Chapter 22

Globalization

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Introduction

Global environmental change is as much a product and manifestation of globalization as trade, production, and finance. Indeed, what gets financed, produced, and traded in the global economy is, in many cases, goods and products made up of, or embodying, natural resources. Even the production of synthetic and artificial components or the operation of service industries, while seemingly not so dependent on direct extraction, still consume vast amounts of water and energy. Hence while those of us who live in more affluent parts of the world may be less attentive to the value of environmental resources, compared to low-income countries for whom close to one third of their wealth comes from their "natural capital" that includes forests, protected areas, agricultural lands, energy, and minerals (World Bank 2011), the circuits of capital that underpin globalization impact hugely, though highly unevenly, on the environment that we all share. Yet discussion of either the environmental dimensions of globalization or the environment as a form of globalization itself is often subsumed by other "high political" concerns, even if "the environment" sustains our collective ability to produce, trade, and consume.

Globalization can of course mean many things, and I have reproduced some definitions below (see Box 22.1). The use of the term often combines an attempt to describe shifts in the scale, speed, or intensity of flows (of capital, information, technology, people, and pollution) with changes in political power and authority (supranationalization, decentralization, private governance, civil regulation, among others), while not losing sight of the social and cultural aspects of globalization such as identity, politics, nationalism, and cultures of knowledge and consumption. Within this broad canvas, I will focus on those aspects of the slippery phenomena we call globalization that interact most directly and clearly with the world of (global)

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environmental politics. In this regard what is perhaps most significant ecologically is the rescaling of capitalist relations and strategies of accumulation to secure access to new resources and markets made possible through technological advance, internationalized production strategies, liberalized trade, and the globalization of finance that underpins this. It is this that has *intensified* and *globalized* environmental harm in a way that has brought about the multiple crises we now currently face around the availability of food, water, and energy. It is also what has enabled capital to overcome the limits imposed by national regulation, including pressures from environmental groups and trade unions for stronger forms of environmental protection on the one hand, and more stringent forms of legislation regarding occupational health and safety legislation on the other. For globalizing capital, accessing new markets and consumers has also been imperative to addressing domestic crises of overaccumulation and the lack of viable domestic investment opportunities (Harvey 2003).

Box 22.1 Definitions of Globalization

[T]he growing interconnectedness and interrelatedness of all aspects of society (Jones 2006: 2).

[G]lobalization refers to the widening and deepening of the international flows of trade, capital, technology and information within a single integrated global market (Petras and Veltmeyer 2001: 11).

[G]lobalization is a transformation of social geography marked by the growth of supraterritorial spaces (Scholte 2000: 8).

[G]lobalization is what we in the Third World have for several centuries called colonization (Khor 1995).

[A] process (or set of processes) which embodies a transformation in the spatial organization of social relations and transactions – assessed in terms of their extensity, intensity, velocity and impact – generating transcontinental or interregional flows and networks of activity, interaction and the exercise of power (Held *et al.* 1999: 16).

Globalization, from this more historical and critical perspective, is better understood as a deepening and globalizing of earlier patterns of capitalist development, rather than a decisive and tangible break with previous economic relations. The inequalities, disruptions, and patterns of environmental injustice that are apparent throughout the history of the world economy take on increasingly transnational dimensions in this latest era of capitalist development. The exploitation of resources through uneven development can be traced back to colonialism, where "accumulation through dispossession" was more obvious and the use of force more prominent, but continues to manifest itself in uneven terms of trade, the debt crisis, and structural adjustment programs that prise economies open to foreign investors as restless capital seeks new outlets for investment and return to avert crises of overaccumulation (Harvey 2003). The process of moving crises around geographically,

spatially, or temporally, rather than resolving them, which David Harvey has highlighted so eloquently in his work, explains, in part, phenomena such as the export of resource-intensive forms of production overseas while rich countries continue to capture the benefits through consumption. It accounts for the export of toxic and hazardous wastes to poor countries so that richer countries are not faced with the consequences of their consumption (Clapp 2001), and the double standards that many TNCs employ when they operate overseas, allowing them to produce more cheaply but still sell their wares to richer consumers (Madeley 1999). The international division of labor upon which this model is premised, which has enabled wealthier countries in the core of the global economy to enjoy a comparative advantage in service and high-tech sectors while benefiting from industrial production reliant on cheap labor in the global South explains, for example, why emissions of greenhouse gases have risen so sharply in "rising powers" such as China, India, and Brazil that are now home to more energy- and pollution-intensive stages of global production chains.

Such strategies both feed upon and reproduce global inequalities, even if they clearly bring tangible benefits to some social groups within host countries. As Roberts and Parks show, these forms of ecologically uneven exchange also mean that the responsibility for pollution, as well as the pollution itself, is redistributed globally such that: "Emissions are increasing sharply in developing countries as wealthy countries 'offshore' the energy and resource intensive stages of production" (2008: 169). While moving things around makes sense for richer countries or social groups able to do so (out of sight, out of mind), it serves to disperse rather than resolve environmental problems.

The chapter is structured as follows. First, I review the evidence of the relationship between globalization and the environment, looking at debates about the impact of different globalizing trends, largely economic ones, on the environment. The way in which this occurs reflects and is mediated by social relations of class, race, and gender that help us to determine who wins and who loses from the way resources are exploited and distributed in today's global economy: the globally uneven distribution of burden and benefit (Newell 2005). Second, I look at attempts to date to govern and mediate the relationship between globalization and the environment. Numerous institutions, public and private, have been created seeking to contain the worst ecological and social effects of globalization and build upon the benefits it delivers. This is true of global and regional trade agreements and institutions, as well as of private governance by and for private actors that seek to reduce their pollution voluntarily in preference to state-based regulation. Third, the limits of these forms of governance and the institutions that oversee them have prompted widespread mobilizations and contestation from a range of social movements and civil society actors that have questioned the orientation and performance of these institutions: the model of growth they pursue and their limited effectiveness in squaring this with rising levels of environmental damage. This section looks at the strategies adopted by these groups to try and re-embed globalization in an altogether different set of values and institutions guided as much by concerns with sustainability and social justice as the pursuit of profit. The fourth and final section offers some conclusions and global policy implications based on the previous discussion.

Globalization and the Environment: Exploring the Connections

This section looks at evidence of the "nature" of the relationship between what has come to be called "globalization," notably trade, production, and finance and different environmental domains. It documents key trends and controversies regarding evidence of the impact of globalization upon, and its relationship to, different socio-ecological systems.

Trade

There is a vast literature on trade liberalization and the environment that arrives at an array of competing conclusions about whether, when, how, and why trade liberalization can be compatible with the goal of environmental protection (for an overview, see Chapter 24 in this volume). Opinion is divided, for example, over whether the lowering of trade barriers enables a "trading up" of environmental standards as companies and countries seek to export their products to the richest regions in the global economy (Europe, North America, and East Asia), where environmental standards also tend to be highest – creating a positive incentive for upgrading (Vogel 1997). In its World Development Report for 1992, the World Bank claimed, more broadly, that: "Liberalized trade fosters greater efficiency and higher productivity and may actually reduce pollution by encouraging the growth of less polluting industries and the adoption and diffusion of cleaner technologies" (World Bank 1992: 67).

Critics claim, however, that more open markets allow investors to play countries off against one another in the pursuit of "pollution havens": zones where environmental regulation is lower, ignored, or unenforced. For years activists have berated the mining industry for its poor track record on environmental pollution, human rights violations, and displacement of indigenous peoples in its overseas operations (Evans *et al.* 2002). The oil industry too has been accused of double standards when it operates in developing countries (Okanta and Douglas 2001). The activities of firms such as Shell in the Niger Delta, Nigeria and Texaco in Ecuador have attracted global attention as a result of activist exposure and high-profile legal actions against those companies (Newell 2001; Garvey and Newell 2005; Frynas 2009). Copeland (2008: 68) claims, nevertheless:

> Fears that trade liberalization will cause an exodus of polluting industry to poorer countries with weak environmental policy appear to be unfounded. Although there is evidence that stringent environmental policy does reduce competitiveness in industries intensive in production-generated pollution, there is no evidence that it is the most important factor affecting trade and investment flows.

Rather than an active downgrading of regulations to attract mobile capital, many have observed a "chilling" or even a "deepfreeze" effect on countries' environmental regulations whereby reforms are not undertaken, or new policies either not introduced or not implemented for fear of deterring investors. Zarsky (2006: 395) finds, moreover, that:

> While there is little evidence that MNCs select investment sites on the basis of lower environmental standards, it seems safe to conclude that many perform below standards of global best practice once they get there. They do not, in other words, actively seek out a "pollution haven" but, if the local environmental regulation is weak, create one through their operations.

The answer to whether trade liberalization is compatible with environmental protection in many ways seems to be "it depends." It depends on the country and region in question (how much power they have to negotiate terms with investors); the power of the corporation (how much the country needs their investment and what other rival locations are really viable); and the sector (how resource-intensive it is and what the global distribution of those resources is – how concentrated they are in particular jurisdictions).

What this narrow discussion on whether and under what conditions formally ascribed environmental standards are revised, lowered, or ignored altogether often overlooks, however, is the bigger and more fundamental question of the sustainability of the current organization of the world trading system, where principles of comparative advantage are held sacrosanct and the desirability of export-led growth strategies, which require concentrated production, often leading to monocultures and the subsequent loss of biodiversity and the intensive use of chemicals in agriculture to boost production, are left unquestioned. A broader developmental critique is the idea that export-led growth is often at the expense of meeting basic needs. For example, cash crops are grown in countries where people are starving because they generate more revenue, when that land could be better used to grow subsistence crops from which the poor are more likely to benefit directly. Icke (1990: 63–64) argues:

> [T]he poorest countries in the world grow cash crops on land that could be growing food for their own people. That's why Ethiopia was still exporting food at the height of the famine . . . in Ghana half their farming land is not growing food for the malnourished, but cocoa for western chocolate bars . . . 40 per cent of the food-growing land in Senegal is growing peanuts for western margarine . . . during the great drought in the Sahel the production of peanuts for export increased there while tens of thousands starved . . . in Colombia where malnutrition is common, fertile land is used to grow cut flowers for the rich in the west.

Such calls underpin social movement calls for "food sovereignty," for example (Borras *et al.* 2008), whereby greater efforts are made by producers to regain control over what they produce and on what terms. Increasingly powerful incentives exist for countries to be more self-sufficient in food, water, and energy given the uncertainties associated with securing these resources globally, where high dependency on oil has led powerful countries to war, and concerns about food and water provision have led to land grabs in parts of the developing world (Borras *et al.* 2011). Despite this, there is little near-term prospect that the global economy will be reoriented around shorter circuits of production and consumption, rather than driven by the economic rather than ecological logic of where things can be most cheaply produced.

Production

The debate about the impact of production very much mirrors that about trade and the environment, since agreements to liberalize trade enable transnational corporations to enter new markets. Those who take the view that new entrants bring cleaner technologies, employment opportunities, and revenue for governments and communities see this is a good thing, while critics suggest that trade agreements between unequal partners tilt the gains towards richer countries while opening up poorer ones to exploitation. As with the trade debate, however, the answer to the question of whether business can be a force for greening seems to be: "it depends." Patterns of "greening" appear to reflect the size of companies: their environmental footprint, their ability to demand change from their suppliers, and their exposure to pressure from consumers and shareholders. This means most focus remains on the activities of transnational corporations rather than small and medium-sized enterprises. There are also important regional and national differences, however, which reflect different regulatory cultures (Levy and Newell 2000; Utting 2002) and levels of integration within global markets (see the "trading up" argument above). There are also important sectoral differences, and while resource-intensive sectors such as oil and mining attract most attention, assumptions that "lighter" industries tend to pollute less need to be subject to critical scrutiny, as examples of toxic contamination from the computer and electronics industry make clear (Pellow and Park 2002).

It is easy enough to locate examples of corporate irresponsibility and environmental negligence (Karliner 1997; Madeley 1999; Okanta and Douglas 2001), just as organizations such as the Business Council for Sustainable Development and the World Bank can identify competing examples of business leadership on environmental issues based on the "business case" for sustainable development (Schmidheiny 1992; Holliday *et al.* 2002). The more interesting debate in a way is to identify the conditions in which it is possible to harness the power of businesses to improve their environmental performance as well as the measures necessary to deter and penalize corporate irresponsibility. The debate then moves on to which policy tools are most effective, efficient, and equitable: regulation or voluntary responses, partnerships or litigation. Unsurprisingly the evidence is mixed, but combinations of tools, tailored to particular national needs and sectoral circumstances, often end up being advocated (World Bank 2000; Newell 2001).

Again, what this framing of the relationship between production and the environment as being about the greening of existing businesses serves to obscure is a bigger debate about the viable and legitimate ways to generate wealth in a resource-constrained world. In other words, are the goals of producing more and more goods year on year, and seeking to create consumer demand for ever more products, compatible with deeper notions of sustainability? The debate comes back to basic notions such as what we mean by growth, progress, and wealth (see also Chapter 12 in this volume). Corporations are given charters and a license to operate based on an assumption that they serve a legitimate public need: they produce things we need, employ people, and pay taxes. But what if they fail to serve that need? Should governments use their powers more forcefully to revoke the charters and licenses of corporations that are found guilty of repeated social and environmental misconduct, as some people claim (Korten 1995)? Can we imagine an economy in which rather

than just producing differently (in a more sustainable manner) businesses actually produce less, but where production is oriented towards meeting the basic needs that remain unmet for the majority of the world's people rather than fueling the overconsumption of 1% of the world's population? For obvious reasons, given the interests at stake, these broader issues and concerns struggle to get a hearing in the debate about the greening of business in a context of globalization.

Finance

There are numerous ways in which public and private finance interacts with the environment. Aid, debt, and private finance are among the vehicles that both fund environmental degradation through support to large-scale infrastructural projects, for example, and are also expected to pay for environmental measures (see also Chapters 25 and 28 in this volume).

Debt, for example, has been seen both as a driver of environmental degradation (George 1992) and as a potential opportunity to connect debt relief with conservation measures through debt-for-nature swaps (Jakobeit 1996). These schemes initially involved NGOs, such as leading conservation NGOs Conservation International, Nature Conservancy, and WWF, and then latterly governments. They involved soliciting donations for the purchase of a foreign debt title of a developing country at a discount on the face value from a commercial bank. The debt title is then converted into domestic currency, reducing the foreign debt, and freeing up an agreed fraction of the debt title to be used to finance a conservation project. US$128 million was raised for environmental projects, while developing countries reduced their stock of foreign debt by US$177 million (Jakobeit 1996: 134). The logic of the schemes continues today in relation to approaches for the payment for ecosystem services such as REDD (Reduced Emissions from Deforestation and Forest Degradation).

The aid lending of bilateral and multilateral institutions, meanwhile, has come under fire for its failure to take into account environmental impacts (Young 2002; Goldman 2005), even where key global actors such as the World Bank present themselves as leading players in financing climate mitigation efforts. For example a report by the Washington-based group the World Resources Institute (WRI) found that between 2005 and 2008 less than 30% of the World Bank's lending to the energy sector integrated climate considerations into project decision-making. As late as 2007, more than 50% of the Bank's US$1.8 billion energy-sector portfolio did not include climate-change considerations at all (WRI 2008).

Given the growing importance of private finance relative to public money, there has been an understandable shift in emphasis towards the ways in which private capital can be levered for environmental goals. The context in which this is most apparent is climate change, where it is already very clear that large amounts of private money will need to be raised if governments are to get even close to meeting the obligations they agreed to in Copenhagen and Cancun regarding the delivery of up to US$100 billion a year by 2020 through the Green Climate Fund. As well as being an important source of money for environmental goods, however, the more difficult and important issue perhaps is trying to green existing flows of private finance, which, in many cases, underpin environmentally damaging investments. The US$1 trillion that changes hands every day in private financial markets, mainly

through currency speculation and investments in stocks and bonds, has an obvious, if disputed and difficult to quantify, effect on the global environment and patterns of resource use. As Helleiner (2011: 51) suggests: "If the global economy is to be made more environmentally sustainable, this powerful 'electronic herd' of global money will need to be steered in greener directions."

Globalization and the Governance of the Environment

The interface between trade, production, finance, and the environment described in the section above does not occur in a vacuum. The nature of the relationships described is mediated by institutions, power, and social relations. These then are critical to our understanding of the governance of the environment in a context of globalization: which interventions aimed at safeguarding the environment are likely and possible; who wins, who loses, how and why from the prevailing global distribution of benefits and burdens from existing (natural) resource allocations; and what spaces and opportunities might exist to contest these, an issue I address in the final section of the chapter.

This section looks not only then at the extent to which and the ways in which globalization is subject to new modes of environmental governance in the arena of trade, production, and finance, but also explores the way in which structures of global environmental governance reflect, embody, and are themselves part of globalization. This trend is traced, amongst other things, through the growth of private governance and regulation, the turn towards market-based solutions, and the growth of markets in environmental services for water, carbon, and forests.

First, trade. Here much of the literature has focused on actual and potential instances of conflicts between environmental regulations and trade rules (Vogel 1997; Lieberman and Gray 2008), as well as the broader governance arrangements in place within global and regional trade institutions such as the WTO and NAFTA, which enable or inhibit the adoption of environmental protection measures (Conca 2000; Audley *et al.* 2003; Newell 2007). Despite moves towards the acceptance of trade restrictive measures for environmental ends, where norms exist internationally for protection measures (Barkin 2008), environmentalists remain concerned about the ongoing resistance to acceptance of process-based environmental measures that would allow countries to discriminate between products on the basis of the extent to which goods have been produced in sustainable ways. As LeQuesne (1996: 81) notes:

> [F]rom an environmental point of view, there is no meaningful distinction to be drawn between environmental harm which is generated by a product, or the harm generated by its process and production methods.

Second, regarding production, the issue is less the power of existing global institutions for regulation, but rather the near-total absence of them. An international code of conduct to regulate the activities of TNCs has been on the international agenda since the 1970s. The UN Centre for TNCs (UNCTC) was set up in 1973, largely at the request of developing country governments, amid concern about the power of TNCs, but was unable to conclude negotiations on a code of conduct. This failure was explained by conflicts of interest between developed and developing countries

and the opposition of the United States, in particular, and in 1993 the CTC was restructured to become the Commission on International Investment and Transnational Corporations, housed within the United Nations Conference on Trade and Development.

Guidelines and standards promoted by bodies such as the International Labour Organization (ILO) (Tripartite Declaration of Principles Concerning Multinational Enterprises (MNEs) and Social Policy) and the OECD (such as the OECD Guidelines on MNEs) are not widely known and rarely used, are entirely voluntary and without sanction, and are outdated, compared even with companies' own codes of conduct (MacLaren 2000). In the environmental domain the issue of TNC regulation was dropped from the UNCED agenda amid sustained efforts on the part of organizations such as the Business Council for Sustainable Development to present themselves as the solution to environmental problems (Schmidheiny 1992), and while Agenda 21 includes recommendations that affect TNCs, it does not take the form of a code of conduct. Instead of business regulation, the overriding preference has been to view business as a partner in promoting sustainability, as demonstrated with the type 2 partnerships agreed at the World Summit on Sustainable Development in 2002 (Bäckstrand 2008; Pattberg *et al.* 2012).

Concern remains, however, about the perceived imbalance between the rights and responsibilities of TNCs. The history of business regulation reveals an imbalance between the promotion and protection of investor rights over investor responsibilities (Muchlinski 1999): regulation *for* business rather than regulation *of* business (Newell 2001). Protection of investor rights can include provisions such as those contained in the NAFTA agreement, which permit companies to challenge governments and local authorities about restrictions on their activities and set a precedent for later Free Trade Agreements (FTAs), such as the Central America–Dominican Republic Free Trade Agreement (CAFTA-DR). It also includes the creation of bodies to address investor disputes such as the International Centre for Settlement of Investment Disputes (ICSID) of the World Bank, as well as generic investment treaties, of which by 2010 there were 5900 (UNCTAD 2010). Attempts not only to protect the exit and entry options of TNCs, but also confer upon them rights to challenge and reverse the public policies of sovereign governments in the ways noted above, have provoked particular ire. These trends provide evidence of what Gill calls the "new constitutionalism," which refers to efforts

> to develop a politico-legal framework for the reconstitution of capital on a world scale and thus the intensification of market forms of discipline . . . The new constitutionalism seeks to reinforce a process whereby government policies are increasingly accountable to (international) capital and thus to market forces (1995: 78–79).

Third, regarding finance, even more so than the domain of production, the issue is one of un-governance and active neglect. Despite repeated calls, not least in the wake of the latest financial crisis to infect the world from 2008, to reregulate aspects of finance capital or impose taxes on short-term and volatile financial transactions, and recognition even within the neoliberal heartlands of the World Bank and IMF that the use of capital controls may, on occasion, be appropriate, global finance remains the least regulated pillar of the global economy. The extent to which this is

so depends on which aspect of finance we are talking about. There have been growing pressures on bilateral agencies and multilateral development banks to screen their lending for potential environmental impacts, often coming from Washington-based NGOs as well as social movements in the global South (Fox and Brown 1998; Goldman 2005), which have produced an array of reforms, though not ones their critics would consider adequate. There is also increasing focus on export credit agencies that provide public money to private firms to encourage investment in overseas infrastructural projects. This credit is provided in the form of government-backed loans, investment guarantees, and risk insurance. Official Export Credit and Investment Insurance Agencies (ECAs) have become the largest source of public international finance, accounting for 24% of all developing country debt and 56% of the debt owed to official governmental agencies (ECA Watch 2011). What is most significant perhaps from an environmental point of view is the support that ECAs provide to high-risk ventures often associated with resource extraction in environmentally sensitive and socially vulnerable areas of the world. Most ECAs are not subject to social and environmental standards or assessment procedures, and operate in a highly secretive manner, rarely disclosing information about the projects they finance or evaluating the impacts of such projects.

In spite of (or perhaps because of) the weak regulation of most aspects of finance, there has been a series of initiatives to govern finance, led either by public international institutions such as the United Nations Environment Programme (UNEP) or the International Finance Corporation (IFC) of the World Bank or by businesses themselves, such as the Carbon and Water Disclosure Projects.

Contesting Globalization

This section shows how some of the ecological impacts associated with the different dimensions of globalization discussed in the first section, as well as the structures of governance and un-governance of globalization explored in the second, are being contested by a range of environmental NGOs and social movements concerned about the environmental and social impacts of globalization and engaged in campaigns for institutional reform or resistance to attempts to "privatize" and commodify natural resources. It provides examples of prominent campaigns to green trade, production, and finance. These help to show that globalization is not a uniform or linear process, nor is it apolitical in its outcomes or neutral in terms of the interests it serves.

Despite general consensus among many environmental activists that the current organization of the global economy is unsustainable, views differ about why this is and, therefore, which strategies are most appropriate to bring about change. There has been a series of campaigns targeted at trade institutions globally and regionally, aimed either at securing environmental side agreements to trade treaties, as in the case of the North American Free Trade Area, highlighting the environmental consequences of attempts to liberalize key sectors such as energy and agriculture, as with the Free Trade Area of the Americas agreement currently under negotiation, or challenging the privatization of resources such as water through agreements such as the World Trade Organization (WTO) General Agreement on Trade in Services (Newell 2007; Icaza *et al.* 2010). There have also been debates about whether environmental standards should be incorporated into trade agreements to establish

basic floors above which investors should operate, or whether the more critical battle is to keep the WTO out of environmental policy such that its rules do not trump those of other multilateral environmental agreements (MEAs) or countries' national regulations that appear to impede trade. As noted above, however, more radical groups also question the sustainability of the model of trade liberalization being promoted in terms, for example, of the intensification of resource use that is often required, or the impacts associated with transporting more goods over longer distances around the world (NEF 2003; Acción Ecológica 2004).

Around production there has been a rising tide of what is sometimes referred to as "civil regulation": civil-society-based "regulation" of the corporate sector (Bendell 2000; Newell 2000; Zadek 2001). It takes as its point of departure and justification for action the lack of effective regulation by states unwilling or unable (or both) to address corporate irresponsibility, or by corporations themselves, who may promote acts of corporate responsibility but have few incentives or collective means to confront corporate wrong-doing. These strategies respond to a perceived "governance deficit," in that the global power of TNCs is not adequately matched by existing regulatory instruments. The term incorporates a range of "liberal" strategies of engagement with business that seek to work with and through the market to achieve reform, examples being the negotiation of codes of conduct, shareholder activism, and the creation of standards of certification. Examples of liberal strategies include the creation of certification schemes in the forestry and marine sectors or project-specific collaborations between companies such as McDonald's and the environmental NGO Environmental Defense (Murphy and Bendell 1997). More "critical" modes of engagement, meanwhile, aim to contest and restrict corporate power. These include the organization of consumer boycotts (such as those organized against Exxon or Shell), the creation of "watchdog" groups that monitor the activities of TNCs (such as Corporate Watch or Oilwatch), as well as traditional protest strategies of naming and shaming and resistance (Newell 2001).

Finally, activism around finance has taken a number of forms, from issue-specific protests regarding particular projects sponsored by the World Bank, for example, through to general campaigns for the reform of international financial institutions (Fox and Brown 1998; Edwards and Gaventa 2001; Scholte and Schnabel 2002) or ECAs (ECA Watch 2011). With respect to private finance, we see among environmental groups a divide between those that are interested in locating and activating levers that exist within the current financial system that can be used to engineer positive change, and those that engage in a more full-frontal attack on the basic principles and means by which the financial system operates. This strategic difference separates groups such as BankTrack (2011), engaged in monitoring and exposing acts of environmental negligence enabled by the support of banks (such as the involvement of commercial banks sponsoring damaging environmental investments in projects like the tar-oil sands in Canada), from coalitions of activist investors aiming to work with financial investors to sensitize them to the importance of environmental risks to their investments, to disclose their investments, and to use their power to disinvest from polluting activities and invest in sustainable projects and sectors of the economy. An example of the latter would be the Interfaith Centre for Corporate Responsibility, a coalition of 275 faith-based institutional investors that use their financial muscle to hold firms to account for their performance on climate change (Newell 2008).

Conclusions

I have argued in this chapter that while contemporary globalization has many historical precedents and essentially derives from established patterns and tendencies of (uneven) capitalist development, the way in which specific policy tools such as trade agreements and financial deregulation and corporate strategies such as globalized forms of production through networks and vertical integration have removed barriers to accumulation has generated a specific set of environmental challenges.

Some of these relate to the spatial and temporal fixes employed to simultaneously shift responsibility and benefit from ecologically uneven exchange. We observe this in relation to the offshoring or outsourcing of the most resource-intensive parts of the production process to the developing world (where labor costs are lower and where in the case of climate change emissions reductions obligations do not yet apply) and in the export of hazardous materials or the use of lower environmental and worker health standards in poorer countries. We also see it in innovations such as carbon offsets that pay poorer countries to reduce emissions on the part of richer countries: sold as a win-win situation that generates capital for poorer countries while relieving pressure on capitalists in the global North to reduce their own emissions.

Others relate to the political challenges of holding powerful corporate actors to account for their social and environmental performance when the distance between sites of production and consumption is so large, or when their power outstrips their responsibilities. A mixture of private certification schemes as well as watchdog activism from groups such as Corporate Watch has sought to address this potential governance gap and to expose the use of double standards, but can clearly go only so far. It raises the issue of whether, and if so how, universal, even if very minimal, standards of environmental conduct can be applied to corporations wherever in the world they operate. This is certainly the ambition behind repeated calls from many civil society organizations for a new UN legally binding corporate accountability convention to provide clearer and more enforceable forms of protection for workers and their environment than are currently afforded by the existing patchwork of voluntary agreements, self-regulation, and weak international law.

The extent and nature of these challenges reflect different understandings of where the problems lie, and lead to different ideas about what the solutions should be. For market liberals, those that take a favorable view of the ability of markets to deliver positive environmental outcomes, the issue is pricing: internalizing the externalities of environmental pollution that producers are currently able to pass on to society (Clapp and Dauvergne 2011). Nicholas Stern's (2006) claim that climate change represents the world's greatest market failure then becomes a call to introduce more wide-ranging carbon taxes or to strengthen carbon markets that put a price on carbon and incentivize its reduction. For those who place more faith in institutions, such measures need to be complemented by strong institutions that establish clear rules, coordinate cooperative outcomes among states, and produce international law that imposes obligations on states to address environmental problems. In this view, if more effective treaties could be negotiated for forests, climate change, and water, as they have been for ozone depletion and to a lesser extent the trade in endangered species, this would go a long way to setting in place responsible collective stewardship in an era of globalization (Young 1998). For others adopting a more critical view,

neither market reforms nor institutional innovation alone will go far enough in confronting the basic reality that a global economy organized around notions of endless year-on-year increases in growth and increases in the throughput of natural resources is fundamentally incompatible with any serious notion of sustainability. In other words, it cannot sustain such patterns of production and consumption indefinitely in a world where there are limits to growth (Meadows *et al.* 1972). Where this leads in terms of solutions is deglobalization: a conscious attempt to delink economies through a greater emphasis on self-sufficiency and the prioritization of meeting basic needs rather than creating and then serving manufactured "wants" and "desires" (Trainer 1996).

It should be obvious which reading of globalization and its relationship to the environment currently prevails, despite the efforts described in this chapter's section on "Contesting Globalization" by a growing array of activists to question the orientation and organization of the current global economy. A combination of material, institutional, and discursive power coheres around the idea that environmental problems occur because there is a lack of something: growth, technology, cleaner production, or capital. The solution then becomes an opportunity to accumulate capital by providing these things, generating demand for more goods and services and creating entrepreneurs for environmental services. The implication of those very things in causing problems in the first place is then airbrushed from the picture.

It follows then that the implications for policy of the body of research summarized here depend on which research is considered to be credible, reliable, and applicable to the policy needs of a diversity of policy-makers who themselves do not agree in many instances on which aspects of globalization require reform, or the extent to which abundant evidence of worsening environmental conditions relates to the current organization of the global economy. There may nevertheless be some compatibilities between these approaches, or at least in the idea that no one set of strategies is likely to deliver the scale or speed of change required. Most evidence points to the need for market-based mechanisms to be embedded within strong institutions and rule-based frameworks if they are to deliver effective and equitable outcomes. Likewise, for them to gain traction with investors, prices need to be high and scarcity is a precondition for that. That takes us back to clear targets that drive interest in reducing pollution in the first place (Newell 2012). At the same time, resistance to market mechanisms and the commodification of everything often has the effect of creating problems and legitimacy crises for market actors that they then have to address through improved standards and governance in order to maintain the credibility of the market as a whole. We see these dynamics clearly at work in carbon markets, where doubts about the "additionality" and authenticity of claimed emissions savings, as well as about the development benefits they claim to deliver, have given rise to a series of voluntary standards aiming to address these issues as well as a greater use of third-party verification and other tools (Paterson 2009; Newell and Paterson 2010).

That there can be mutually reinforcing dynamics between regulation, markets, and resistance is not the same as saying that these can be relied upon to adequately detect and address the range of environmental problems we face, which are clearly about more than inefficient markets and rogue traders within them. Since environmental problems derive from everyday practices of production and consumption in every domain of human life, some of which citizens have direct control over themselves,

but many over which they do not, change is clearly required at all levels from personal behavior to structural change in the organization of the global economy. This is so even for those who firmly believe that capitalism can grow its way out of environmental crisis through innovation, finance, and technology, because ultimately every aspect of the global economy depends on a sustainable supply of resources to preserve itself. The consequences of global market forces being allowed to reign without serious social or ecological restraint were reflected upon with hindsight and foresight by Karl Polanyi almost 70 years ago:

> To allow the market mechanism to be sole director of the fate of human beings and their natural environment . . . would result in the demolition of society . . . Nature would be reduced to its elements, neighbourhoods and landscapes defiled, rivers polluted, military safety jeopardized, the power to produce food and raw materials destroyed . . . [T]he commodity fiction disregarded the fact that leaving the fate of soil and people to the market would be tantamount to annihilating them (1944: 73).

References

Acción Ecológica. 2004. "Acción Ecológica," http://www.accionecologica.org/alca.htm (accessed October 5, 2004).

Audley, John, Demetrios G. Papademetriou, Sandra Polaski, and Scott Vaughan. 2003. *NAFTA's Promise and Reality. Lessons from Mexico for the Hemisphere*. Washington, DC: Carnegie Endowment for International Peace.

Bäckstrand, Karin. 2008. "Accountability of Networked Climate Governance: The Rise of Transnational Climate Partnerships." *Global Environmental Politics*, 8(3): 74–102.

BankTrack. 2011. "About BankTrack," www.banktrack.org/show/pages/about_banktrack (accessed July 3, 2012).

Barkin, Samuel. 2008. "Trade and Environment Institutions." In *Handbook on Trade and the Environment*, ed. Kevin Gallagher, 318–326. Cheltenham: Edward Elgar.

Bendell, Jem, ed. 2000. *Terms for Endearment: Business, NGOs and Sustainable Development*. Sheffield: Greenleaf Publishing.

Borras, Jun, Marc Edelman, and Cristóbal Kay, eds. 2008. *Transnational Agrarian Movements Confronting Globalization*. Oxford: Wiley-Blackwell.

Borras, Jun, Ruth Hall, Ian Scoones *et al.* 2011. "Towards a Better Understanding of Land Grabbing." *Journal of Peasant Studies*, 38(2): 209–217.

Clapp, Jennifer. 2001. *Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries*. Ithaca, NY: Cornell University Press.

Clapp, Jennifer and Peter Dauvergne. 2011. *Paths to a Green World: The Political Economy of the Global Environment*, 2nd edn. Cambridge, MA: MIT Press.

Conca, Ken. 2000. "The WTO and the Undermining of Global Environmental Governance." *Review of International Political Economy*, 7(3): 484–494.

Copeland, Brian. 2008. "The Pollution Haven Hypothesis." In *Handbook on Trade and the Environment*, ed. Kevin Gallagher, 60–71. Cheltenham: Edward Elgar.

ECA Watch. 2011. "Jakarta Declaration for Reform of Official Export Credit and Investment Insurance Agencies," www.eca-watch.org/goals/jakartadec.html (accessed January 27, 2012).

Edwards, Michael and John Gaventa, eds. 2001. *Global Citizen Action*. Boulder, CO: Lynne Rienner.

Evans, Geoff, James Goodman, and Nina Lansbury. 2002. *Moving Mountains: Communities Confront Mining and Globalization*. London: Zed Books.

Fox, Jonathan and David Brown, eds. 1998. *The Struggle for Accountability: The World Bank, NGOs, and Grassroots Movements*. Cambridge MA: MIT Press.
Frynas, George. 2009. *Beyond Corporate Social Responsibility: Oil Multinationals and Social Challenges*. Cambridge: Cambridge University Press.
Garvey, Niamh and Peter Newell. 2005. "Corporate Accountability to the Poor? Assessing the Effectiveness of Community-Based Strategies." *Development in Practice*, 15(3–4): 389–405.
George, Susan. 1992. *The Debt Boomerang*. London: Pluto Press.
Gill, Stephen. 1995. "Globalization, Market Civilisation and Disciplinary Neo-liberalism." *Millennium: Journal of International Studies*, 24(3): 399–423.
Goldman, Michael. 2005. *Imperial Nature: The World Bank and Struggles for Social Justice in an Age of Globalization*. New Haven, CT: Yale University Press.
Harvey, David. 2003. *The New Imperialism*. Oxford: Oxford University Press.
Held, David, Anthony McGrew, David Goldblatt, and Jonathan Perraton. 1999. *Global Transformations: Politics, Economics, and Culture*. Stanford, CA: Stanford University Press.
Helleiner, Eric. 2011. "The Greening of Global Financial Markets?" *Global Environmental Politics*, 11(2): 51–53.
Holliday, Charles, Stephen Schmidheiny, and Phillip Watts. 2002. *Walking the Talk: The Business Case for Sustainable Development*. Sheffield: Greenleaf Publishing.
Icaza, Rosalba, Peter Newell, and Marcelo Saguier. 2010. "Citizenship and Trade Governance in the Americas." In *Globalizing Citizens: New Dynamics of Inclusion and Exclusion*, ed. John Gaventa and Rajesh Tandon, 163–185. London: Zed Books.
Icke, David. 1990. *It Doesn't Have to Be like This: Green Politics Explained*. London: Green Print.
Jakobeit, Carl. 1996. "Non-state Actors Leading the Way: Debt-for-Nature Swaps." In *Institutions for Environmental Aid*, ed. Robert Keohane and Marc Levy, 127–167. Cambridge, MA: MIT Press.
Jones, Andrew. 2006. *Dictionary of Globalization*. Cambridge: Polity.
Karliner, Joshua. 1997. *The Corporate Planet: Ecology and Politics in the Age of Globalization*. San Francisco: Sierra Club Books.
Khor, Martin. 1995. "Address to the International Forum on Globalization." New York City, November.
Korten, David. 1995. *When Corporations Rule the World*. West Hartford, CT: Kumarian Press.
LeQuesne, Caroline. 1996. *Reforming World Trade: The Social and Environmental Priorities*. Oxford: Oxfam Publishing.
Levy, David and Peter Newell. 2000. "Oceans Apart? Comparing Business Responses to the Environment in Europe and North America." *Environment*, 42(9): 8–20.
Lieberman, Sarah and Tim Gray. 2008. "The WTO's Report on the EU's Moratorium on Biotech Products: The Wisdom of the US Challenge to the EU in the WTO." *Global Environmental Politics*, 8(1): 33–52.
MacLaren, Duncan. 2000. "The OECD's Revised 'Guidelines for Multinational Enterprises': A Step towards Corporate Accountability?" February. London: Friends of the Earth.
Madeley, John. 1999. *Big Business, Poor Peoples*. London: Zed Books.
Meadows, Donella, Dennis Meadows, Jorgen Randers, and William Behrens. 1972. *The Limits to Growth*. London: Pan Books.
Muchlinksi, Peter. 1999. "A Brief History of Business Regulation." In *Regulating International Business: Beyond Liberalization*, ed. Sol Picciotto and Ruth Mayne, 47–60. Basingstoke: Macmillan, in association with Oxfam.
Murphy, David and Jem Bendell. 1997. *In the Company of Partners*. Bristol: Policy Press.
NEF (New Economics Foundation). 2003. *Collision Course: Free Trade's Free Ride on the Global Climate*. London: New Economics Foundation.

Newell, Peter. 2000. "Environmental NGOs and Globalization: The Governance of TNCs." In *Global Social Movements*, ed. Robin Cohen and Shirin Rai, 117–134. London: Athlone Press.
Newell, Peter. 2001. "Managing Multinationals: The Governance of Investment for the Environment." *Journal of International Development*, 13(7): 907–919.
Newell, Peter. 2005. "Race, Class and the Global Politics of Environmental Inequality." *Global Environmental Politics*, 5(3): 70–94.
Newell, Peter. 2007. "Trade and Environmental Justice in Latin America." *New Political Economy*, 12(2): 237–259.
Newell, Peter. 2008. "Civil Society, Corporate Accountability and the Politics of Climate Change." *Global Environmental Politics*, 8(3): 124–155.
Newell, Peter. 2012. "Of Markets and Madness: Whose Clean Development Will Prevail at Rio+20?" *Journal of Environment & Development*, 21: 40–43.
Newell, Peter and Matthew Paterson. 2010. *Climate Capitalism: Global Warming and the Transformation of the Global Economy*. Cambridge: Cambridge University Press.
Okanta, Ike and Oronto Douglas. 2001. *Where Vultures Feast: Shell, Human Rights, and Oil in the Niger Delta*. New York: Sierra Club Books.
Paterson, Matthew. 2009. "Resistance Makes Carbon Markets." In *Upsetting the Offset: The Political Economy of Carbon Markets*, ed. Steffen Böhm and Siddhartha Dabhi, 244–255. London: May Fly Books.
Pattberg, Philipp, Frank Biermann, Ayşem Mert, and Sander Chan, eds. 2012. *Public–Private Partnerships for Sustainable Development: Emergence, Influence, and Legitimacy*. Cheltenham: Edward Elgar.
Pellow, David and Lisa Sun-Hee Park. 2002. *The Silicon Valley of Dreams: Environmental Injustice, Immigrant Workers, and the High-Tech Global Economy*. New York: New York University Press.
Petras, James and Henry Veltmeyer. 2001. *Globalization Unmasked: Imperialism in the 21st Century*. Delhi: Madhyam Books.
Polanyi, Karl. 1944. *The Great Transformation*. Boston, MA: Beacon Press [reissued 1980].
Roberts, J. Timmons and Bradley Parks. 2008. "Fuelling Injustice: Globalization, Ecologically Unequal Exchange and Climate Change." In *The Globalization of Environmental Crises*, ed. Jan Ooshthoek and Barry Gills, 169–187. Abingdon: Routledge.
Schmidheiny, Stephen. 1992. *Changing Course*. Cambridge, MA: MIT Press.
Scholte, Jan Aart. 2000. *Globalization: A Critical Introduction*. Basingstoke: Palgrave Macmillan.
Scholte, Jan Aart and Annabel Schnabel, eds. 2002. *Civil Society and Global Finance*. London: Routledge.
Stern, Nicholas. 2006. *The Stern Review on the Economics of Climate Change*. London: HM Treasury.
Trainer, Ted. 1996. *Towards a Sustainable Economy: The Need for Fundamental Change*. Oxford: Jon Carpenter.
UNCTAD (United Nations Conference on Trade and Development). 2010. *World Investment Report: Investing in a Low Carbon Economy*. Geneva: UNCTAD.
Utting, Peter. 2002. *The Greening of Business in Developing Countries*. London: Zed Books.
Vogel, David. 1997. *Trading Up: Consumer and Environmental Regulation in the Global Economy*, 2nd edn. Cambridge, MA: Harvard University Press.
World Bank. 1992. *World Development Report 1992: Development and the Environment*. New York: Oxford University Press.
World Bank. 2000. *Greening Industry: New Roles for Communities, Markets and Governments*. New York: Oxford University Press.
World Bank. 2011. *The Changing Wealth of Nations: Measuring Sustainable Development in the New Millennium*. Washington, DC: World Bank

WRI (World Resources Institute). 2008. *Correcting the World's Greatest Market Failure: Climate Change and Multilateral Development Banks*. Washington, DC: WRI, www.wri.org/publication/correcting-the-worlds-greatest-market-failure (accessed October 20, 2012).

Young, Oran. 1998. *Global Governance: Learning Lessons from the Environmental Experience*. Cambridge, MA: MIT Press.

Young, Zoe. 2002. *A New Green Order? The World Bank and the Politics of the Global Environment Facility*. London: Pluto Press.

Zadek, Simon. 2001. *The Civil Corporation: The New Economy of Corporate Citizenship*. London: Earthscan.

Zarsky, Lyuba. 2006. "From Regulatory Chill to Deepfreeze?" *International Environmental Agreements: Politics, Law and Economics*, 6(4): 395–399.