

## F. Conclusions

This report has addressed four fundamental issues relating to natural resources trade. The first is how key economic features of natural resources and the manner of their exchange influence patterns of trade for this class of goods. Second, we have examined how far the absence of trade barriers provides an efficient mechanism for ensuring access to natural resources and their long-run sustainability. The third issue concerns the incentives that governments face in setting trade policy in natural resource sectors and the consequences of this incentive structure. Finally, the report has considered how international cooperation affects the management of trade in natural resources, with particular emphasis on the role of the WTO.

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## Economic features of natural resources and patterns of trade

Natural resources have a number of distinctive features that have served as organizing themes throughout the report – the skewed geographical distribution of natural resources, their exhaustibility, the widespread occurrence of economic effects of natural resources exploitation disregarded by the market (externalities), high natural resource dependency in some economies, and tendencies towards high price volatility in natural resource markets. Keeping these characteristics in mind is essential for recognizing the effects of international trade, the rationale and consequences of trade policy measures, and the efficient design of rules governing resources trade.

The report has documented the sharp rise in the share (in value terms) of natural resources in world trade in recent years, mostly due to rising commodity prices, particularly for oil. Modes of trade in natural resources differ substantially from trade in manufactured goods in a number of important respects. First, natural resources are amenable to centralized trading as they tend to be quite homogeneous. This mode of trading has contributed to the establishment of international exchanges for natural resources, as well as to the stability of trade flows. Second, the unequal geographical distribution and other characteristics specific to certain resources have resulted in the adoption of special modes of trade, such as long-term intergovernmental contracts and vertical integration of various stages of the production process. The details of these arrangements have important implications for the patterns of international trade and the formation of resource prices.

## Trade openness, access and sustainability

Due to the geographical concentration of natural resources, trade has the potential to improve efficiency and increase welfare by shifting resources from regions of relative abundance to regions of relative scarcity. However, welfare comparisons are complicated by factors such as the exhaustibility of natural resources and pervasive market failures. The latter include imperfectly competitive markets and open access to resources when property rights are poorly defined. Under some circumstances, cartels in non-renewable sectors may lead to a slower than optimal extraction of a resource in exporting countries, while the opposite – that is, faster depletion – can result from free trade in renewable resources that suffer from an open access problem. The latter leads to a situation where the standard result of welfare gains from open trade breaks down, at least for one country.

Four other major issues are commonly associated with natural resources trade – the presence of environmental externalities, the impact that technology has on the sustainability of resources, the so-called “curse” faced by resource-rich economies, and the high volatility that

characterizes some resource sectors. International trade interacts with all these factors in complex ways, in some cases exacerbating existing problems and at times providing solutions. A negative impact on the environment can be intensified by an increase in the rate of extraction driven by exports, but the more efficient international allocation of resources promoted by trade has the effect of reducing this negative impact. Technological innovations – diffused internationally through trade – may accelerate the depletion of scarce resources, but they also improve the ability of governments to monitor remaining stocks and provide efficient substitutes to exhaustible resources. Finally, international trade may encourage over-specialization in natural resources but it can also provide opportunities for diversification that reduce the problems of high dependency on commodities and price volatility.

## Trade policies and their consequences

The report has documented government intervention in natural resource sectors, noting that trade policy in this area is very nearly the reverse of what we observe in other traded goods sectors. Resource-rich countries often restrict exports through a variety of means, such as export taxes and quantitative restrictions, whereas tariffs and other import restrictions in resource-scarce countries are low. There are, however, two important qualifications to this general rule. First, domestic policies that are likely to affect trade flows, including subsidies, technical regulations and consumption taxes, are frequently used. Second, the structure of protection that resource exporters face tends to rise with the stage of processing (tariff escalation).

Policy interventions in natural resource sectors are justified on welfare grounds by the specific features of natural resources. Governments employ trade policies as instruments to achieve several objectives: to improve resource conservation, to reduce environmental externalities associated with the harvesting or consumption of resources, to stimulate diversification of exports away from dominant resource sectors, and to stabilize income in response to supply or demand shocks.

However, three significant caveats need to be kept in mind. First, restrictions on trade have beggar-thy-neighbour effects, as they shift rents across countries or alter the terms of trade. They also have beggar-thyself consequences, as they may be politically expedient in the short run but welfare-reducing in the long run. Second, while in some cases they are the only available policy option, trade measures are typically a second-best policy to address problems associated with natural resources. The first-best intervention is often a domestic policy that addresses the distortion at the source. Finally, trade measures and domestic measures in natural resource sectors tend to be close substitutes. When resources are unevenly distributed across countries, there is sometimes little difference between the trade impact of domestic measures, such as consumption taxes and production restrictions, and the effects of traditional trade measures.

## Rules to foster international cooperation

The general principles of the multilateral trading system provide a framework for limiting beggar-thy-neighbour and beggar-thyself trade policies, including within resource sectors. Several WTO rules have relevance in relation to the main features of natural resources. In particular, rules on non-discrimination, freedom of transit, tariff bindings and export restrictions are relevant to the unequal distribution of resources across countries and facilitate WTO members' access to supplies of scarce resources. The instruments of policy flexibility contained in the WTO agreements, such as Article XX, allow issues of resource exhaustibility, environmental externalities, dominance and price volatility to be addressed. In addition, other international agreements establish mechanisms for international cooperation in natural resource sectors. These agreements are often aimed at addressing related market or government failures, such as those associated with the protection of the environment or with corruption.

WTO rules were not specifically drafted to regulate natural resources trade and may not always respond adequately to the specific features of this sector. In this respect, the report has identified several areas where consideration could be given to intensified cooperation on the basis of mutual gain. One such area involves trade policies, such as export taxes, where bargains might ameliorate uncooperative trade outcomes. The scope for such bargains will depend in part on what objectives are being pursued by such policies and how these objectives might influence welfare at the national level. A second issue concerns the scope for conservation policies, such as the treatment of subsidies aimed at improving the conservation of natural resources.

A third issue relates to the facilitation of trade flows of natural resources, specifically the scope of freedom of transit covered under Article V of the GATT. A fourth area concerns the clarity of current rules, such as the applicability of the rules of the GATT or the General Agreement on Trade in Services (GATS) to exploration and processing of natural resources. A further area where coherence matters is the relationship between the WTO and rules of international law in different agreements and arrangements that may be relevant to natural resources.

Other issues that have been touched upon, but where no WTO mandate nor ongoing negotiations exist, include increased international cooperation on investment, competition and domestic policies such as consumption taxes. These issues have been included in the discussion on account of the analytical case that can be made, under specified circumstances, for further cooperation. This is distinct from advocating a new WTO negotiating agenda, which would be outside the competence of a report of this nature.

## Concluding remarks

The tension between rising demand for natural resources due to population and income growth on the one hand, and their scarcity and exhaustibility on the other, is a challenge facing modern society. This tension seems likely to increase, especially as the global economy recovers from recession and the circle of development and industrialization continues to widen. Fears of inadequate access to supplies in resource-scarce countries and of inappropriate exploitation in resource-rich regions could lead to trade conflict or worse. Adequately defined rules for international cooperation, built on a shared perception of gain, will contribute to the avoidance of such an outcome.

In sum, the analysis in this report argues strongly for cooperation. The importance of natural resources to virtually every aspect of human activity, and the particular characteristics of these products, make it vital that governments work together to find common ground and appropriate trade-offs. Such cooperation should aim to ensure sound resource management, equity and mutual gain. The trade aspects of cooperation have been a particular focus of the report, and the case has been made for seeking accommodation through effective multilateral trade rules. Well-designed rules on trade are not only about securing the standard gains from trade; they are also a key component of cooperation in domains such as environmental protection and domestic policies to manage scarce resources.