties to be levied on the imports. For example, in August 1991 the U.S. calculated the precise “dumping margin” of 58.71% for Japanese word-processors.¹⁰

Environmental dumping occurs when environmental costs of a particular product are externalized. As a result, products are sold below the actual cost of production. GATT’s Article VI should be amended to concede “environmental dumping” as an illegal subsidy to the traded products (Arden-Clarke, 1991a). Nations that do not count the full environmental costs in the prices of their exports are in effect subsidizing those exports as surely as if they taxed their citizens and transferred the money to the exporters. In fact, an environmental subsidy is even

⁹ Environmental effects from consumption differ from those from production. GATT does not forbid consumption-related standards if applied to both domestic and imported goods, but it does oppose production or process-related restrictions. For example, pesticide-contaminated fruit from Mexico can be kept out of the U.S. market if it fails to meet the same standards for pesticide residuals as U.S. fruit. But Mexican fruit cannot be kept out on the grounds that Mexican farm workers are suffering from pesticide poisoning more than are U.S. farm workers due to lower safety standards or less rigorous enforcement in Mexico.

¹⁰ Anti-dumping measures as an excuse for trade restrictions were justified by the need to extend across national frontiers the policing that antitrust laws provide domestically against monopolies. Now some feel anti-dumping measures have become tools of monopolies, not antidotes. Anti-dumping is how a monopoly extends across frontiers the price rigging that it has already accomplished at home.

more economically inefficient than a tax-financed subsidy because taxes, since they are paid in money, can be shifted to the margin while environmental costs must be borne where they fall, usually inframarginally.

For example, if timber producers can clear-cut forests without replanting, one environmental cost may be flooding that destroys people's homes. Suppose the timber corporation had been required to cover those costs, and was reimbursed by a government subsidy financed by taxes on those who otherwise would have been flooded. It is clear that those citizens would prefer to pay money – taxes – not only because prevention is almost always cheaper than restoration, but also because the burden of paying the tax can be met by sacrificing something less important than one's house (e.g., one's car). Thus an environmental subsidy is financed by an in-kind inframarginal tax, whereas a monetary public subsidy is financed by marginal sacrifices with taxpayers deciding their own margin of least important use value sacrificed. This is more efficient. Most efficient, of course, is to make the consumer of timber pay for the cost of forest replacement by including that cost in the timber price rather than adding it to the general tax burden. Although such cost internalization is socially efficient, timber firms in competition have an incentive to externalize costs on to the general public in their country in order to sell internationally at low prices.

4.1.3. *Social dumping: GATT's exception*

While GATT in general neglects the social and environmental implications of its rules, there is one exception. This is significant, partly because it is the only one and is not caprice, and partly because it offers hope for broader reforms in the future. The exception is Article XX which allows countries to discriminate against imports produced by prison labor. This curious provision does not relate to whether prisoners are paid nor whether their labor is forced. But if GATT admits prison labor as an exception, can they continue to exclude similar issues such as child labor, debt peonage, chattel slavery, or jobs with high mortality/morbidity rates, especially where the

job can be made tolerably safe?¹¹ Possibly the burden of proof should be on GATT as it treats other accused parties: prove that prison labor is more important than child labor?

Indeed the case for excepting prison labor is weak relative to the case for excluding child labor or uninsured risky labor. There are good reasons for sending criminals to prison, and once there, why should society support them in idleness? Why not offer productive work? From the point of view of rehabilitation, teaching work skills to prisoners is surely desirable. Child labor, debt peonage, uninsured risky labor, and subsistence-wage labor all represent a greater degradation of social standards than requiring justly-convicted, reasonably-fed criminals to earn their keep. Of course, if people are thrown in forced-labor "gulags" for political reasons, then GATT's exception is understandable, but the case for extending it to child labor, etc., remains strong. The prison labor exception is an acknowledgement by GATT that standards-lowering competition can be carried too far. That is the thin edge of a big wedge.

The distributive effects on the laboring class in countries that elect to compete with prison labor abroad will be strongly negative. The employing class will, of course, gain as will consumers buying cheap prison-made imports. These distributive effects might be more important than the allocative effects and justify inclusion under the former heading. It is included here because of its logical connection with dumping and failure to pay full-cost prices (wages) in the exporting country.

¹¹ Anti-Slavery International claims that 100 million people worldwide suffer as slaves (including child labor) in violation of the 1948 UN Universal Declaration of Human Rights, as annually documented by Geneva's "Working Group on Contemporary Forms of Slavery". We acknowledge that children may occasionally work, such as helping their families during peak harvest. By child labor, we mean the case where young children work permanently for most of the day, obviating an education and being thereby consigned to illiteracy for the rest of their lives. That much child labor is unsafe, underpaid, repetitive and unhealthy bolsters the case against it. The UN Convention on the Rights of Children should take precedence over GATT's singular exception.

Article XXb provides for exceptions as noted, but much devolves on the interpretation of measures “necessary” to protect human, animal, or plant life or health. GATT seems to construe “necessary” in a narrow sense. Does necessary mean that the trade restraint is the most effective or feasible measure, or that there is no other choice? The XXb clause was originally introduced to provide for quarantine, but should be reformed to provide for environmental needs. XXg seems to provide scope for discrimination against imports if domestic environmental standards are not met, but is uninvoked. Whether a particular trade measure is “necessary” devolves – for GATT – on whether other measures reasonably consistent with GATT are available, and if not, if it is the least trade distorting way of achieving the goal (Charnovitz, 1991a,b; Petersmann, 1991; GATT, 1992a,b,c).

4.1.4. *Toxic wastes trade*

We concede gains from trade in toxic wastes exported to, say, a large and unpopulated desert nation. Such gains will continue until the desert becomes full. Should, therefore, toxics be traded on the principle of comparative advantage? Should toxins be exported by the polluting nation or firm to “underpolluted” or cheap lands, likely to be low-wage nations in the Third World? Or should toxic wastes be internalized to their country of origin on the “Reinforced Polluter Pays” principle that the best way to internalize the risks of any enterprise is to have the owners live next to it?¹²

Four reasons why toxics should not be exported are: First, the importer has less information on the risks. The importer knows less about the content mix of the shipment being imported than does the toxic producer. Importers are less

likely than producers to be able to handle toxics safely, and to store them prudently. Second, the distribution of benefits may not adequately compensate the people taking the risks. Corruption is likely in such trades. Third, developing countries may not enjoy institutional stability for the long time necessary for safe storage. Governmental changes increase risks. Fourth, the volume of toxics in the world today is vast and increasing. Even efficient, well-informed, and experienced transporters suffer accidents (e.g., the 1989 non-toxic oil spill from the Exxon Valdez in Alaska). Increased transportation of toxics increases the risks of accidents or even of malversations, particularly of radioactive substances.

The final problem with toxics trade is that it removes the powerful and dynamic incentive for producers to internalize waste disposal. Suppose that two countries have a cost advantage (absolute or comparative) in toxic waste disposal. Suppose one country is Sweden and that its cost advantage comes from the technical efficiency of a new process. Suppose the other country is Sudan and that it can dispose of toxics at the same price as Sweden, but its cost advantage is based on low wages, low environmental standards, and low safety standards. One might reasonably approve the export of toxics to Sweden, but not to Sudan, in spite of the four reasons noted above and the possibility of developing the Swedish technology domestically. But the main point is that had there been free trade in toxics from the beginning, Sweden would have had no incentive to develop the new technology as long as Sudan was importing toxics for a price as low as that possible with the new technology. Only after Sudan would have become so polluted that it had to raise its prices would the Swedish technology have had an economic chance. This is the difference between standards-lowering competition (trade with Sudan), and efficiency-increasing competition (trade with Sweden). Probably the best rule is to prohibit trade in toxics, thus forcing each country to internalize its own costs geographically. Sweden could transfer its technology internationally, but toxics would stay at home. External costs of toxics would be internalized not only to the firm that produced them, but also to

¹² Within nations the opposite more generally holds. Waste disposal and unwanted industries are not sited randomly; they follow the path of least resistance to sites near the poor or politically weak, or to low property value sites. The international trade in dumping toxics that led to the Organization of African Unity (OAU) 1991 Bamako Convention also is a path of least resistance. This is unfortunate because the poor and weak are the least able to withstand pollution.

the country under whose laws and institutions the firm operates.

The trend is towards “self-sufficiency” as the organizing principle of the “Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal” under the auspices of the United Nations Environment Programme (UNEP), signed by 105 nations including the U.S. and the EC as of May 1992. This is not as strong as African nations proposed, as it legitimizes waste trade under certain precautions. Similarly, OECD adopted a “decision” on 5 February 1992 to govern international shipments of wastes. Signatories are obliged to develop adequate facilities for sound waste management within national boundaries. Germany is well on the way to its goal of zero wastes export. Now no German hazardous waste leaves the European Free Trade Association (EFTA). While there is lively discussion on definitions of the terms: hazardous, toxic, recycled, household, industrial, “environmentally sound” disposal, and recyclable secondary substances, as well as where to draw the line on self-sufficiency (municipalities, provinces, nations, regions) – the trend for international trade is clear. For these reasons there is a clear case for an international agreement to minimize trade in toxins. Exporting “bads” can have important distributive effects, and also increase the relative scale of the economy to the ecosystem in the importing country by preempting ecological space from other uses, including life-support services.

4.2. *Mainly distribution issues*

4.2.1. *Fallacy of confusing comparative advantage with absolute advantage*

“An open trading system, which leads to the distribution of global production in accordance to comparative advantage, is of benefit to all trading partners” is the conventional wisdom. Unfortunately the principle of comparative advantage rests on the assumption that capital and labor are immobile between nations. As David Ricardo clearly explained, if capital could cross national boundaries, then it would seek absolute advantage (profitability) just as it does within a nation.

Only if capital is not free to cross national boundaries in pursuit of absolute advantage is there any reason for it to specialize within the nation according to the principle of comparative advantage.

The theory is supposed to work as follows. When in international competition the relatively inefficient activities lose out and jobs are eliminated, at the same time the relatively efficient activities (those with the comparative advantage) expand, absorbing both the labor and capital that were disemployed in activities with a comparative disadvantage. Capital and labor are reallocated within the country, specializing according to that country’s comparative advantage. However, when both capital and goods are mobile internationally then capital will follow absolute advantage to the low-cost country rather than reallocate itself according to comparative advantage within its home country. It will follow the highest absolute profit, which is usually determined by the lowest absolute wage. Other factors determining efficiency, such as technology and managerial efficiency, can usually be transferred along with capital.¹³

All countries have a comparative advantage in something, so it could be plausibly argued that trade and specialization guided by comparative advantage would be to the benefit of all trading partners. But there is no reason why each country must have an absolute advantage in something, and thus no guarantee that specialization and trade according to absolute advantage will not harm one of the trading countries, even though it would increase world product. As capital leaves a country in pursuit of greater absolute advantage, then that country loses both capital and jobs and becomes worse off. In today’s world nothing could

¹³ It is difficult to perceive the absolute advantage of some nations, particularly those created by colonial fiat with no respect for ethnicity, history, bio-regions, or natural resource distribution. However, new technology can alter the situation; even Niger and Mali may profit greatly from the desired solar hydrogen energy economy. Further, if prices do not reflect the environmental costs of economic activity and trade, the comparative advantage resulting will not be sustainable, nor will the development that stems from trade-induced growth based on it (Arden-Clarke, 1992b,c).

be clearer than that capital is electronically mobile internationally. However valid comparative advantage may be as a logical exercise, its relevance is undermined to the extent that capital is mobile. There may be good arguments for free trade, but in a world of international capital mobility, comparative advantage *cannot* be one of them. We are surprised by the frequency of the overconfident assertion that an open trading system will benefit all trading partners, because that assertion assumes the immobility of capital for its validity, even in theory (Daly, 1992).¹⁴

One might reconstruct the free trade argument on the grounds that specialization according to absolute advantage will increase world output, without worrying about what happens to nations separately. The focus would then be on individuals operating in a cosmopolitan world where national boundaries have no economic meaning. So the fact that capital is allocated by absolute advantage all over the world, just as it was previously allocated by absolute advantage within nations, might be considered of little significance. We can all rejoice in the increase in world product. Economically, the world would become just one big nation without any government, laws, or institutions of mutual responsibility.

Such a situation is in harmony with the highly

individualistic premises of modern neoclassical economic theory, which does not recognize community in any sense beyond a mere aggregation of individuals. But the classical economists who developed the theory of comparative advantage took national community very seriously, and the importance of the doctrine to them was the demonstration that, under its assumptions, free trade in goods and services would not harm the trading nations. But the main assumption of that doctrine, as already emphasized, is that capital is immobile internationally; i.e., national boundaries are economically significant. The current celebrants of global economic integration are frequently arguing for the erasure of national boundaries (free movement of goods and capital) on the basis of a doctrine (comparative advantage) whose validity presupposes the existence of those same national boundaries!¹⁵

Comparative advantage is valid as a principle of division of labor between individuals (e.g., the famous example of the lawyer who is a better typist than her secretary, yet specializes in legal work and hires the secretary to do the typing). But far from clarifying the issue of trade between nations, this example about individuals abstracts from the very possibility of a transfer of productive capacity (capital, labor time) between the trading entities. The lawyer and her secretary are each reallocating their labor time according to comparative advantage – it is impossible for time to flow from the secretary to the lawyer in pursuit of absolute advantage. But, of course, capital (and labor) can flow from country A to country B, rendering comparative advantage irrelevant.

4.2.2. *Population and employment*

If by wise policy or blind luck a country has managed to control its population growth, pro-

¹⁴ The implications of factor mobility for the classical theory of comparative advantage (the basis and rationale for the gain from unregulated trade), while not widely remembered, have long been known. The following cautionary paragraph is from no less an authority than Bertil Ohlin: "In considering the gain from increased efficiency in the use of productive factors that results from interregional trade, we must be mindful of this last statement, namely that interregional trade itself influences the quantities and qualities of the factors. It is quite impossible to say anything about what the world would look like in the absence of interregional trade, that is, if it consisted of a number of self-sufficient regions. It is certain, however, that the supply of productive factors would be different from its current pattern. *Every argument about the gains from interregional trade is based on a far-reaching abstraction, namely that trade will not affect the supply of productive factors. It is therefore not worthwhile to undertake a detailed discussion of questions involving the size of the gains from trade and their distribution among the trading regions, an issue that received considerable attention in the classical theory.*" (Ohlin, 1924; republished in Hecksher and Ohlin, 1991).

¹⁵ It is worth remembering in this context that the UN, the IMF, the World Bank, and even the GATT are made up of member *nations*. They are not cosmopolitan, anti-nationalist precursors of a world state, but loose federations of nations, presumably dedicated to serving mankind through the existing national communities that are their members. They were not founded to weaken their member nations by fostering global economic integration in the service of transnational capital.

vide social insurance, high wages, reasonable working hours, and other benefits to its working class (i.e., most of its citizens), should it allow these benefits to be competed down to the world average by unregulated trade? Through unregulated trade, Northern capitalists share the wages of Northern laborers with Southern laborers – although the Southern elites may also gain. This levelling of wages will be overwhelmingly downward due to the vast number and rapid growth rate of underemployed populations in the Third World. Northern laborers will get poorer, while Southern laborers will stay much the same. The dream that growth will raise world wages to the current rich country level, and that all can consume resources at the U.S. per capita rate, is in total conflict with ecological limits that are already stressed beyond sustainability. Growth for the poor is urgent and necessary, but without making ecological room for it by a reduction in growth of resource consumption by the rich, and a reduction in population growth of both rich and poor, it cannot happen.

Wage levels vary enormously between countries and are largely determined by the supply of labor in relation to resources. Labor supply in turn depends on population size and growth rates. Overpopulated countries with high population growth rates are naturally low-wage countries, and if population growth is rapid they will remain low-wage countries. This is especially so because the demographic rate of increase of laborers is frequently twice or more that of the capitalists. For most traded goods, labor is still the largest item of cost and consequently the major determinant of price.¹⁶ Cheap labor, *ceteris paribus*, means low prices and a competitive advantage in trade. But economists do not worry about that because, as discussed in the previous section, they mistakenly believe that they have proved that free trade with free capital mobility between high-wage

and low-wage countries will be mutually advantageous, thanks to comparative advantage.

Although the focus here is on distribution, the effect on scale via population growth could be very important. As the social and private benefits of low fertility are dissipated from the low-fertility country to the “world as a whole”, it is doubtful that the discipline of low fertility will survive in that country. This is especially so if social security benefits are also competed away in the quest for “efficiency”. Rising fertility in previously low-fertility (high-wage) countries would increase population and worsen the scale problem. Since wages in poor countries are unlikely to rise due to both existing overpopulation rapid demographic growth, the net effect may be a reverse demographic transition in which population increases as wages fall in previously high-wage countries.

4.2.3. *North–South labor competition*

GATT urges the reduction of tariffs in developed countries on all products of export interest to developing countries without addressing the consequences for Northern laborers. There is at least some truth in the old saying that foreign aid is the transfer of money from poor people in rich countries to rich people in poor countries, and it ought to be taken more seriously. It was recently (1992) re-emphasized by Sir Alan Walters: “It’s the poor taxpayers of the developed world subsidizing the rich people in the developing countries”. Northern capitalists want Northern laborers to compete directly with the Southern laborers. International capital mobility, coupled with free trade of products, stimulates an international standards-lowering competition to attract capital: wages can be lowered, as can health insurance, worker safety standards, environmental standards, etc. – all in the name of reducing costs. But reducing costs by increasing efficiency, and reducing costs by lowering standards are two very different things. Avoiding standards-lowering competition requires more than “free trade”.

The most direct form of North–South labor competition would be free migration –let the cheap labor come to capital instead of capital moving to where the cheap labor is. This has

¹⁶ Labor is such a large determinant of cost because governmental owners of natural resources undercharge or fail to charge the full environmental and social cost of exploitation to the firms who use the resources, hence the urgent need for environmental accounting (Ahmad et al., 1989).

been happening in Europe in the guest labor program and in the United States by means of illegal immigration. The distributive and allocative effects are very similar to those of free trade with free capital mobility. The likely allocative effect of cheap labor will be a shift toward labor-intensive goods and processes.

Cheap labor provides no incentive for investments in the technologies that would increase labor productivity and wages in the future. As early as 1971, W.J. Baumol wrote that the social costs of population growth can become international externalities, with one country's population problems spilling over into other parts of the world. He goes on to suggest that restrictions on immigration would be justified. By extension, if one acknowledges that deregulated trade with free "migration" of capital has wage-equalizing effects quite similar to those of free migration of labor, would not analogous restrictions again be justified? Should not GATT recognize the validity of this justification?

4.2.4. *Enriching the North to help the South*

In the standard view Northern laborers are supposed to be willing to sacrifice their high-wage jobs in the name of "free trade". Yet the North as a whole is supposed to consume more Southern exports. Consequently Northern capitalists must get richer to consume ever more if the North is to provide growing markets for Southern products and raw materials. The alternative Southern strategy of import substitution is considered inefficient, while export-led growth is considered efficient, almost by definition. There is no recognition of the wisdom of relative self-sufficiency in basic goods. Would it not make more sense for Third World countries to focus more on transforming their own resources into products needed by their own people, rather than primarily exporting them to the North in exchange for consumer goods for Southern elites?

Foreign investment and trade has sparked economic "take-off" in Japan, South Korea, Taiwan, Thailand, and Malaysia, for example, and it is difficult to identify countries that have "taken off" without such trade. The price paid included low environmental and social standards, a de-

graded environment, destruction of local communities, and natural capital asset liquidation.¹⁷ The benefits include high literacy, reduced poverty, and so far, one or two generations of affluence. The extent to which this is sustainable in all cases is unclear and depends in part on whether the export-led policy aims to increase *net* exports in order to boost aggregate demand in Keynesian fashion. If all or many countries seek to increase net exports along the Newly Industrialized Countries (NIC) lines, then we bump up against the constraint that, for the world as a whole, aggregate exports must equal aggregate imports. Who are the net importers of industrial exports? As NIC growth continues we will also bump up against the scale constraint unless the North frees up ecological carrying capacity. For those countries to which such take off cannot be generalized, tilting the balance towards domestic needs and poverty alleviation, with trade in a supporting role, is preferable.

GATT (and World Development Report (WDR), 1992) claim that further growth produces the extra income needed to clean up pollution and cure environmental damage. Economics Nobelists Jan Tinbergen and Trygve Haavelmo disagree with that claim: "...continuing with the prevailing growth path is blocking (global) chances for survival.... What the world needs *least* is an increase in national income... the highest priority is to (halt) any further production growth in rich countries..." (Tinbergen and Huetting, 1991, and Haavelmo and Hansen, 1991, in Goodland, et al., 1991). We agree with Tinbergen and Haavelmo. No one denies that if we were truly richer, all our problems, including pollution, would be easier to solve. The issue is whether growth at the current margin, as conventionally measured, is really making us richer. We suspect that it is making us poorer by increasing environmental costs faster than it increases production benefits. Failure to recognize even the possibility that we have grown beyond the optimum scale leads us to respond to our experience of reduced

¹⁷ Birdsall and Wheeler (1992) point out the further cost that higher Southern incomes lead to more consumer goods (e.g., automobiles in Chile) with their consumption externalities.

well-being with calls for even more production, thereby pushing the economy still further beyond optimum scale.

Environmentally benign activities tend to be less costly than environmentally malign alternatives and therefore, paradoxically, to contribute less to GNP. Thus, walking, biking, and mass transit damage the environment less than automobile use; an extra blanket or sweater damages less than raising the thermostat; opening windows costs less than turning on air conditioners; and recycling costs less than trashing. Yet automobiles, highly set thermostats, and throw-away products contribute more to GNP than their environmentally benign substitutes. The general point is that environmental prudence costs less than environmental imprudence, but GNP often perversely counts environmental cost as “economic” benefit. In addition, global income growth or raising Northern incomes exacerbates inequality while scarcely denting Southern poverty. Inequality doubled between 1960 and 1990. The richest fifth of the world’s population, by nation, now earns over 60 times more than the poorest fifth. (UNDP, 1992).

4.2.5. *Terms of trade*

Primary commodities account for most of developing countries export earnings, such as Latin America (67%), West Asia (84%), developing Oceania (76%) and sub-Saharan Africa (92%). Only a few developing countries, mainly in Southeast Asia, have diversified exports thus escaping this dependence. The price of these commodities declined 50% in real terms between 1979–1981 and 1988–1990, averaged over all non-fuel commodities (Arden-Clark, 1992c). This substantial decline in earning power of developing country exports is reflected in their terms of trade which fell 30% between 1980 and 1988. This means that, *ceteris paribus*, a greater physical volume of exports is required to earn the same value thus increasing the ratio of throughput and environmental stress per unit of value (i.e., increasing scale). To the extent the Bretton Woods institutions advise borrowers to increase exports, and similar advice is purveyed to many countries at the same time, prices of their products will tend

to fall. In the face of inelastic world demand, total receipts also fall, leading to still more production to make up for the fall in receipts, which causes a further fall in price and total receipts.

In addition, international specialization requires specific investments (factories, plantations). Since this investment cannot in the short term revert to other uses, national economies increase dependence on world markets, losing their “freedom not to trade” and putting themselves in the position of having to accept whatever terms of trade the market dictates.

4.2.6. *Transfer pricing*

The private sector has been known to understate the price of commodities to evade taxes in the producing country and raise profits when they sell at full price in the importing country. This is done to transfer profits to the country with lowest taxes, or to escape limits on remittances of profits abroad. This usually means in practice the underpricing of raw material exports. As this “transfer pricing” is illegal, there are few firm figures on its extent. Arden-Clark (1992b,c) cites cases where Indonesian logs are underpriced by 40%, and Papua New Guinea logs by 10%. In addition, even the domestic price before it was lowered for transfer purposes does not reflect scarcity value, replacement value, or the environmental costs of logging. Underpricing accelerates depletion of the natural resource by increasing the quantity demanded. It increases the ratio of throughput to value in the same way as a fall in the terms of trade.

We recognize that transfer pricing results from conditions other than unregulated trade, including, in fact, some trade restrictions. But we mention it in this context because it involves the general relation of trade to environment, and as a reminder that trade regulation can also have undesired environmental consequences. Transfer pricing also involves the difference between unregulated trade that is international but intra-firm, and unregulated trade that is both inter-firm and international.

4.2.7. *TRIMS and TRIPS*

The United States, Europe and Japan are urging the extension of GATT in two dramatic ways:

(1) Trade-Related Intellectual Property Rights (TRIPS), and (2) Trade-Related Investment Measures (TRIMS). The first would basically generalize United States patent and copyright laws to the whole world, and the second would regulate how GATT members deal with foreign investment and operations of foreign firms within their borders. The latter would open up to foreign competition the entire service sector (banking, insurance, law, medical care), which has traditionally been reserved for nationals. These two measures represent an enormous further internationalization of the world economy, with a corresponding weakening of the national state and its ability to carry out policies of any kind. As nation states become weaker, transnational corporations become relatively stronger, and these new extensions of GATT clearly serve their interests.¹⁸

GATT would treat new knowledge as private property rather than a common heritage, and would extend patents to plant and animal varieties, including seeds in agriculture. The gene pool, or at least modifications and new discoveries related to the gene pool, would become private property rather than the common heritage of mankind. Of course, the monopoly is for a limited period (14 years in the United States), but GATT seeks a longer period than that now accepted in most Third World countries. To impose uniform and stringent patent laws on all nations seems an unwarranted infringement on national sovereignty, for the protection, not of underpaid, exploited inventors, but of transnational corporate patent holders. A nation that rewards its inventors with patent monopoly could protect those inventors from competition from cheap pirated imported reproductions by a tariff on such imports.

Adding to this the opening up to international competition of the entire service sector leads to an enormous centralization of power in transna-

tional corporations and the GATT. A country refusing to allow foreign banks, law firms, retail chains, etc., to move freely into its domestic market would be faced with “cross retaliation” against its commodity exports, a severe sanction which GATT allows nations to employ only to protect citizens against competition from prison labor.

4.3. *Mainly scale issues*

4.3.1. *Scale, trade, and ecological carrying capacity*

The dogma of global economic integration via free trade and free capital mobility is based on the assumption that wages can be levelled upward rather than downward. It assumes that the whole world and many future generations can consume resources at the per capita levels current in today's high-wage countries without inducing ecological collapse. In this way, free trade sins against the criterion of sustainable scale. In its physical dimensions, however, the economy really is an open subsystem of a materially closed, finite, and nongrowing ecosystem with a limited throughput of solar energy. The proper scale of the economic subsystem relative to the total system really is a very important question.

Free trade has obscured the scale limit in the following way. Sustainable development means living within environmental constraints of regenerative and absorptive capacities. These constraints are both global (greenhouse effect, ozone shield), and local (soil erosion, deforestation). Trade between nations or regions offers a way of loosening local constraints by importing environmental services, including waste absorption, from elsewhere. Within limits this can be quite reasonable and justifiable. But carried to extremes in the name of free trade it becomes destructive. It leads to a situation in which each country tries to live beyond its own absorptive and regenerative capacities by importing these capacities from elsewhere. Of course, the importing countries pay for these capacities and all is well as long as some other countries have made the complementary decision to keep their own scale below their own national carrying capacity in order to export some of its services. In other words, the apparent escape from scale constraints via trade by some

¹⁸ The UN-affiliated World Intellectual Property Organization in Geneva notes that the U.S. and Philippines are the only two countries granting patents on a first-to-invent basis, rather than on the normal first-to-file basis. First-to-invent favors small entrepreneurs; first-to-file favors transnational corporations.

countries depends on other countries' willingness to adopt the very discipline of limiting scale that the importing countries are seeking to avoid.

What nations have made this complementary choice? All countries are now aiming to grow in scale, and it is merely the fact that some have not yet reached their limits that allows other nations to import carrying capacity. Free trade does not remove carrying capacity constraints – it only guarantees that nations will hit those constraints more or less simultaneously rather than sequentially. It converts local constraints into an aggregated global constraint. It converts a set of problems, some of which are manageable at the national level, into one big, integrated, unmanageable, global problem.

Keynesian policies of stimulating investment for the sake of growth and full employment often involve increasing the component of investment called net foreign investment by means of trade policy. In addition to the laudable increase in employment that results from the successful execution of such policies, we also usually get an increase in scale of the economy, with all the associated environmental stresses.

Of course, the drive to grow beyond carrying capacity has roots other and deeper than the free trade dogma. The point is that free trade makes it very hard to deal with root causes at a national level, which is the only level at which effective social controls over the economy exist. Many economists will argue that free trade is just a natural extension of price adjustment across international boundaries, and that "right prices" must reflect global scarcities and preferences. But if the unit of community is the nation – the unit in which there are institutions and traditions of collective action, responsibility, and mutual help; the unit in which governments try to carry out policies for the good of their citizens – then "right prices" should not reflect the preferences and scarcities of other nations. Right prices should differ between national communities. Such differences have traditionally provided the whole reason for international trade in goods – trade that can continue if balanced – i.e., if not accompanied by the free mobility of capital that homogenizes scarcities and prices globally while reducing

national economic policy to ineffectiveness unless agreed upon by all freely trading nations.

Underpricing of resources, either through failure to internalize environmental costs or through outright subsidy, has been treated under the heading of allocation, but it also has important effects on scale. Widespread underpricing of raw materials and energy tend to encourage throughput growth and expand scale as well as to allocate resources less efficiently. *WDR '92* calculates that developing country electricity prices average half those of the OECD, and tropical timber stumpage fees rarely exceed 25% of replacement costs. Removing subsidies to resource use (which were usually granted in order to stimulate growth in scale) is an obvious first step toward both improving allocative efficiency and lowering scale to within sustainable limits.

4.3.2. Trade-induced market expansion and its effect on welfare

The previous section argued (scale effect) that increasing GNP via trade, for any given level of throughput efficiency, will increase throughput and associated stresses on environmental sources and sinks. This section argues that the welfare benefits we derive from those extra stresses, through the extra GNP generated, may well be small. The greater the scale of throughput already attained, the stronger this tendency is likely to be. For poor countries we would expect a higher correlation between GNP and welfare. But even for poor countries, especially those whose GNP consists significantly of exports of nonrenewable resources, GNP falsely counts natural capital liquidation as income. Even if welfare is correlated with true income, it is much less correlated with GNP, which incorrectly measures income. Promoting international trade in liquidated natural capital counted as income is not a good policy.

Trade augments economic choices, thus tending to expand economic growth through extending the size of the market, which makes room for greater specialization and exchange, and increased competition. Potentially, but not necessarily, everyone could gain. A corollary of specialization is interdependence and vulnerability to

disruption of trade. Interdependence is often celebrated while vulnerability, the other side of the coin, is lamented but sotto voce. Competition can lower cost by improving efficiency or by lowering standards (of safety, of environmental protection, of living). Frequently the vulnerability argument is recognized; less frequent recognition is accorded the standards-lowering competition argument.¹⁹

These drawbacks to unregulated trade are thought to be more than compensated for by the increased economic growth. The measure of growth is GNP. Welfare is assumed to be highly correlated with GNP; therefore, free trade promotes welfare by promoting growth in GNP. But the link between GNP and welfare has become very questionable and with it the argument for unregulated trade and other growth-promoting policies.

Economists did not devise GNP to be a direct measure of economic welfare. But GNP is thought to be sufficiently correlated with welfare to serve as a proper objective for economic policy. Many have begun to doubt this correlation. Evidence for such doubts for the United States from two sources is given here.

First, Nordhaus and Tobin (1972) phrased this question as “Is Growth Obsolete?” as a measure of welfare and hence as a proper guiding objective of policy. To answer their question they developed a direct index of welfare called Measured Economic Welfare (MEW), and tested its correlation with GNP over the period 1929–1965. They found that for the period as a whole, GNP and MEW were indeed positively correlated – for every six units of increase in GNP there was, on average, a four-unit increase in MEW. Economists breathed a sigh of relief, forgot about MEW, and

concentrated on GNP. Some 20 years later, Daly and Cobb (1989) revisited the issue and began development of their Index of Sustainable Economic Welfare (ISEW) with a review of the Nordhaus and Tobin MEW. They discovered that if one takes only the latter half of the period (i.e., the 18 years from 1947–1965), the correlation between GNP and MEW *falls* dramatically. In this most recent period – surely the more relevant for projections into the future – a six-unit increase in GNP yielded on average only a one-unit increase in MEW. This suggests that GNP growth at this stage of United States history may be a quite inefficient way of improving economic welfare, certainly less efficient than in the past.

Cobb and his group then developed the ISEW to replace MEW since the latter omitted any correction for environmental costs, did not correct for distributional changes, and included leisure which dominated the MEW and introduced many arbitrary valuation decisions. The ISEW, like the MEW though less so, was correlated with GNP up to a point beyond which the correlation turned slightly negative. Neither the MEW nor ISEW considered the effect of individual country GNP growth on the *global* environment, and consequently on welfare at geographic levels other than the nation. Such considerations, we suspect, would further weaken the correlation between GNP growth and welfare.

Measures of welfare are difficult and subject to many arbitrary judgments, so sweeping conclusions should be resisted. However, it seems fair to say that for the United States since 1947, the empirical evidence that GNP growth significantly increased welfare is very weak. Consequently any impact on welfare via free trade’s contribution to GNP growth would also be weak (Cobb, 1992).

4.3.3. *Transnational corporations*

Nations rarely trade with each other; export–import of products and services is done by companies and individuals, not by nations. Transnational Corporations (TNCs) control 70% of world trade, thus exerting a major and increasing influence on the global economy. TNCs provide much needed capital for developing countries, accelerate technology transfer, and develop human re-

¹⁹ To avoid confusion, we stress that by “standards-lowering competition” we are referring to the cost advantages of lowering social and environmental standards (wages, social and medical insurance, environmental and safety standards, etc.). We are not referring to standards of product quality, and therefore do not need to assume imperfect competition as would be necessary to compete by lowering product quality. The standards-lowering competition we are talking about can occur in any market structure.

sources; joint ventures are especially effective in this regard. Manufacturing is now globally integrated by TNCs. International trade of the world's largest 350 TNCs accounts for almost 40% of world merchandise trade, which in 1990 amounted to US\$3485 bn. Practically all TNCs are dominated by industrial country shareholders, but hugely affect developing nations, not least as "engines of growth" in scale (UN, 1992). GATT decreases the power of governments to regulate international trade and works for TNCs by providing for less regulation on their activities. GATT reduces the sovereignty of nations, while creating lax circumstances for TNCs. This may be part of the reason for the antisocial behavior of TNCs, such as those noted in the sections above on transfer pricing, toxic wastes trade, North–South labor competition, and dumping.

There is no international agreement or treaty regulating the conduct of TNCs. For such reasons the UN recently proposed a code of conduct for TNCs, which was not adopted. On the contrary, the UN Center for Transnational Corporations, founded in 1975, was abolished in February 1992, as soon as it had prepared its mandatory code for TNC conduct. Instead, the TNC-led Business Council for Sustainable Development is now promoting its own weaker, voluntary, and unmonitored "Business Charter" for TNCs. The "Group of 77" developing nations, joined by the Nordics and China, proposed to UNCED in April 1992 that TNCs should accept environmental liability. This was defeated by the U.S., UK and Japan. Presumably TNCs do not perceive it in their interests to adopt such codes. The International Chamber of Commerce deleted all mention of TNCs from UNCED's "Agenda 21" during the May 1992 PrepCom at the UN.

TNCs should be subjected to regulation requiring them to internalize in prices the full environmental and social costs of production. This specifically should include the polluter-pays principle, clean-up, rehabilitation and replacement costs (performance bonds), waste disposal, fair wages, health insurance, risk reduction, etc. National governments should play the leading role, and international discussions and agreements would help if a government does not yet have the capac-

ity to set and enforce regulations. Strengthening the UN International Court of Justice, or extending its ambit into environment as proposed by UNCED, would help in this regard. If a manufacturer cannot recycle its own used products, should it be permitted to manufacture them in the first place? This may apply to the whole range – from nuclear plants, to newspaper, and aluminum cans. Newspapers and aluminum can be partly recycled by consumers, given proper incentives. Nuclear waste disposal must be done by the producer under regulation.

4.3.4. Unregulated trade destabilizes the economy

Pressure to borrow and to lend with inadequate assessment of investment quality and of creditworthiness has contributed to excessive indebtedness and growth in scale. Unregulated trade and freely mobile capital are sometimes blamed for interfering with macroeconomic stability by permitting huge international payments imbalances and capital transfers resulting in debts that are unrepayable in many cases and excessive in others. Efforts to service these debts can lead to unsustainable rates of exploitation of exportable resources, and to an eagerness to make new loans to obtain the foreign exchange with which to pay old loans, with a consequent disincentive to take a hard look at the real productivity of the project for which the new loan is being made. Efforts to pay back loans and still meet domestic obligations lead to government budget deficits and monetary creation with resulting inflation. Inflation, plus the need to export to pay off loans, leads to currency devaluations, giving rise to foreign exchange speculation, capital flight, and hot money movements, disrupting the macroeconomic stability.

To the extent there are significant economies of scale to an industry, we have an additional source of instability under free trade. This is an implication of the so-called "new trade theory" (Krugman, 1990). New trade theory seeks to explain trade, not in terms of differing factor endowments in a world of pure competition, but rather in terms of differing arbitrary starting points in a world of increasing returns to scale and imperfect competition. The implications of

this view for trade policy are similar to the old infant industries argument for protection. Krugman (1990, p. 3) says, “The potential gains from trade are even larger in a world of increasing returns, and thus, in a way, the case for free trade is even stronger”. While the case for specialization and trade may be stronger in a world of increasing returns, the case for *free* trade is surely weaker for two reasons. First, since cost advantage now depends entirely on getting an early start in an industry, there is every incentive for governments to subsidize and protect infant industries. Second, since, as Krugman recognizes, increasing returns in an industry is inconsistent with a competitive structure for that industry, regulation must replace competition as the organizing principle in a world of monopoly power, and that is hardly consistent with free trade. A world of monopolistic industries trading internationally would be unstable. Although the new trade theory supports our case against unregulated trade, we do not base our main arguments on it because we are not convinced that increasing returns represent an important empirical phenomenon, especially at the technological level of the single plant, and once external costs are fully counted.

5. Free trade versus balanced trade

The main purpose of this paper is to call attention to the environmental risks of deregulation of trade. But in criticizing the status quo and risky trends, we owe at least some hint of an alternative. If we oppose “free” or deregulated international trade, and we also oppose autarky, then what do we propose? We advocate a position balanced between those two extremes, “balanced trade”. Before we outline below what we mean by balanced trade, we acknowledge the long gestation periods of economic evolution. We are less concerned that “immature” economies are likely to experience a certain imbalance as they borrow to develop, with mature economies correspondingly in surplus. We are more concerned when trade becomes massively unbalanced and debt excessive.

At the outset, we recall that textbook examples of mutually beneficial international trade according to comparative advantage are barter examples. In barter, trade is always balanced. Only in monetary transactions is unbalanced trade possible. We do not advocate reversion to barter, but rather oppose using money (international capital transfers) to finance unsustainable and continuing trade account imbalances. A strictly balanced trade account would make capital account transfers impossible. Although massive debt should be diminished,²⁰ and should not be driven by trade account imbalances, we do not go to the unrealistic and undesirable extreme of ruling out all international capital movements.

Rather our concept of “balance” would allow capital account transfers (international lending and borrowing), but only within a relatively narrow range that is clearly within the ability of the receiving country to repay. Investment through trade is possible even with a balanced trade account in the sense that a country can export wheat and import tractors in exchange. It need not import tractors faster than it can export wheat in order to convert consumer goods into producer goods via trade. Once capital has become relatively immobile, then the comparative advantage argument for international trade in goods becomes valid again. This is basically Keynes’ view that finance should be primarily national. Divergences from this rule should preferably be small and multilaterally managed.

Creditworthiness and ability to service debt are commonly overestimated, partly by the underpricing and liquidation of natural capital already referred to. Therefore, creditworthiness and debt–service ratios should better reflect such concerns. This implies that prudent environmental accounting is urgently needed as proposed by

²⁰ The sooner unrepayable debts are written off or vastly reduced by such means as equity swaps, the sooner development will accelerate. Very poor or uncreditworthy countries, not the focus of this paper because they trade less than more creditworthy countries, merit special support.

Ahmad et al. (1989). Until such calculations become available, it is difficult to supply rules of thumb on prudent levels of debt. If today's 100–150% of GNP is clearly too high, is 10% of GNP too low?

This perspective is both incomplete and wildly at odds with current views. It clearly requires more study, and we earnestly seek readers' views. We fully acknowledge that even the most legitimate trade interventions can lead to abuse. On the other hand, since only 7% of world trade is unregulated (i.e., complies with GATT, according to UNDP's Human Development Report, 1992), we are suggesting more living with the status quo rather than GATT's position of accelerating deregulation of the regulated 93%. For now, one should keep in mind that a balanced current account does not rule out trading consumer goods for capital goods, nor transferring technology. It only rules out doing these things at a rate that requires the accumulation of large debts, and, of course, the consequent large return flows of interest and principal repayment. Eventually, in theory, all debt should be self-liquidating and temporary. Preferably that should happen sooner rather than later. Perhaps new debt could be incurred as old debt is liquidated, but the stock of debt should not continually grow – much less should new debts be incurred mainly to meet interest payments on old debts.²¹ This is not a precise and operational idea of balance, but it seems to us to be a starting point for future reflection and research.

²¹ Historically the World Bank has loaned – and demands to be repaid in – foreign exchange. This requires that the project directly or indirectly increases exports or diminishes imports. The latter has fallen out of favor as it would reduce overall volume of trade. But could export-led growth be considered a “distortion” of development induced to fit the needs of lenders to be repaid in foreign currency? Since there seems to be merit in lending in local currencies, as for example, the InterAmerican Development Bank (IADB) and commercial international banks are able to do, this option should be explored. We suspect that better balance between foreign exchange and local currency lending would reap major environmental, economic, and equity gains for developing nations.

Acknowledgments

In addition to our World Bank colleagues (H. Binswanger, J. Böjö, S. El Serafy, P. Low, D. McCarthy, and D. Wheeler), we want to acknowledge the comments and encouragement of the many people who helped us with this paper, especially Charlie Arden-Clarke, David Bather, John Cavanagh, John Culbertson, George Foy, Mark Lutz, Raymond Mikesell, and Joachim von Amsberg. Gratitude on our part does not necessarily imply agreement with our position on their parts. The complete version of this paper is available from the authors – what is printed here is a long excerpt, roughly the first half.

References

- Acheson, A.L.K., Chant, J.F. and Prachowny, M.F.J. (Editors), 1972. *Bretton Woods Revisited*. Toronto, University of Toronto Press, 138 pp.
- Ahmad, Y., El Serafy, S. and Lutz, E. (Editors), 1989. *Environmental Accounting for Sustainable Development*. The World Bank, Washington, DC, 100 pp.
- Arden-Clarke, 1991a. Conservation and sustainable management of tropical forests: the role of ITTO and GATT. World Wildlife Fund, Gland, Switzerland, Discussion Paper, 13 pp.
- Arden-Clarke, C., 1991b. The Cruel Tradeoff. *The Guardian*, 13 September.
- Arden-Clarke, C., 1992a. South–North terms of trade, environmental protection and sustainable development. World Wildlife Fund, Gland, Switzerland, Discussion Paper, 12 pp.
- Arden-Clarke, C., 1992b. International trade, GATT, and the environment. World Wildlife Fund, Gland, Switzerland, Position Paper, 14 pp.
- Arden-Clarke, C., 1992c. The GATT report on trade and environment: a critique by the World Wide Fund for Nature. World Wildlife Fund, Gland, Switzerland, 8 pp.
- Baumol, W.J., 1971. Environmental Protection, International Spillovers and Trade. *Almqvist & Wiksell*, Stockholm, 59 pp.
- Bhagwati, J., 1988. *Protectionism*. MIT Press, Boston, 147 pp.
- Bhagwati, J., 1991. *The World Trading System at Risk*. Princeton University Press, Princeton, NJ, 156 pp.
- Birdsall, N. and Wheeler, D., 1992. Trade policy and industrial pollution in Latin America: where are the pollution havens? World Bank, Washington, DC, 20 pp.
- Charnovitz, S., 1991a. Exploring the environmental exceptions in GATT Article XX. *J. World Trade*, 25 (5): 37–55.

- Charnovitz, S., 1991b. Trade links: Labor and the environment. *Int. Econ. Insights*, 11: 38–39.
- Cobb, J.B., Jr., 1992. Growth without progress? *Loyola of Los Angeles Int. Comp. Law J.*, 15 (1): 45–62.
- Culbertson, J., 1991. U.S. free trade with Mexico: progress or self destruction? *The Social Contract*, Fall: 7–11.
- Daly, H.E., 1991a. Ecological economics and sustainable development. In: C. Rossi and E. Tiezzi (Editors), *Ecological Physical Chemistry*. Elsevier, Amsterdam, pp. 185–201.
- Daly, H.E., 1991b. Sustainable growth: a bad oxymoron. *Grassroots Development*, 15 (3): 39 pp.
- Daly, H.E., 1992. From adjustment to sustainable development: the obstacle of free trade. *Loyola of Los Angeles Int. Comp. Law J.*, 15 (1): 33–34.
- Daly, H.E. and Cobb, J., 1989. *For the Common Good*. Beacon Press, Boston, 482 pp.
- GATT, 1991. On environment, economy and GATT. GATT Briefing, No. 5–6.
- GATT, 1992a. Trade and the environment. GATT Secretariat, Geneva, Paper No. 1529 (12 February), 35 pp.
- GATT, 1992b. News Release: Expanding trade can help solve environmental problems. 3 February.
- GATT, 1992c. Press Release: Environment concerns must not be kidnapped by protectionists says Arthur Dunkel. 11 February.
- Goodland, R., Daly, H.E. and El Serafy, S. (Editors), 1991. *Environmentally Sustainable Economic Development: Building on Brundtland*. The World Bank, Washington, DC, Environment Department Paper 46, 85 pp.
- Harrod, R.F., 1951. *The Life of John Maynard Keynes*. Macmillan, London, 674 pp.
- Heckscher, E.F. and Ohlin, B., 1991. *The Heckscher–Ohlin Trade Theory*. MIT Press, Cambridge, MA, 222 pp.
- Keynes, J.M., 1933. National Self-Sufficiency. In: D. Moggeridge (Editor), *The Collected Writings of John Maynard Keynes*, Vol. 21. Macmillan and Cambridge University Press, London.
- Krugman, P.R., 1990. *Rethinking International Trade*. MIT Press, Cambridge MA, 282 pp.
- Low, P., 1992. International trade and the environment: an overview. In: P. Low (Editor), *International Trade and the Environment*. The World Bank, Washington, DC, pp. 1–14.
- Nordhaus, W. and Tobin, J., 1972. Is growth obsolete? In: *Economic Growth*. Columbia Univ. Press, New York, National Bureau of Economic Research, General Series No. 96E, 92 pp.
- Petersmann, E.-U., 1991. Trade policy, environmental policy and the GATT: why trade rules and environmental rules should be mutually consistent. *Aussenwirtsch. (Switzerland)*, 46 (2): 197–221.
- Robbins, L.C., 1972. *An Autobiography of an Economist*. 301 pp.
- Thomas, V. and Nash, J., 1991. *Best Practices in Trade Policy*. Oxford University Press, New York, 226 pp.
- UN, 1992. *World Investment Report, 1992: Transnational Corporations as Engines of Growth*. UN, New York, E.92.II.A.19, 356 pp.
- UNDP, 1992. *Human development report*. UNDP, New York, 216 pp.
- World Commission on Environment and Development, 1987. *WCED (The Brundtland Commission) Our Common Future*. Oxford University Press, New York, 383 pp.
- World Development Report, 1992. *Development and the Environment*. The World Bank and Oxford University Press, Washington, DC, 308 pp.