

Food and Agriculture Organization (FAO) of the United Nations

Higher international standards or rent-seeking race to the bottom?

The impacts of forest product trade liberalisation on forest governance

A Background paper for the Global Project: Impact Assessment of Forest Products Trade in Promotion of Sustainable Forest Management

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Executive summary

The objective of this study is to assess the impacts of forest trade policies, especially trade liberalisation, on forest governance. This was based on a literature review and three country case studies – Brazil, Indonesia and Mexico. The emphasis is on national (public, private and community sector) forest governance in developing and transition economy countries, since this is where governance problems like illegal logging and corruption are most problematic.

A brief review of trade policies found it difficult to establish an overall trend towards trade liberalisation. Reductions in tariffs have been counteracted by a range of non-trade measures – mainly trade restrictions by poorer countries, and subsidies by wealthier nations - to protect domestic forest industry.

An analysis was carried out of various pro and anti-trade liberalisation positions towards likely forest governance impacts. Evidence surrounding the following overlapping issues was collated and assessed:

- Impacts of trade policies on rent seeking and corruption
- The effect of external demand pressures on forest level governance
- The role of green international market pressures, especially certification
- The role of transnational companies and the 'race to the bottom'
- The effect of trade policies on the temptation to cut compliance costs
- The capacity of governments to limit or internalise externalities
- The links between trade liberalisation, wealth and governance

It was found that the empirical basis for both (pro and anti-liberalisation) sets of arguments was weak, fundamentally because trade policies and pressures have weak, indirect and sometimes perverse impacts on forest governance. They are also difficult to identify due to the complexity of trade and governance interactions, and the greater importance of non-trade factors.

Much of the evidence is therefore conflicting. For example, while political corruption tends to fall after removal of trade restriction since discretionary powers are reduced and transparency increases, there is likely to be an increase in rent-seeking opportunities to other actors. There is also evidence from Southeast Asia that export booms can lead to forest sector institutional breakdowns due to political interference with the concession allocation system. Increased external demand pressures can have positive or negative governance and environmental effects depending on regulatory capacity and other policies. Even neo-classical economic theory is ambivalent about the effect of higher rents on corruption.

The evidence does however suggest that trade policies and pressures can be a catalyst to either a virtuous governance cycle, providing regulatory weaknesses and externalities are tackled, or a downward spiral. Trade policy impacts depend on the presence or absence of underlying market, policy and institutional failures. External trade is thus a magnifier of these failures or of successful efforts to internalise the externalities. Accompanying non-trade policies, both sectoral (stricter control, competitive concession bidding, forest taxation, etc.) and extra-sectoral (decentralisation, state downsizing, devaluation, etc.), can therefore either ameliorate or exacerbate the potential adverse impacts of trade policies.

When regulatory capacity is weak, either higher stumpage values (higher returns from illegal logging) or lower prices (increased pressure to reduce compliance costs) increase the incentives for illegality. Trade naturally favours lower cost producers; the presence or absence of effective regulation determines whether the lower cost is achieved through low (or zero) compliance costs, or from more efficient but legal forest management. The most important accompanying 'stick' for the 'carrot' of trade liberalisation is therefore effective regulation in producer countries – although great care is needed to ensure this does not increase the transaction costs of 'good forestry'.

The three case studies confirm the literature-based findings. They show that both freer trade (tariff reductions in Mexico) and increased protection (Indonesia's log export ban, and Brazil's ban on mahogany exports) can exacerbate underlying problems and result in incentives for non-compliance. They confirm trade policies are unreliable for pursuing environmental objectives, and can cause perverse incentives. For example, Brazil's attempts to control the mahogany trade have increased corruption, especially species mis-specification, and diversion of mahogany to less discriminating markets.

The Brazil case study found that in general external trade pressures are encouraging better governance; certification is exerting an important market access incentive for foreign companies, and is having a knock-on effect on the domestic market with the establishment of a buyer's group. But the superior governance record of 'modern' export-oriented companies, operating in more distant areas from the agricultural frontier, in comparison with nationally-owned and domestic market oriented operating near the frontier, is due to more powerful determinants of forest governance like road access, tenure security and the scale of frontier clearance timber. The increased media and regulatory attention to the mahogany and export sector issues has however been at the cost of reduced vigilance of domestic trade in which forest governance problems are worse. The Mexico case study also found that governance problems are more acute for lower value domestic market production.

In East Kalimantan, Indonesia, external trade policies and pressures are reported to be less important drivers of corruption and illegal logging than political and financial instability, and the lack of law and order. At the same time, the demand for logs from Malaysia, China and other countries was fuelling the illegal export trade. An important aspect of this is that China's logging ban and marginally better control in Malaysia have increased the governance pressures on East Kalimantan's forests. Another observation was the way the decentralisation process has caused a shift in rent-seeking opportunities and corruption away from central government and large companies to local government and small operators.

In Mexico, key informants felt that trade liberalisation has had an overall net positive governance impact, while inappropriate sectoral policies and the SAP have been more important drivers of governance problems in the community forestry sector. The timing of the SAP before the first wave of tariff reductions in 1986, and the deregulatory forest law before the implementation of NAFTA in 1994, were both very poor preparations for trade liberalisation, and resulted in large increases in unregulated logging. This brings out the vital issue of sequencing. As argued by Joseph Stiglitz and others, regulatory and institutional strengthening must precede trade liberalisation, not follow it. Another consequence of trade liberalisation in Mexico has been to widen the governance gap between the higher value, formal,

regulated and more export-oriented community forestry sector, and the lower value, informal, unregulated and more domestic-oriented community forestry sector. This shows the 'trade as magnifier' effect.

In all three case study countries, the poorly regulated domestic trade was much bigger than export trade, and the forest governance problems considerably more acute. The main forest governance challenge is therefore how to improve domestic forest trade governance. Again, increased regulatory control combined with efforts to increase civil society participation in policy and monitoring processes, and to raise the incentives for sustainable forestry, like environmental service payments, are critical. This is an essential complement to the multilateral and bilateral approaches espoused, for example, in the EU FLEGT process, and in view of the resources and support needed for such a transition, shows the importance of the bilateral model pioneered in the UK-Indonesia Memorandum of Understanding agreement.

The Indonesia case study and wider literature also show that an improvement in forest control in a wealthier country, which can afford to import forest products to meet a domestic market shortfall, increases environmental and governance pressures in poorer neighbour countries. An FAO study also reports that countries imposing logging bans have greatly increased their log imports. As Sedjo (1996) comments, in the context of stricter control in the US and Canada, "logging restrictions in some places will simply be offset by logging increases elsewhere. In short, the issue is not whether to log but where to log." Thus freer trade facilitates the displacement of governance problems from one country to another; regional and multilateral approaches are therefore essential.

While this confirms the importance of the regional FLEG initiatives, potential consumer country legislation against illegal timber imports could result in perverse impacts in poorer producer countries. Higher verification costs for natural forest products from developing and transition economy countries could further reduce their competitiveness with temperate and plantation products, resulting in diversion towards less discriminating domestic and external markets. Higher costs of legal production would also be an incentive for illegality where control is weak. Against this, if consumer country measures were to prove an effective stick (and carrot) for the legal export trade, producer countries would make significant revenue gains, as well as reap broader governance and social benefits.

Finally there is an important political economy aspect to forest governance. The transition towards more effective governance usually only happens in wealthier countries with mature democracies, although the recent progress in Bolivia and Ecuador does not make this an iron law. There is a strong correlation between the quality of governance and income per capita, although there is also a Kuznets curve problem to this relationship at lower income levels. Poorer producer countries like Indonesia are still heavily dependent on natural resource exports, and thus suffer from 'resource curse' governance problems. Democratic progress and political stability are also essential. For these reasons, Brazil and Mexico are making some progress in improving export sector forest governance, while Indonesia is caught in a downward spiral. Improving forest governance is therefore integral to the wider processes of economic and political development.

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Abbreviations

APEC	Asia-Pacific Economic Co-operation
CERFLOR	Certification of forest management group, Brazil
CFE	Community forestry enterprise
CIFOR	Center of International Forestry Research
CITES	Convention on International Trade in Endangered Species
ECA	Export credit agency
EIA	Environmental Investigation Agency
FD	Forest department
FDI	Foreign direct investment
FLEG	Forest Law Enforcement and Governance
FLONAS	National Forest logging concessions, Brazil
FSC	Forest Stewardship Council
GIS	Geographical information system
GNP	Gross national product
HPHH	Hak Pemungatan Hasil Hatan concessions, Indonesia
IBAMA	Amazon Environmental Institute, Brazil
INGO	International non-government organisation
IPPK	Izin Pemungatan dan Pemanfaatan Kayu concessions, Indonesia
ITTO	International Tropical Timber Organization
NAFTA	North American Free Trade Agreement
NTM	Non-tariff measure
OECD	Organisation for Economic Co-operation and Development
PNG	Papua New Guinea
RFE	Russia Far East
SAP	Structural adjustment programme
SFM	Sustainable forest management
TNC	Transnational corporation
UNCTAD	United Nations Conference on Trade and Development
USTR	Office of the US Trade Representative
WTO	World Trade Organisation

1 Introduction

1.1 Objectives and structure

“Sweeping generalisations are common from both the trade and the environmental community arguing that trade is either good for the environment, full-stop, or bad for the environment, full-stop, while the real-world linkages are presumably a little bit of both.” (Mick Moore, WTO President quoted in *The Economist*, 1999)

Discussion of the social and environmental impacts of forest trade liberalization tends to be an emotive and polarised debate with more free market or neo-liberal economists at one end of the spectrum, and environmentalists, especially international ‘green’ non-government organizations (INGOs), at the opposite end. The debate on the impacts of trade liberalization on ‘forest governance’ is effectively a sub-discussion of this debate. Free trade supporters claim trade liberalisation brings pressure for more positive governance, for example, through the influence of green market pressures and country-of-origin governance standards. On the other hand green NGOs argue that it increases the power of rent-seeking multinational companies and demand pressures on forest governance capacity in poorer countries, resulting in higher levels of corruption and illegal logging.

The purpose of this report, based on a review of mainly published literature and three commissioned country case studies is to carry out a more dispassionate analysis of the evidence that forest product trade liberalisation is good or bad for national level forest governance. An important aspect of this study is to assess how trade liberalisation and other trade policies affect stakeholder incentives, and thus lead to more supportive attitudes to forest governance, or whether it rather encourages stakeholders to cheat, circumvent or weaken forest laws, regulations and institutions. National stakeholders whose incentives might be expected to be affected by trade policies include politicians (in situations where they are able to influence rent distribution), public sector forest authority officials (both at senior and field level), the forest industry (loggers, processors and traders), forest communities, and other local forest users. There is also likely to be a response from civil society, although in this case the link is more indirect since their economic incentives are unaffected.

The emphasis in this paper is on forest governance in developing and transition economy countries, since this is where weak forest governance is most problematic, as shown by the prevalence of such indicators as corruption, illegal logging and forest land tenure conflicts, while recognising that these problems also occur in industrialised countries but are generally less severe. The analysis of industrialised country forest governance situations is introduced where appropriate.

The report is structured as follows. In this section an attempt is made to define and discuss the terms forest governance and trade liberalisation. In section 2, recent trends in forest trade liberalisation and protection are assessed. In section 3, forest governance impacts of trade liberalisation *per se* are assessed, both in terms of theory and evidence. Sections 4 to 6 summarise the Brazil, Indonesia and Mexico case studies, and section 7 reports on trade and governance issues in Russia. In section 8 the *per se* condition is dropped, and the interactions between trade liberalisation and other forest governance drivers discussed. This provides the basis for a ‘prescriptive discussion’ in section 9 of what can be done to encourage more positive governance impacts from freer trade. Section 10 concludes.

1.2 Forest governance

A dictionary definition of governance is “the exercise of authority and control”; a slightly more developed definition used in a World Bank Institute working paper is “the traditions and institutions by which authority is exercised in a country” (Kaufmann & Kray, 2002). According to Mayers et al (2002), “governance is guided by policy, enforced by laws and executed through institutions.” Thus better forest governance happens when a set of enabling policy, legal and institutional conditions allow a society to organise itself effectively for the development and management of forest wealth, and for the more equitable and sustainable production and consumption of forest goods and services. Another view of governance, which indicates how it relates to wider goals and the democratic process, is provided by Ribot (1999, cited by Mayers et al): “good governance is aspirational, concerned with the distribution of power and authority in a society in ways that best serve the widest cross-section of people.” Meanwhile Kaufmann & Kray (2002) emphasise the process by which those in authority are selected and replaced; a government’s capacity to formulate and implement sound policies; and the respect of citizens for the institutions of the state, including the rule of law.

Forest governance is therefore a very broad and complex concept; it is multi-layered, inter-sectoral, spans the global to the local levels, involves forest policy elements, and different values or norms. In Table 1 an attempt is made to identify some of the main elements and more tangible indicators of ‘good’ or ‘poor’ forest governance, while acknowledging the point made by Mayers et al (2002) that there is no universal set of good governance conditions – they are context specific. These elements and indicators (italicised) are presented under three slightly arbitrary governance levels (public sector, private sector, and community forestry) with a view to considering aspects of forest governance which might be observable in the literature and case studies. Global forest governance is not included since the objective of this study is to assess trade policy impacts at the national and sub-national levels. Civil society participation is included under public sector governance, since it is primarily dependent on enabling public sector conditions, i.e., supportive policies and institutions. Other factors could be added to this list, but those included should be sufficient to indicate what is meant by good and poor forest governance in this study.

An issue of particular importance when discussing forest governance is the term ‘illegal’. A basic definition of illegality is when timber or another forest product is harvested, transported, bought or sold in violation of national laws. The illegality may be in the harvesting procedure (e.g., logging without permission, from a protected area, or taking out more timber than authorised), in the issuing of a transport permit, in processing, avoidance of forest fees and other taxes or in export procedures, including misdeclarations to customs (see Brack et al, 2002a, for a comprehensive list). In weak public sector governance situations, much supposedly ‘legal’ timber appearing in official statistics is legalised at source, often through bribing FD (Forest Department) field officers. This makes it very difficult to distinguish between legal and illegal timber at the international level; there are now major pressures for consumer countries to reject illegal timber, but a huge problem remains of how to confidently distinguish between legal and illegal timber. Even costly chain of custody monitoring and high tech methods of log marking are not infallible (Brack et al, 2002a).

Table 1. Possible elements and indicators of ‘good’ and ‘poor’ forest governance

Forest governance level	Good forest governance elements and indicators (<i>italicised</i>)	Poor forest governance elements and indicators (<i>italicised</i>)
Government or public sector governance (includes local government governance)	<p>Forest legislation and policies support SFM;</p> <p>Strong regulatory capacity (<i>well-staffed, financed, trained and equipped institutions and few illegalities</i>);</p> <p>Equitable and just <i>system of law and order</i>;</p> <p>Senior positions not politically nominated;</p> <p>Promotion of a <i>national criteria and indicators process</i>;</p> <p>Forest management plans as serious management tool, and monitored;</p> <p>Transparency and accountability;</p> <p>Good <i>information publicly accessible</i> (e.g., on forest concessions);</p> <p>Competitive <i>auction-based concession system</i> or other system which effectively taxes forest rent;</p> <p><i>High civil society participation</i> in forest policy fora, monitoring, audits, public education of SFM, etc.;</p> <p><i>Secure property rights</i>, especially of indigenous groups; conflict resolution mechanisms or procedures;</p> <p>Clear demarcation between federal forest authority and local government responsibilities</p>	<p>Inadequate legislation and supporting forest policies;</p> <p>Weak regulatory capacity (high incidence of <i>illegal logging, processing, transport and trade</i>);</p> <p><i>Inequitable, unjust law and order</i>;</p> <p><i>High level or political corruption</i>;</p> <p>Senior positions <i>politically nominated</i>;</p> <p><i>Petty field level corruption (bureaucratic capture)</i>;</p> <p>Border illegalities like <i>customs misdeclarations, transfer pricing</i>;</p> <p>Forest management plans treated as a procedure;</p> <p>Lack of transparency, information and accountability;</p> <p>Patronage in <i>administrative-based concession system</i>, or <i>collusion</i> in auctions (corruption);</p> <p><i>Low civil society participation</i>, education, etc.</p> <p>Insecure and conflicting property rights (conflicts over timber in indigenous areas)</p> <p><i>Conflicts between local government and forestry authority</i></p>
Private sector governance (industrial forest managers and processors)	<p>Companies willing to comply with forest laws, and follow forest management plans;</p> <p>Trend towards <i>self-regulation (ISO standards, harvesting codes, etc.)</i>;</p> <p>Interest in <i>certification</i>.</p>	<p>Companies circumvent laws through <i>illegal logging, transport, trade (export smuggling), tax evasion, etc.</i>;</p> <p>State capture: companies make payments to influence laws, regulations, decrees, etc. (e.g., to influence concession allocation);</p> <p>Public procurement kickbacks: illicit payments to secure state contracts;</p> <p>Disinterest in self-regulation, certification, etc.</p>
Community forest governance	<p>Effective community institutions and rules; <i>absence of free-riding</i></p>	<p><i>Corruption</i> of community leaders;</p> <p>illegal logging; free-riding;</p>

Furthermore, it is important to distinguish between two types of illegality - illegality which is the result of a deliberately criminal act, and illegality which is unintentional or enforced. Both reflect problems of public sector governance, but are very different in terms of causes and remedies. In ‘criminal’ illegal logging, there is an intention to break the law. It is very often accompanied by some kind of corruption, e.g., bribing local FD staff to ‘turn a blind eye’ to clandestine logging, or sign a document that the

timber has been legally supplied. 'Enforced' illegal logging usually involves small farmers, artisanal processors, indigenous communities and other local level forest users, and happens when forest regulations are so complex, time-consuming and expensive (in terms of local people's opportunity costs) they are impossible to comply with from the perspective of basic livelihood and financial viability. In some situations, regulations may be so complex or poorly communicated that forest users do not realise they are breaking the law. This also means that, just as 'legal' forest management can often fall far short of 'sustainable forest management' (SFM) standards, in other situations local users can be following SFM principles but remain outside the law.

1.3 Forest trade liberalisation

Forest product trade liberalisation can be defined as a reduction in the costs and barriers to the free movement of forest goods and services between countries (based on Rytkönen, 2002). Theoretically trade liberalisation should increase the price to the exporter and reduce the price to the importer, and so encourage more trade and consumption. The goods should flow from countries with a comparative advantage (lower costs of production) to countries with a comparative disadvantage (a higher cost of production). There are two main elements of trade liberalisation; it can occur through reduced import and export tariffs or levies (usually only on logs or unprocessed timber), and through a reduction of so-called 'non-tariff measures'.

Non-tariff measures (NTMs) or barriers can be defined as laws, regulations, policies and practices which either protect domestically produced forest goods and services from the full weight of foreign competition, or artificially stimulate exports (Rytkönen, 2002). They can be arguably divided into two main types:

- those directly affecting production and trade levels: these are more formal forest trade measures like log export bans, export quotas, permits and licenses, as well as indirect quantitative restrictions or controls on harvest levels;
- those with an indirect effect on trade and production: these include phytosanitary regulations; health and safety standards; labelling and certification; government procurement contracts; and recycling and waste recovery requirements. Trade impacts are usually an unintended side-effect of these NTMs.

Since those NTMs falling into the latter category have mainly non-trade objectives, this makes removing them a complex inter-sectoral issue. Subsidies can fall into both the above categories, but the treatment of subsidies as a NTM is controversial. Whereas the influential APEC report (1999) included afforestation subsidies in its definition of NTMs, it did not assess other types of subsidies. Other sources (Sizer et al, 1999, Rice et al, 2000) argue that a range of direct and indirect subsidies provide a competitive trade advantage. These include tax breaks; low interest loans; undercharging of forest services; incentives to farmers to settle in forested areas; state road-building and infrastructure in logging areas; and, most importantly, under-taxation of the forest rent on state land (forest taxes below stumpage values). Annual subsidies to forest industry are estimated at \$6-10 billion, with Canada alone accounting for \$4-5 billion (Sizer et al, 1999). About half of these subsidies are considered as 'perverse', i.e. harmful to forests and forest peoples. But it should be recalled that subsidies can also be justified on the basis of protecting environmental and social externalities.

2. Recent trends in forest trade policies

2.1 Import tariffs

Forest product import tariffs have been historically lower than for other products¹. Developed country import tariffs (less than 5% on most products) are much lower than developing countries (10-20%), as reported by Bourke (2003). This compares to tariffs of 5.3% for the EU, and 1.4% for the US. Also various developed countries or trading blocks like the EU impose lower import duties on developing countries, as in the UNCTAD General System of Trade Preferences (GSP). Before the 1994 Uruguay Round, the average industrialised country forest product import tariff was 3.5%, about 45% below the average of all products, although wood panel tariffs were often 10-15% (Rice et al, 2000). At the Uruguay Round, the average import tariff on forest products was reduced by over a third.

While North America is pushing strongly for 'accelerated tariff liberalisation' (ATL) as discussed by USTR (1999), Europe and Japan are more cautious due to the threat to their relatively high cost timber industries, especially plywood, from cheaper imports. As shown in Box 1, tariff changes are only likely to have minor 'scale' impacts on production and trade, and are therefore unlikely to affect forest governance.

Box 1. The scale impacts of import tariff reductions

Studies of the impacts of Uruguay Round tariff reductions from the Uruguay Round predict an overall increase in the value of production by 0.4-0.6% by 2010, and a 1.6-2% increase in exports, mostly intra-north trade (Barbier, 1999, USTR, 1999). Much of the increased production is likely to be from plantations and secondary forests. The largest estimated increase in exports is 5% for plywood, previously subject to 10-15% import tariffs (Barbier, 1999). It is estimated there will be a slight fall in developing country exports and an increase in developed country exports, but there is considerable uncertainty (USTR, 1999, Rice et al, 2000). Finland, Sweden, Indonesia, Malaysia and Brazil might experience significant increases in exports.

The small trade impact of lower import tariffs can be explained by the fact that they are being reduced from already low levels, and by the low elasticities of supply and demand of forest products. In terms of supply elasticity, a producing country has a limited production response capacity at the more 'efficient' cost level; as old growth forest is exhausted, production shifts to higher cost and/or lower value plantation or secondary forest production (Sedjo & Simpson, 1999). The demand elasticity for most timber products is also low since consumers do not switch easily between timber and its substitutes; thus cheaper imports will only slightly encourage consumption.

Average tariff levels also disguise 'tariff escalation', i.e., higher import tariffs on processed products, like plywood and furniture, than logs and sawnwood². Tariffs on wood-based panels and furniture are often in excess of 10%. Log exporting countries and developing country plywood producers like Indonesia, Malaysia and Brazil would be most likely to benefit from a reduction in tariff escalation (Rice et al, 2000).

¹ But it should be noted that tariffs are only part of the fiscal element of trade protection; additional taxes and duties raise the effective level of protection. For example, Egypt had an import tariff of 15% but additional charges raised the effective rate of protection to about 40% (Bourke & Leitch, 2000).

² Theoretically it should be noted that higher import tariffs on unprocessed imports might be seen as positive for forest governance since they internalise some of the externality costs (Rice et al, 2000).

Theoretically it is desirable to reduce tariff escalation, since it discourages value-added processing in source countries.

It should be noted that the literature treats export tariffs on unprocessed forest products as a type of trade restriction. It can be assumed that the consequences of a reduction in export tariffs on logs or sawnwood are similar to, but weaker than, removal of an export ban, in that higher export tariffs will lower domestic log prices and protect the timber industry. Export tariffs and (ideally) log export quotas are less distorting than bans, but require more administrative capacity (Karsenty, 2000).

2.2 Non-tariff measures (NTMs)

The general trend has been to increase NTMs to compensate for falling tariffs, or to maintain high tariffs when trade restrictions are removed. Thus many developing countries have introduced log export bans or other unprocessed export restrictions as shown in Table 2, which collates accessible information on tariffs and NTMs from a sample of countries. This shows a trend towards less import restrictions, but an increase in export restrictions and other NTMs. The latter trend is because lower import tariffs have not reduced the perceived need for protection, and has resulted in more indirect means of maintaining it (Bourke & Leitch, 2000).

These indirect means include a range of direct and indirect subsidies. For example, the US has long claimed that the low stumpage fees on Canadian crown land gives Canadian exports an unfair advantage; following previous impositions of countervailing duties, the US Department of Commerce imposed a 29% import tariff on Canadian softwood in March 2002. This was subsequently challenged by Canada in the WTO.

2.3 Is there an overall trend towards trade liberalisation?

The purpose of Table 2 is to try and identify a trend towards liberalisation or protection; this involves a rather arbitrary judgement as to whether a country is a 'net liberaliser' or not. While the opposing trends of tariffs and NTMs make it difficult to identify a clear trend, it is generally recognised that NTMs have a more powerful impact on production and trade than tariff changes, and therefore the net overall trend, including the effect of subsidies, is probably towards increased protection. Since global forest trade has increased, this implies that trade liberalisation is not a pre-condition for increased trade; the latter is rather driven by a range of aggregate demand factors.

Given this unclear picture, it is worth considering whether changes in demand and prices provide evidence of trade liberalisation, especially of tropical production. In a recent analysis of the global timber trade, Contreras (2002) concluded that there is little evidence of increased producer prices due to trade liberalisation or other factors; the only clear increase in prices is for wood-based panels, and this could be due to better quality. In fact world demand for tropical timber is slowing down overall. While industrial wood production in tropical countries increased by 27% over 1980-98, tropical log exports have fallen, largely due to reduced exports from Malaysia and Indonesia.

Table 2. Sample of countries moving towards more or less trade liberalisation (quoted tariffs are mainly 2000 levels)

Country	Increasing (?) liberalisation	Observations/qualifications
Bolivia	Abolished log export ban 1996	
Brazil	Some import tariffs reduced, reduced producer subsidies	Import tariffs 9-13% on most forest products, 17% builders' joinery, 21% furniture, 15-17% pulp & paper, 21% furniture. Ban on mahogany production
China	Log import tariffs reduced to 0 in 1998; January 2002 reduction of plywood tariffs from 15% to 10%, veneers from 8% to 4%	18% builders' joinery, 22% on furniture imports, but one third reduction of latter proposed
Japan	Import tariffs gradually reduced from 15% before Uruguay Round	6-10% import tariff on plywood, high producer subsidies
Korea (South)	Import tariffs on most products reduced to 8%	
Mexico	NAFTA: tariffs on North American imports reduced from 10-20% to zero by end 2003	Over 80% forest product imports and exports from/to US
Russia	Export taxes abolished 1996	18% import tariff on logs and lumber
USA	Elimination of tariffs on furniture, paper & paperboard products by 2010	Log export ban from US National Forests, Pacific North West; high levels of producer subsidies
Country	Increasing (?) or high protection	Observations/qualifications
Cameroon	Log export ban 1999, recently replaced by log export quotas and 25% log export tax	
Canada	Log export ban from British Colombia, export tax on lumber exports to US, 9.5% import tariff on coniferous plywood	Reduced producer subsidies, agreed to eliminate tariffs on paper & paperboard products by 2010. But US claims that low stumpage fees on crown land means Canada has unfair trade advantages
Chile	Import tariff 11% across all forest products	Reduced producer subsidies
Côte d'Ivoire	Increased log export ban number of species	
EU	Import quota on board and panel products; 6-10% import duties on wood panels; high levels of producer subsidies	Agreed to eliminate tariffs on furniture, paper & paperboard products by 2010 Coniferous plywood imports: duty-free annual quota of 650,000 m ³
Ghana	Selective 1979 log export ban extended to all species in 1995, 1996 export levy on air dried sawnwood	
Honduras	1998 export ban on unprocessed hardwood reintroduced (lifted in 1992)	Ban on export softwood logs lifted in 1992; draft forest law proposes lifting hardwood export ban
India	35% import tariff on most wood products	Agreed to reduce sawnwood tariffs by 27.5%
Indonesia	Log export ban introduced 2001, 12% import tariffs across all forest products	Reduction of export tariffs from 200% to 10% in 1998; log export ban ineffective
Malaysia	Import duties on most forest products 20%, plywood/laminates 25-40%; ban on Indonesia log imports 2002; Log export ban from Peninsular Malaysia 2002, export quotas in Sabah, Sarawak	Reduced export taxes and abolished log export ban 1998; agreed to reduce tariffs on most forest products by 5-10%; furniture 0% import duty
Papua New Guinea	High export duties, phased reduction in log exports	
Philippines	Log export ban 1986, sawnwood export ban 1989; 20% import tariff on many wood products	
Solomon Islands	Export duties, phased reduction in log exports	
Thailand	Logging ban 1989, import tariff 20% on most wood products	Agreed reduction in wood-based panel tariffs by 20-50%, furniture 60%
Uganda	Ban on export of all timber in 1990	

Sources: Bourke & Leitch, 2000; APEC, 1999; Landell-Mills & Ford, 1999; Rice et al, 2000; Sedjo & Simpson, 1999

Thus most increased production has been due to *domestic trade* pressures; for most developing countries, domestic demand has grown faster than export demand. The only tropical timber export to increase significantly has been plywood, and this has been largely due to *increased trade restrictions* (log export bans in Indonesia and Malaysia). While Indonesia, Malaysia, Gabon, Cameroon, Brazil and Chile have had some increase in timber exports, most of the supply increase has been from temperate sources, especially Russia, Eastern Europe, North America and the Scandinavian countries.

3. Governance impacts of trade liberalisation *per se*

3.1 Introduction

In this section the theory and evidence surrounding forest governance impacts of trade liberalisation *per se* are assessed. The ‘theory’ is presented in the form of a series of arguments or hypotheses based on pro and anti-liberalisation viewpoints; the evidence to support or detract from these viewpoints is then assessed. The purpose of this rather dichotomised approach is not to add fuel to the fire, but by setting up these ‘straw men’ positions to make it easier to assess where the ‘truth’ lies along the continuum between these positions. Analysis of the various pro and anti-trade liberalisation viewpoints results in the following main areas of contention, some of which are overlapping:

- Impacts of trade liberalisation and protection on rent seeking and corruption
- The effect of increased external demand pressures
- The role of green international market pressures
- The role of transnational companies and the race to the bottom
- The effect of trade policies on the temptation to cut compliance costs
- The capacity of governments to limit or internalise externalities
- The links between trade liberalisation, wealth creation and improved governance

3.2 Trade liberalisation, corruption and rent-seeking

Corruption is the most studied indicator of the quality of public and private sector governance. Here we deal both with political or high level public sector corruption, which usually involves senior politicians, heads of forest departments (FDs), customs officers, and other senior public sector officials, and private or corporate sector corruption involving ‘state capture’¹ and ‘public procurement kickbacks’².

Pro-trade liberalisation position

Trade restrictions cause corruption since they create a barrier to profitability, encouraging stakeholders to find a way round them. They increase the rent-seeking opportunities to public sector officials and the colluding private sector (Hellman et al, 2002). Trade liberalisation, on the other hand, forces domestic production to compete with imported products, so that the rent-seeking opportunities are reduced (Leite & Weidmann, 1999). Trade liberalisation should also encourage a more open society with a freer flow of information in which governance and environmental abuses are less easily covered up (Neumayer, 2001).

Anti-trade liberalisation position

Trade liberalisation leads to corruption in the pursuit of windfall rents, since the rewards to corruption and illegality are much higher in the export market than the domestic market. Where governance is weak, there is a major temptation for politicians and senior state officials to exert their forest rent-seizing³ potential (Ross,

¹ This refers to corporate influence over the public sector (laws, regulations, decrees, etc.) through bribes or other unofficial payments (Hellman et al, 2002).

² Illicit payments by the corporate sector to secure government contracts (Hellman et al, 2002)

³ Rent-seeking by the public sector is termed as ‘rent-seizing’ by Ross (2001).

2001). If trade liberalisation is accompanied by privatisation of state-owned enterprises, the rent-seeking opportunities to state officials increase (Bardham, 1997). Economic theory also suggests higher levels of rents and corruption are correlated, since higher rents increase the rate of return to successful efforts of the first rent capturing group in preventing its competitive dissipation (Pearce, 2002).

Evidence and discussion

The evidence mainly supports the contention that removing or reducing trade restrictions is likely to reduce public sector corruption. Empirical studies find public sector corruption is higher in economies characterised by greater state intervention and trade restrictions (Treisman, 2000). Protection and corruption are correlated in many environmental but not forestry-specific studies (Ades & Di Tella, 1999; Damiana et al, 2000). High level corruption was also higher in Mexico before trade liberalisation due to complex import and export procedures involving a high level of discretionary powers (see 6.3).

But it is not as black and white as this implies. There is for example evidence of increased corruption following trade liberalisation in India, China and the Philippines (Harris-White & White, 1996), and various sources argue that more powerful drivers than trade policies drive corruption. For example, the natural openness of the economy (mainly dependent on distance and transport costs) is a more important determinant of corruption than the level of trade openness for some economists (Wei, 2000). Also most of the studies which link higher corruption with protection are not specific to the forest sector, and may under-estimate the effect of high export rents from trade liberalisation (Box 2).

Another observation from the literature is that while it may not necessarily reduce the overall level of corruption, forest trade liberalisation alters the distribution of corruption benefits or 'surplus' forest rent to different stakeholders, since it changes the balance of power among the main instigators and beneficiaries of corruption. Khan (1996) argues that liberalisation can cause a shift in the balance of power between 'patrimonial' and 'clientelist' forms of corruption, and that the resulting scale and distribution of corruption benefits depends on the nature of the 'political settlement' between state and society.

In weak governance situations in which the state does not effectively regulate or tax the sector, rent-seeking opportunities shift to the private sector, especially international stakeholders like transnational companies. For example, a study of economic (including trade liberalisation) and institutional reforms in Tanzania, Zambia and Zimbabwe by Reed (2002) shows that there has been a transfer of the control of natural resource wealth from the state to the private sector. While reducing some corruption by state elites, this has resulted in 'rampant' corruption and collusion between national elites, senior public officials and corporate interests (including international companies). This is attributed mainly to the failure to establish adequate institutional mechanisms for regulation and transparency.

Box 2. Rent-seizing following log export booms

According to Ross (2001) liberalised forest trade results in windfall profit levels or rents, and the temptation for 'rent-seizing' is too great for powerful politicians to resist. His evidence comes from an analysis of the breakdown of forest institutions following log export booms in Indonesia, Malaysia (Sabah and Sarawak) and the Philippines. In three of the four case studies he found a relationship between the time forest rents rose, the rent-seizing actions of politicians, and forest institutional breakdown. Before the export booms, the Philippines, Sabah and Sarawak had strong forest institutions, e.g., including laws protecting indigenous land rights. Following the booms, senior politicians in these countries deliberately weakened forest institutions and regulations to obtain control over the concession allocation process. In the case of Indonesia, rent-seizing by Suharto preceded the export boom. In another example, Thailand's 1989 logging ban resulted in a fivefold increase in timber imports and an export boom for Cambodia, accompanied by windfall profits, a sharp increase in corruption, and the financing of political factions (Le Billon, 1999). But governance was already weak when the export boom started, so it is not directly comparable to the Asian examples.

Ross presents evidence from other sectors to support his case that windfall gains inevitably lead to corruption, e.g., a World Bank study of 18 agricultural exporting countries shows how export stabilisation funds facilitated 'enormous transfers of wealth' from rural to urban areas (Schiff & Valdes, 1992). A recent study of oil and timber producing developing countries (Wunder, 2002) comes to a similar conclusion, at least as regards oil rents.

But a weakness in Ross's argument that the main cause of the problems was windfall gains is the problem of political instability. He admits there were major political changes during the export booms in the three countries which most support his argument; the Philippines moved from democratic to authoritarian rule, while Sarawak and Sabah were in the process of changing from colonial rule to transitional economies and later parliamentary democracies. Each country experienced "repeated changes of government, as party and leaders rose and fell ...many of these shifts produced changes in the security of politicians, and in the exclusiveness of their allocation rights: these in turn can help explain changes in the rate at which forests were harvested, and used for patronage and corruption" (op.cit, p.50).

A critical reform as regards both public and private sector corruption is to reduce discretionary powers over concession allocation through competitive bidding. But there is a chicken and egg problem in that this depends on the governance capacity to establish it effectively. Such reforms are also resisted by state officials and industrial stakeholders benefiting from the *status quo*. Trade liberalisation should increase the reform pressures from prospective new concessionaires for whom an administrative allocation system is a major entry barrier. Whether such sectoral reforms are possible depends on domestic political economy realities. Box 3 shows how the clash of stakeholder interests in Cameroon resulted in an erratic process of forest sector liberalisation in the 1990s.

Box 3. Political economy problems of sectoral reform in Cameroon in the 1990s (based mainly on Ekoko, 1999, Verbelen, 2001)

Attempts at forest sector liberalisation in Cameroon, Africa's largest timber exporter, have been dogged by conflicts and coalitions between actors, including bilateral and multilateral donors, and a lack of political will to carry out the reforms. World Bank-driven structural adjustment policies, including trade liberalisation, helped a rapid expansion of the forest industry from the late 1980s. This resulted in a doubling of the number of logging companies from 1988 to 1996. The new entrants were mainly French, but included some Asian companies. But the move towards forest sector liberalisation has been complicated by a series of conflicts between the three main policy reform actors: the World Bank, the Cameroon Government, representing the domestic industry, and the French Embassy, representing the interests of French logging companies. Foreign companies are responsible for about 75% of timber exports.

Timber industry positions on sectoral reform are reported to depend on interests and means. While well-established companies pushed for access to the resource with minimal regulatory and financial constraints, new entrants were in favour of concession transparency. Domestic industry, supported by the Government with its vested interests, argued against concession auctions and reduced log export tariffs. The political arguments used to gain popular support were that auctions were a threat to national interests since they favoured foreign companies, while protection and administrative allocation were essential to preserve the 'cultural heritage'. Meanwhile foreign logging companies lobbied in Washington and Paris.

This all resulted in a very erratic policy reform process. The 1994 Forest Law attempted to reduce log export tariffs and introduce auctions. But when auctions were introduced, they were abused. A 1999 government field inspection found widespread illegalities involving French and Italian logging companies. The official report particularly noted of the giant French logging company Thanry, and its national subsidiaries, that "the forestry operations, as carried out by this company, undermine the entire forest policy and SFM promoted by the Cameroonian government" (Verbelen, 2001). One interpretation might be that the denunciation of foreign companies tied in conveniently with domestic political economy objectives, helping to thwart donor pressures for sector liberalisation. The government succeeded to some extent in its objective of increasing protection to domestic industry, first by raising log export tariffs in 1997, and then by prohibiting log exports in 1999 (although the log export ban has not been implemented effectively). However, over the last two years there have been more serious attempts to improve forest governance, including a major clampdown on illegal logging (ITTO, 2002b).

3.3 Demand pressures from trade liberalisation

Pro-trade liberalisation position

Trade restrictions like log export bans cause inefficiency and waste since logs are cheap in comparison with other factors of production¹ (Repetto & Gillis, 1988, Karsenty, 1998). Therefore trade liberalisation provides incentives for more efficient and 'sustainable' forest management, which in turn leads to improved private sector

¹ Cheap logs relative to other factors of production result in high levels of waste and inefficiency, leading to negative value-added by the industry. Gillis (1988) showed that the log export ban in Indonesia resulted in an effective rate of protection of 222% for the plywood industry. This led to an annual loss of \$136 million in potential state revenue from foregone production and exports.

governance standards, and increased forest industry pressures for a supportive SFM policy and regulatory framework. Also the experience from the manufacturing sector is that more open economies encourage more efficient and greener technological development, and companies that are more likely to comply with environmental regulations (World Bank, 2000).

Anti-trade liberalisation position

Trade liberalisation favours low cost producers. It increases external demand pressures on public sector forest governance since higher log values make smaller trees, more distant forests and previously non-commercial tree species more viable (Sizer et al, 1999). Unless regulatory capacity is strengthened prior to liberalisation, the result will be an increase in unregulated or illegal logging, fuelled by the higher stumpage values.

Evidence and discussion

The case that trade liberalisation encourages SFM, and thence improved governance, is unconvincing. When there is pre-existing weak governance or control, higher external demand pressures and producer prices are more likely to encourage unsustainable logging than more efficient processing (Sizer et al, 1999). Econometric analysis shows that higher log prices are associated with higher rates of logging in tropical areas (Kaimowitz & Angelsen, 1998). And Barr (2002) points out, in the Indonesia context, a lack of hard evidence for improved milling efficiency following removal of a trade restriction. There is also little effect in vertical integration situations where logs are not purchased by processors. On the other hand, if regulation is stronger, removing a NTM should encourage more efficient processing and SFM.

A further problem is the link between economic efficiency and SFM. The international timber market, except small green 'niche' markets, does not distinguish between efficient SFM and low cost forest exploitation. Many operators are only 'efficient' because their costs are low, and the main reason for this is the lack of environmental regulations and social standards, and/or the ability the timber industry to evade them. For example, Sizer et al (1999) noted that pulp was three times cheaper in Indonesia than Sweden, both countries using state of the art mills. In the case of Sweden, production was based on secondary forest management and certified plantations, while in Indonesia, old growth forests were being clear-cut.

Although it was stated earlier that the impacts of tariff reduction are normally minimal, the elimination by China of its log import tariffs in 1998 has placed serious governance pressures on Indonesia, Russia Far East and Siberia (see 5.3 and 7), countries with weak governance before 1998. There are similar concerns about the forest governance impacts on low (compliance) cost plywood exporting countries like Indonesia from planned cuts in plywood tariffs by the EU, Japan and China (Rice et al, 2000).

But neither is the anti-trade liberalisation position convincing - that trade restrictions reduce demand pressures on forest governance. A clear example of where trade restrictions have done little to dampen external demand pressures is Indonesia where the log export ban helped build up the largest plywood export industry in the world, much of the raw material coming from illegal logging (Ross, 2001). Also where laws are hardly implemented in the first place, introducing a trade restriction makes

little difference except to increase the level of forest crime. The 2001 log export ban in Indonesia has had little effect on actual log export flows (5.3).

As regards the impact of trade liberalisation demand pressures on community level forest governance, the Mexico case study observed a tendency for them to weaken local institutional controls where natural and social capital levels were already low, whereas it has stimulated improved governance in better resourced community forest enterprises (6.3).

On balance, the evidence suggests that for most developing and transition economy countries, *existing* regulatory capacity is too weak to control external demands on the resource, and a likely outcome of trade liberalisation is an increase in unregulated logging. For example, econometric studies show that reduced export tariffs led to increased illegal logging in Indonesia (Barr, 2001). As already pointed out, higher forest rents are also associated with increased corruption where public sector governance is weak (Ross, 2001).

3.4 Green market pressures: timber certification and procurement policies

Pro-trade liberalisation position

Trade liberalisation increases the impact of international green market pressures like certification and green procurement policies (as promoted by several European governments). In a more liberalised trading scheme, there are higher returns to certified forest product exports. As certification and green procurement become more prominent, and the non-green market diminishes in size, there are increasing incentives for companies and communities to comply with forest regulations (Bass et al, 2001). This is because forest governance principles comprise many of the basic certification conditions; for example, Forest Stewardship Council (FSC) certification requires adherence to forest and labour laws, and demonstrable social benefits, e.g., forest companies should sponsor sustainable community development in areas affected by timber extraction¹. Secondly, companies incurring the costs of certification are more likely to pressurise governments for a more supportive policy and institutional basis for SFM.

Trade liberalisation also facilitates 'trading up' whereby higher environmental product and governance standards in an importing country induces higher standards in exporter countries in order to access the market (Neumayer, 2001). For example, there is evidence from the horticultural sector of how consumer-led green market pressures (particular via northern supermarkets) for more organic and healthier produce have resulted in higher management standards in exporter countries, especially through strategic commercial alliances (Utting, 2002).

Anti-trade liberalisation position

There are various shortcomings of certification and timber procurement initiatives which reduce the likelihood of forest governance benefits in developing and transition economy countries:

¹ For example, Bolivian certification criteria include measures to promote community organisation and the development of conflict resolution procedures (Contreras & Vargas, 2002).

- Most forest production is for domestic markets currently disinterested in certification, and forest governance problems are more acute for domestic trade;
- Since the non-green international market is still dominant, certification may be resulting in a net negative governance effect for tropical producer countries. This is because of the trend for (easier to certify) temperate timber to substitute tropical timber on more discriminating markets, causing a shift in tropical timber exports to less discriminating markets;
- Certification and procurement constrain development objectives since they represent a form of trade discrimination;
- Certification is inequitable, since its high cost means that only larger operators can obtain certification, giving them preferential export market access.

Evidence and discussion

Certification is still at a rather incipient stage in the tropics due to its cost and other constraints. While North America and Europe have 8.7% and 5.7% of their forest areas certified respectively, the corresponding figure for other regions is only about 0.5% (Eba'a Atyi & Simula, 2002). About 97% of the total certified forest area is in North America and Europe (Bourke, 2002), and the total certified forest area is still less than 1% of the world's forests outside protected areas.

The main positive governance impacts identified by reviews or evaluations of certification experiences (Bass et al, 2001; Eba'a Atyi & Simula, 2002) relate to private or community level forest governance. They include improved forest management planning and administration (including internal monitoring, evaluation and reporting procedures), increased dialogue with government and other stakeholders, increased acceptance of community representatives in local and national policy fora, and at a more general level, increased company and supply-chain transparency.

There are also emerging examples of how certification can help stimulate enabling SFM policies, deriving from its participatory approach to standards development – discussion of what good forestry is, who should be responsible for it, and how to recognise and measure it (Bass et al, 2001). Benefits have included raising awareness of the potential of SFM, decentralising and democratising the policy processes (e.g., via certification working group debates on certification and procedures, and the stimulus to multistakeholder forest 'round table' fora), through better policy definition (from agreements on certification standards), and from an interdisciplinary sharing of ideas. In some countries certification is beginning to take on a voluntary monitoring function of SFM; in Cameroon, Papua New Guinea (PNG) and Ghana, 'privatised' chain of custody verification mechanisms are emerging which will help enforce forest management and transport regulations.

Positive policy and governance impacts of certification are particularly noticeable in South Africa and Latin America (Box 4). The process of developing national criteria, indicators and principles for SFM in South Africa has been triggered by certification discussions (Mayers et al, 2001). An important legal development has been to make certification mandatory within two years of leasing state forest land, so that it

becomes a (cheaper) proxy to direct state monitoring of forest concessions¹. Perhaps above all certification has intensified the profile of social issues, enabling genuine forest sector contributions into wider national debates and negotiations on labour, land rights and 'affirmative action'. For Bass et al (2001), the great potential of certification is that it has given civil society a greater leverage on policy processes, and can eventually promote a new model of multi-stakeholder governance.

Box 4. Governance benefits from certification in Latin America

Much of the more positive developing country certification experience is emerging from Latin America, particularly Brazil, Costa Rica, Bolivia, Mexico and Guatemala, in the latter three especially in the community forestry sector. In Brazil, the governance benefits from Brazilian plantation sector certification include provision for the resolution of land tenure disputes linked to outsourcing arrangements, and development of a set of national standards for certification of forest management and chain of custody systems (CERFLOR) (May, 2002). Brazil now has a buyers' group of about 70 companies, spanning a wide range of forest products, supplying both the domestic and export market.

The key to the growth of certification has been enabling policy and institutional (including land tenure) reforms preceding or accompanying certification. In Bolivia, for example, the 1996 forest law and the more vigorous monitoring of forest management plans by the *Superintendencia Forestal* has created incentives for certification by (a) showing the seriousness of forest management plans, and (b) making certified forests exempt from government audits (Contreras & Vargas, 2002). Legislation has also provided strong incentives for certification in Guatemala, where certification within three years is a condition of community concessions in the Mayan Biosphere Reserve (Bass et al, 2001).

But the argument that certification is an incentive for SFM is still weak, especially for community forest management. Unlike in the horticultural sector, consumers are unwilling to pay a premium (health and diet are higher priority than environmental concerns). Evidence that trade restrictions can limit certification efforts comes from efforts of certified Honduran cooperatives to access the US market; long delays, wastage and the 'diversion of resources' associated with restrictive export regulations have resulted in repeated commercial failures (Bass et al, 2001). It can more generally be noted that the problems of meeting international quality and supply continuity requirements have made it very difficult for communities to access these niche markets.

There is also still a tenuous link between certification and improved forest governance. The review by Bass et al (2001) concludes that certification has only had a limited impact on enabling policy and legislation, and on non-certified forest management. One reason for this is limited state involvement in the certification process, as determined by FSC and WTO rules. Also governance and forest management benefits have so far been limited in the tropics because certified forests tend to be those *already* relatively well managed (Eba'a Atyi & Simula, 2002). Other drawbacks of certification include:

- it tends to be inequitable, and requires strong policies or hefty subsidies to facilitate the participation of smaller operators (Utting, 2002);

¹ Although there is a concern that this could reduce the effectiveness of voluntary market-based certification (Mayers et al, 2001).

- the proliferation of certification schemes causes producer and consumer confusion;
- chain of custody certification is problematic, for example with multiple source forest products, and since cheating at any point in the supply chain is possible, there is a credibility problem.

A potential problem of certification and eco-labelling is that for some developing countries (and trade economists) they represent a form of 'green protectionism'. Under current WTO rules, state-supported certification could be challenged as a barrier to trade¹. The WTO Sanitary and Phytosanitary (SPS) Agreement already restricts the scope of governments to impose SPS measures (Sizer et al, 1999). While certification is not a trade restriction as long as it is voluntary and private sector, it has some of the characteristics of one in that it encourages consumers to discriminate on 'process and production methods' (Bourke & Leitch, 2000).

Uncertainty over a potential WTO ruling could be having a negative regulatory effect, since the confidence of governments to promote certification and eco-labelling as an incentive for regulatory compliance is tempered. According to Sizer et al (1999), the WTO uncertainty could even deter countries from introducing stricter forestry regulations, as the latter could also be interpreted as a trade barrier. For example, recent revisions to the British Colombian Forest Practices Code, which raised the cost of harvesting, were included in a list of NTMs in the APEC (2000) study.

The evidence also supports the contention that tropical timber is increasingly switching to indiscriminating Asian markets² as a result of its substitution by northern temperate timber on the European market (Karsenty, 1998). For example, African producers like Gabon and Equatorial Guinea used to export timber exclusively to Europe, but by 1996 most of their exports were going to China and other parts of Asia (Sizer & Plouvier, 1998).

A final observation is that the more positive experiences of certification are in countries where there is a slightly better forest governance and policy basis to start with (Bass et al, 2001). As pointed out by May (2002), the control of illegal logging is a precondition for the growth of certification. Therefore a reasonable level of regulatory capacity is needed for certification to be successful – indicating that certification may only marginally benefit existing forest governance.

3.5 TNCs: higher international standards or race to the bottom?

Pro-trade liberalisation position

Large transnational corporations (TNCs), which are favoured by trade liberalisation since they are better able to cut costs than small operators (Sizer et al, 1999; Adams, 1997), tend to have higher management standards than domestic companies. This is because they are influenced by country of origin or international management standards, including the trend towards corporate self-regulation. International market

¹ There is a lack of consensus in WTO on the extent to which certification and eco-labelling schemes constitute 'barriers to trade'. Bourke & Leitch (2000) report differing views in the WTO Committee on Trade and the Environment. Key to making any national certification efforts acceptable to WTO is that they conform to a set of international standards (but this is also problematic).

² Asian markets accept a wider range of species, smaller logs, and lower quality timber than northern markets (Sizer & Plouvier, 1998).

integration also encourages improved management standards in TNCs (Utting, 2002).

Evidence from transition economies (Transition Newsletter, 2000) shows that better quality TNCs (which are important for national economic growth, employment and the trade balance) prefer to avoid corrupt and insecure investment environments, while more rent-seeking TNCs (bringing fewer macro-economic benefits) seek out weak governance situations. This acts as an incentive to countries to improve governance (Wei, 2000). Socially responsible TNCs and governments therefore have a mutually supportive interest in improved governance.

Anti-trade liberalisation position

In the forest sector, especially in developing countries and transition economies, many if not most TNCs tend to have rent-seeking objectives, rather than be interested in long term SFM. Trade liberalisation empowers these more aggressive TNCs, and accelerates the 'race to the bottom'. TNC claims of higher international governance standards like commitment to voluntary self-regulation tend to be 'corporate greenwash' (Utting, 2002).

Evidence and discussion

The evidence is mixed over the governance impacts of TNCs in developing and transition economies. On the more positive side as regards trade liberalisation, the historical experience of Africa has been that state controls in authoritarian political regimes have suppressed competition and blocked the entry of TNCs, allowing natural resource wealth to be exploited by corrupt national elites (Reed, 2002). The same study found that, subsequent to economic liberalisation, TNCs have generally held themselves accountable to higher environmental standards than those established by host governments, basically due to fear of eviction (Reed, 2002). The Mexican and Brazilian case studies also indicate that foreign companies are more law-abiding for the same reason.

On the negative side, there are various flaws to the argument that there is a mutually supportive interest between TNCs and governments in promoting better forest governance. Firstly, most of the evidence for this position is not from the forest sector, in which there are greater opportunities for windfall profits; international forest product markets do not penalise bad governance or corruption, in contrast to other environmental and manufacturing sectors (Ross, 2001). Second, the transition economy literature shows that *inferior* quality foreign companies are attracted by lax environmental standards (Transition Newsletter, 2000); less scrupulous TNCs are more likely than their domestic counterparts to be involved in state capture or public procurement kickbacks¹ (Hellman et al, 2002). The Indonesia case study supports this contention (5.3). In the short term at least, this confirms the tendency of more exploitative TNCs to target weaker governance countries. While there are some examples of responsible forestry TNCs, mainly of European and North American origin, there is a huge INGO literature on the abuses of TNCs in countries where forest governance is weak (Box 5).

¹ Hellman et al (2002) found that TNCs with local partners are more likely to engage in state capture, while TNCs with an overseas headquarters are less likely to do so. However the latter are more likely to use public procurement kickback payments to secure contracts.

Box 5. Transnational companies and the race to the bottom

One estimate is that TNCs control 90% of the global timber trade (Dudley et al, 1995). The literature is rich in examples of aggressive TNCs which appear to take advantage of weak forest governance, as reported by INGOs like Forest Monitor (2001), the Environmental Investigation Agency (EIA, 1996 and EIA & Teleapak, 2001), Greenpeace (2001), Global Witness (2001), WWF (2002), Friends of the Earth (Glastra, 1999), FERN (2001) and others. There is considerable evidence from these and other studies that TNCs systematically move from one country to another relocating where environmental regulations are weakest.

One of the more authoritative studies was by the World Resources Institute and WWF (Sizer & Plouvier, 1998). This study highlights differences between 'new' and older TNC forestry investments. It found that newer TNC operations tend not to invest in processing since export logging is more profitable; a high mobility of capital, with equipment rapidly moved from one country to another to take advantage of higher profitability; and frequent use of their own expatriate as opposed to local labour. The study observed that "the new investments have been concentrated in countries with generally weak or outdated environmental and social laws and little enforcement capacity", for example, PNG, Solomon Islands, Guyana, Suriname, Cameroon, Gabon and Equatorial Guinea. These countries are characterised by poor monitoring capacity, inefficient tax collection, lack of auditing capacity, and widespread administrative irregularities.

A particularly notorious case has been that of Rimbunan Hijau in PNG. This company has controlled about 40-50% of PNG's log export trade through the 1990s by means of a Sino-Malaysian cartel involving several clusters of companies, each cluster containing foreign exporters and national, mainly 'local landowner', companies (Filer with Sekhran, 1998). These companies were connected through mutual shareholdings, overlapping directorships, and shared office facilities. In 1993, PNG's forest minister complained that Rimbunan Hijau was using its connections to block the implementation of the National Forestry Development Guidelines, at the same time as financing a new daily national newspaper to curry public favour. For Filer and Sekhran (1998), this cartel is the main obstacle to 'rationalisation' of forest management in PNG. They also point out that, unlike foreign mining and oil companies from North America, Europe and Australia, Malaysian timber export companies have not been subject to country of origin environmental pressure groups.

The problem of aggressive TNCs is by no means restricted to tropical or developing countries. For example, EIA (1996) reports how timber companies opposed stricter environmental regulations in Alaska, lobbying against protected areas for boreal forests. There have been clashes with indigenous populations and their property rights in such countries as Australia, New Zealand, Alaska and Lapland, the latter case involving old growth forests valuable to the Sami people for reindeer grazing (Dudley et al, 1995).

The INGO evidence on TNC behaviour also suggests that corrupt governments purposefully encourage less responsible TNCs. For example, low forestry taxes, weak monitoring and enforcement capacity, and corruption in concession allocation in Congo-Brazzaville have resulted in foreign logging companies controlling most of the concessions; such policies have allowed a subsidiary of the giant Malaysian company Rimbunan Hijau to gain control over most of the commercial forest in Equatorial Guinea (Forests Monitor, 2001). Stricter domestic conservation laws can also encourage TNCs to relocate where effective regulation is weaker. For example, Stone Corporation has admitted that it operates mainly in Latin America to avoid stricter rules in the US (Dudley et al, 1995). According to EIA (1996), logging or log export bans in Asia in the early 1990s, e.g., Indonesia (1992), Thailand (1989), Laos

(1991) and Vietnam (1992) resulted in Malaysian, South Korean and Indonesian TNCs investing heavily in western Amazonia. These cases seem to confirm the 'race to the bottom' hypothesis in the forest sector.

But this runs counter to the conclusion of most environmental sector studies that there is weak evidence for an overt race to the bottom in the environmental sector (Neumayer, 1999; Fredriksson, 1999). For example, a study by Mabey & McNally (1999) finds that the capacity and willingness of TNCs to support or break laws varies between firms, sectors and countries, depending on:

- the origin of the TNCs (Asian companies are generally more aggressive than European and North American companies, which face greater country of origin pressures for transparency and accountability);
- how discriminating the import markets are;
- the flexibility of exporters to switch to less discriminating markets;
- the distribution of power along the commodity chain;
- the degree of dispersion or integration of the commodity chain; and
- other factors affecting the relative ability of different actors to capture rent.

But forestry may be a special case due to the prevalence of market and policy failures encouraging resource exploitation. The case study evidence suggests there is a race to the bottom in weaker forest governance countries like Indonesia, but that foreign companies tend to have higher governance standards in improving governance countries like Mexico and Brazil.

3.6 The temptation to reduce compliance costs

Pro-trade liberalisation position

The stimulus that trade liberalisation gives to efficiency (as argued in the 3.3 pro-trade liberalisation position) should result in *bona fide* cost savings, which allow for a rise in compliance costs as necessary. The pro-trade liberalisation arguments already given also favour legality over illegality.

Anti-trade liberalisation position

A liberalised trading regime results in increased competition on domestic markets, encouraging both governments and the private sector to reduce compliance costs in order to maintain or develop a comparative advantage. Also the claim that trade liberalisation results in *bona fide* efficiency or cost saving improvements is unproven in weak forest governance situations (3.3). Thus trade liberalisation encourages forest managers or users to ignore or illegally evade environmental regulations which increase their costs, and exerts a chilling effect on state imposition of cost-increasing regulations (Glastra, 1999, WWF, 2001).

Evidence and discussion

The evidence generally confirms that trade liberalisation has a chilling effect on environmental regulations, at least in developing countries. Utting (2002) reports that 'competitive fears' are often cited as the reason why developing countries have not introduced stricter environmental regulations. The Mexico case study (6.3) found that NAFTA has probably stimulated illegal logging in community forest enterprises

(CFEs) less well endowed in terms of their natural and social capital, and supplying local rather than export markets. But this has not happened in the case of better organised export-oriented enterprises with higher value forests. Therefore there is a 'chicken and egg' problem with the anti-trade liberalisation position. Whether forest managers can cut compliance costs depends on existing regulatory capacity. Therefore it is not trade liberalisation *per se* which is the problem, but underlying regulatory capacity.

3.7 State capacity to internalise social and environmental externalities

Pro-trade liberalisation position

Trade liberalisation can be an important policy to reduce the power of corrupt governments (see 3.2) with little interest in internalising externalities (Laarman, 1999). A more liberalised trading regime does not *per se* prevent a government from taking actions to limit externalities, e.g., through full-cost forest pricing. Also an important benefit of higher forest product values resulting from trade liberalisation is an expanded revenue base for strengthening regulatory capacity (Adams, 1997).

Anti-trade liberalisation position

The benefits of trade liberalisation will be dissipated as a result of the erosion of natural and social capital *unless* governments put in place complementary policies to counteract negative social and environmental externalities (WWF, 2001). Just as it is desirable to reduce the powers of corrupt governments, it is undesirable to increase the powers of an aggressive private sector. It can be argued that trade liberalisation increases the power of the private sector, especially if accompanied by deregulatory reforms, privatisation and/or a structural adjustment programme (SAP). These reduce the capacity of governments to control the private sector, regulate the market place, and internalise externalities (Andersson et al, 1995). The private sector is naturally less concerned than the state over the loss of non-market forest values, or the equity issues arising from public-private rent transfers.

Evidence and discussion

There is evidence to support the view that sustainable growth is undermined by uncompensated social and environmental externalities arising from trade liberalisation. One of the case studies in a CEDR/UNEP (2001) study examined the economic impacts of trade liberalisation on the Tanzania forest sector. It found that the economic costs, including an accelerated deforestation rate (partly due to weak control), almost exactly outweighed the benefits, which included higher forest product values and a growth in forest product trade and employment. A similar but less forest-specific conclusion was reached by Reed (2002), although the latter also comments that liberalising the natural resource based economies of Tanzania, Zambia and Zimbabwe was crucial for raising living standards.

When trade liberalisation is accompanied by a SAP, deregulatory reforms and/or privatisation, as happened in Mexico between 1992 and 1997, there can be serious regulatory problems over an empowered private sector. Key informants in Mexico regarded deregulation and the SAP as more important drivers of illegal logging than trade liberalisation. In retrospect deregulation was a poor preparation for NAFTA.

Regarding the argument that trade liberalisation can improve the financial basis for strengthening institutional capacity, it has been estimated that only about 10% of the revenue from the developing country logging and sawnwood sectors remains in-country, and 35% from other timber products (EIA, 1996). Unless governance is *already* sound, forest revenue tends to be squandered. Also, in most developing countries, forest revenue is usually siphoned off by the Treasury.

But the anti-trade liberalisation position is weakened by the observation that the record of governments in managing non-market values in protective trading regimes has often been poor. Laarman (1999) points out that state control and ownership of forest resources in Latin America in the 1990s reinforced social inequities, and that state regulation of private forests can result in fraud and injustice. In practice, whether externalities can be internalised is more a case of political will, and having the research and administrative capacity to establish the necessary economic incentives for SFM and cost internalisation (Richards, 2000). It is also a question of reducing externality inducing subsidies (Box 6).

Box 6. Subsidies and forest governance

The reduction or abolition of subsidies can be expected to lead to significant forest governance improvements, judging by the negative effects of keeping these subsidies in place. For example, according to Sizer et al (1999), subsidies and weak governance in British Columbia have combined to result in over-cutting of old growth forest in remote areas. Plantation or fiscal subsidies in the past in Brazil, Chile, Guyana, Indonesia, Thailand and elsewhere have resulted in conflicts with indigenous groups (Rice et al, 2000). Trade liberalisation may eventually direct more attention to the issue of subsidies, since financial support for competing industries is in principle against WTO rules.

3.8 Liberalisation, economic growth, equity and governance

Pro-trade liberalisation position

Trade liberalisation is essential for foreign direct investment (FDI), economic growth and wealth creation. Wealthier countries with more liberalised trading regimes have stronger environmental regulations and institutions (Damiana et al, 2000). As economies grow, the rewards to 'productive', as opposed to rent-seeking investments, rise; better paid civil servants reduce the incidence of petty corruption; and more transparent and accountable institutions make it difficult to sustain corruption networks (Bardham, 1997).

Anti-trade liberalisation position

Trade liberalisation leading to faster growth and higher income is unlikely to result in better governance in poorer countries due to the Kuznets Curve effect, i.e., as economic growth and incomes rise, governance gets worse before getting better (Bardham, 1997). For example, as markets expand, there is increased scope for officials to benefit from granting rights and franchises. Many developing countries do not reach the 'threshold' income levels at which forest governance might improve (Adams, 1997). Also the theory of comparative advantage ignores social and environmental externalities; these slow or even reverse the long-term growth trend (WWF, 2001).

Another problem of trade liberalisation is that it tends to be inequitable. It favours capital and knowledge-intensive export production, which can undermine rural livelihoods (Halle et al, 2002). The benefits go mainly to national elites, TNCs and international consumers, while smaller operators find it difficult to compete. Competition can easily be transformed into conflict through a mix of environmental stress, ethnic rivalry and political manipulation (Halle et al, 2002).

Evidence and discussion

An initial controversy with the pro-trade liberalisation view is how much trade liberalisation generates *sustainable* economic growth, a discussion beyond the scope of this paper. There is though a strong positive correlation between per capita incomes and the quality of governance (Kaufmann & Kraay, 2002), just as higher levels of corruption associated with trade restrictions are correlated with lower economic growth and per capita incomes (Hellman et al, 2002). Corruption hinders growth both because it reduces FDI, and secondly because it attracts lower quality FDI which is much less growth-inducing.

But Kaufmann & Kraay (2002), by unpacking the per capita income and governance correlation, provide a more nuanced explanation in which they find that increased wealth can weaken governance. Data from transition economies¹ shows that while there is a strong positive causal effect running from better governance to higher per capita incomes, there is a weak and even negative causal effect in the opposite direction, i.e., rising incomes can be associated with a decline in governance quality. These authors then used more qualitative diagnostic data from Colombia, Honduras and Peru, to argue that as countries become wealthier, higher incomes are appropriated by captor firms and elites, and the very success of these captor firms undermines public sector governance mechanisms (policies, regulations, law and order). In a growth situation there is an increasing demand for 'state capture' which is often abetted by an *a la carte* supply of laws, regulations and policies offered by corrupt politicians. But the authors admit that these explanations are speculative, and the relationships need further research.

Proceeds from illegal logging have been used to finance civil disturbance and wars in a number of countries, for example, in Liberia (Global Witness, 2001), Cambodia (Le Billon, 1999), Nicaragua and Indonesia (Halle et al, 2002). But trade liberalisation *per se* is not to blame. Such inequities, divisions and conflicts are caused by underlying social and political economy problems which pre-date liberalisation, and that have been built up through the power of protected elites in closed economies, as stressed in Reed's (2002) African study. The risks of destabilisation and conflict are probably less than the political and security benefits of more open trade, including those stemming from increased international integration and cooperation (Halle et al, 2002).

3.9 Conclusions for forest governance impacts of trade liberalisation

Both protagonists and opponents of forest trade liberalisation can assemble a set of powerful sounding arguments for positive or negative impacts on forest governance, but there is a weak empirical basis to most of the arguments. This is firstly because

¹ Econometric analysis, based on a 1999 survey of 'state capture' corruption among 4,000 companies working in 24 transition countries.

the impacts of trade policies on governance (and on the environment) are indirect, complex and often perverse (Sizer et al, 1999, Rice et al, 2000). This makes the relationship hard to assess and test. Among the problems of trying to assess governance or corruption as a dependent variable are the two-way relationships between the dependent and explanatory variables (e.g., political instability encourages corruption, but corruption also causes instability), and causative relationships between the explanatory variables¹. Therefore cause and effect become very difficult to establish. This also explains why there are conflicting viewpoints; even the neo-classical economics literature is ambivalent about the effect of higher rents on corruption (Ades & Di Tella, 1999).

The evidence does however suggest that trade liberalisation exerts a mixture of positive and negative governance pressures depending on the presence or absence of policy, institutional and market failures which pre-date liberalisation. It is generally the case that trade liberalisation forms part of a broader economic reform package which may include a SAP, deregulatory reforms, decentralisation and privatisation. It will be the make-up of the broader economic reform package and the particular mix of policy and market failures which determines the effectiveness of the wider liberalisation package. For example, the inclusion of sectoral reform measures like concession bidding and effective forest taxation, and other measures to strengthen the institutional framework to deal with the impacts of liberalisation, are key to whether trade contributes to a 'downward spiral' or 'virtuous cycle' of forest governance.

Therefore whether increased (or reduced) external trade pressures and domestic forest product values resulting from trade liberalisation have a positive governance impact (through encouraging SFM) or a negative one (e.g., an increase in unregulated logging) depends on the strength of public sector governance, especially regulatory capacity, in the first place. A clear example of this surrounds the evidence surrounding TNC behaviour and the race to the bottom. Increased trade pressures can further encourage good environmental governance, and exacerbate weak governance, as pointed out by Adams (1997). An initial conclusion therefore is that trade policy *per se* is not a major driver of forest governance.

¹ Attempts to unravel trade, environmental and governance relationships refer to these problems as 'system complexity' (Lofdahl, 2001) and 'endogeneity' (Deacon, 1994).

4. Brazilian Amazon case study¹

4.1 Introduction

Brazil is the world's largest producer and consumer of tropical timber, but contributes only about 4% (\$450 million) of global tropical exports. This is because domestic forest trade accounts for about 86% of tropical timber production (São Paulo alone consumes 20% of Amazon timber). Although environmental objectives have meant that Brazil's forest trade policy is a mixture of protection (export restrictions) and liberalisation (reduced import tariffs and other NTMs), there has been a considerable increase in timber exports and FDI.

The main focus of the case study was on comparing external and domestic trade impacts on forest governance. This was achieved mainly by comparing forest governance issues in an area (Amazonas State) with a strong export orientation and high involvement of foreign owned companies, and an area with mainly domestic companies predominantly supplying the national market (Pará State). The main reason for the higher domestic market orientation of Pará State is that it is much better connected to the national road network, which facilitates domestic trade, whereas most timber from Amazonas State is transported by river.

4.2 Forest trade policy and governance overview

Until the early 1990s, Brazil's general trade policy was protectionist, with the objective of promoting import substitution. But since Brazil was (and still is) a large net exporter of forest products, these policies had little impact on the forest sector. The most important trade restriction was the ban on log exports from the early 1970s. This has not achieved its main objective of promoting higher value processed exports. While there was a significant general policy shift to trade and capital liberalisation (and privatisation) in the early 1990s, with reductions in tariffs and the removal of most NTMs and foreign capital restrictions, the timber sector was not significantly affected - in fact environmental objectives have resulted in increased export restrictions. In 1990 the government established a system of export quotas for mahogany decreasing over time: 150,000 m³ in 1990, 65,000 m³ in 1998, and 30,000 m³ in 2001. Since this did not stop illegal logging, a ban on all mahogany exports was imposed in December 2001, including sawnwood from authorised management plans. Furthermore there was an embargo on new forest management plans involving mahogany in 1996, and the closure of all remaining mahogany-producing forest management plans in 2001 as part of a wider suspension of concessions due to fraud or 'technical' problems².

In spite of these trade restrictions, the attractiveness of timber exports increased sharply as a result of successive devaluations in 1999, 2001 and 2002. Before this the national currency was overvalued, decreasing trade competitiveness. Another stimulus for timber exports was the reduction of value-added tax on timber exports in

¹ Research undertaken by Carlos E. Frickmann Young based mainly on interviews with government, corporate and NGO stakeholders at federal and State levels in October and November 2002, and relevant secondary data. It is important to note that this case study focuses on the tropical forest trade, and does not report on the issues surrounding the Southern Brazil plantation sector.

² In 2001 IBAMA suspended forest management plans corresponding to half the total concession area.

the late 1990s, although this has mainly benefited those at the marketing end. It can therefore be observed that the stimulus to timber exports has been due to macroeconomic policies rather than forest trade policies.

Clearance for agriculture (subsistence farming, cattle farming and soyabean cultivation¹) is the main driver of Amazonian deforestation. But this has strong connections with timber, since loggers often finance clearance for subsistence farming and cattle raising, and most timber from the frontier is used commercially – flooding local markets. Timber extraction and farming also establish colonist property rights over state land; the ‘property rights race’ is a major cause of deforestation. These incentives, and the low returns to forest management or conservation relative to other land use options, make it very difficult to enforce the legal restriction that 80% of land on all rural properties in the Amazon be retained as a ‘legal (forest) reserve’. In spite of the prevailing incentives, recent years have seen evidence of a shift towards better forest governance:

- the 1998 ‘Environmental Crimes Law’ increased the power of environmental protection agencies like the Brazilian Environmental Institute (IBAMA); stricter regulatory enforcement and higher penalties have greatly increased the cost of ‘legalising’ timber and reduced the level of illegal logging in the Amazon to an estimated 20%;
- considerable ‘private’ forest has been returned to the state following a review which found widespread corruption and irregularities in the concession process;
- new efforts have been made by state governments to enforce legislation, e.g., Matto Grosso State is using remote sensing and GIS technology to enforce the 20% deforestation limit, while Acre state has placed a 15% cap on deforestation and is providing incentives for forest management (over cattle ranching);
- increased environmental action by municipal governments, and higher levels of local participation, often as a result of specific projects like the ‘Fire Protocol’ and with the assistance of NGOs and donors (especially through the Brazil Pilot Programme);
- the federal initiative to introduce long-term National Forest logging concessions (FLONAs) following an international auction process (16 million ha of FLONAs have been established to date).

But there is considerable political opposition to such measures, for example by the powerful ‘*ruralista*’ lobby in Congress, which opposes the 80% legal forest reserve restriction. At the frontier, corruption, illegal logging and violence continue unabated in response to the low risk of being caught. The *Avança Brasil 2002-2007* development plan involves a major expansion of the Amazon road network, partly to facilitate soyabean exports. This is predicted to result in 120,000-270,000 km² deforestation within 25-35 years (Nepstad et al, 2002).

¹ In terms of rainfall, the Amazon can be divided into three large regions: dryer areas (less than 1800 mm per year), transitional areas, and humid areas (above 2200 mm). Soyabean cultivation prefers the dryer areas, while cattle farming is profitable in dryer and transitional areas. In humid areas, rainfall and soil conditions constrain these land use options, so forest management or logging still remains the main option for 45% of the Amazon (Schneider et al, 2000).

4.3 External trade pressures and policies as forest governance drivers

Evidence of more positive governance impacts

The comparison between the more domestic-oriented production of Pará State and the greater export orientation of Amazonas State indicates that the latter situation is more conducive to better forest governance; foreign owned companies, which control about two-thirds of the State's wood exports, are generally more law abiding, and certification is becoming a significant market-access incentive. By contrast there was a much higher level of private sector corruption in the Pará sawmilling industry. The latter is dominated by relatively small-scale and family-based domestic companies with low levels of managerial capacity and communication skills. These companies find it difficult to access foreign markets, so rely on an oligopsony of timber traders who retain most of the rent. Such conditions tend to make domestic companies more rent-seeking (or likely to want to cut compliance costs) in their behaviour than international companies.

The study identifies a range of governance benefits from export market-led certification, many of them spilling over to domestic forest trade:

- it encourages compliance with environmental standards, labour rights, land tenure and fiscal legislation - this can have important 'knock-on' governance impacts. For example, if labour rights are respected, labour unions, which are a major channel for civil society involvement in governance, can be more effective;
- it has put more pressure on IBAMA for effective control;
- it has led to the formation in 1998 of a domestic buyers' group, the Brazilian Association of Buyers of Certified Wood; and the development, with federal support, of the Brazilian certification system CERFLOR (Box 4), although this is yet to be recognised internationally;
- it has resulted in partnerships between NGOs and the private sector.

The export trade, and the threat of an invasion of Asian TNCs in the mid-1990s, resulted in a major media focus on the problems of illegal logging in the Amazon. This situation empowered NGOs and civil society to influence regulatory policies, and has led to an increase in IBAMA's regulatory capacity and stricter legislation.

Evidence of more negative governance impacts

There are some important export market niches encouraging illegality, for example parts of the US market accept mahogany without proof of origin. Attempts to control the mahogany trade by closing concessions and banning mahogany exports, partly in response to green international pressures, have been disastrous according to informed opinion. Since new forest management plans have been prohibited from 1996, the previously issued logging authorizations became the main source of mahogany; 81% of these are controlled by five "mahogany kings" with a long history of infractions. Meanwhile new initiatives to develop SFM face the problem of not being able to work with by far the most valuable species, as well as continued competition from predatory loggers who are able to market mahogany. It has probably increased corruption (for example, through 'species mis-specification'), and may be driving mahogany to the less regulated domestic market.

There is a strong trend towards land and capital concentration in the export-oriented sector. Where property rights are unclear, timber companies find the only way to ensure all the wood in their concession area is from 'sustainable management' is by buying up all the land in the management plan. This is increasing pressures on smaller companies to resort to illegal land seizure to stay in business, and increasing social tensions in logging areas.

The flip side to increased control of export-oriented forest management, both as a result of the national mass media attention and increasing international pressures to control the mahogany trade, is reduced attention and resources for domestic trade regulation. The governance and environmental problems surrounding 'deforestation authorisations' (which account for about 60% of Amazon timber production) are reported to be much more serious than those of the closely monitored forest management plans (about 4% of the total).

The case study also finds that the quality and governance demands of the international market increase the fixed costs of production, which may encourage firms to reduce compliance costs. But high interest rates and lack of institutional credit are equally to blame for high production costs and reduced investment in improved practices. Such negative economic conditions, which discourage better forest level governance standards, are in stark contrast to the southern plantation sector which has been highly favoured by credit and fiscal incentives. Finally, a concern over the development of certification on the national market is that it results in a comparative advantage for easier and cheaper to certify Southern plantation timber, so that tropical timber is likely to be diverted to the non-certified market.

4.4 Other forest governance drivers

The case study shows that it is too simplistic to make black and white distinctions between the governance behaviour of export-oriented and foreign-owned companies, and the more domestic-oriented and owned sector. This is because of the various underlying conditions which drive forest governance. In Pará State, there is a developed road network, and a dynamic and open forest frontier resulting in a constant supply of cheap timber¹; poorly defined property rights² which provide an insecure basis for long-term forest management plans; and a relatively high density of commercial species. These conditions favour the establishment of 'low tech' rent-seeking companies oriented to lower value domestic markets. By contrast Amazonas State has a less open frontier due to the undeveloped road network, better defined property rights, and a lower density of commercial species. But if the area becomes better connected to the road network, such conditions could change rapidly.

The main forest governance problem in tropical Brazil is lack of control over the relatively much larger domestic trade, dominated by construction timber. It is mainly supplied by colonist farmers and more 'predatory' loggers, often through illegal logging. Compared to the export trade, in which exports can be more easily tracked

¹ The case study argues that forest governance is only likely to improve when the frontier timber supply is brought under control, since this creates a 'scarcity factor'. The 16 million ha (established so far) of FLONAS and eight million ha of extractive reserves are important steps in this direction.

² Most forest management plan failures can be traced to illegal appropriation of state land with falsified documents, border disputes and indigenous property right conflicts.

to the ports, domestic trade is much more difficult to supervise, partly due to the complex networks of middlemen.

Financial instability is identified as a major cause of short-termist behaviour. The main uncertainties have involved high inflation and/or interest rates, fiscal crises and over-valuation of the exchange rate throughout the 1990s. These factors resulted in major fluctuations in the demand for construction timber. While this instability affects the domestic market more, the export market is also somewhat volatile; this complicates access to credit, and constrains export levels.

Other important drivers of Brazil's improved forest governance include the country's relative political stability and better-developed democracy, in comparison with Southeast Asian countries for example, with an increasingly prominent role for civil society. The case study also notes that regional development incentives and sectoral policies are more important drivers of forest governance than trade policies.

4.5 Conclusions for forest governance impacts of trade policies

The case study found that the better governance record of export-oriented TNCs can be largely explained by underlying conditions like road access, the openness of the frontier, and tenure security. Positive effects include the development of certification, resulting in a 'knock-on' effect on the domestic trade front with the formation of a national buyers' group. Also the heightened attention to governance issues surrounding the export sector, and the threat of an influx of foreign capital have resulted in a higher profile of illegal logging and an increase in regulatory capacity. However, increased regulation of the export trade has been at the expense of a reduced vigilance of the domestic trade in which governance problems are worse. How to control domestic market oriented production and trade remains the main challenge to improving forest governance.

Finally it is important to note how the attempt to use trade restrictions to encourage mahogany conservation, mainly in response to international pressures, shows how trade policies tend to be ineffective in achieving environmental objectives, and often lead to perverse effects - in this case increased corruption, and diversion of mahogany production to unregulated markets.

5. Indonesia case study¹

5.1 Introduction

This case study focused on the province of East Kalimantan, one of the most important timber producing provinces of Indonesia. Some research was also carried out in the neighbouring Malaysian state of Sabah, which has close timber trading links with East Kalimantan. Forest trade policy can be characterised as basically protective, with the exception of the temporary lifting in 1998 of the 1983 log export ban, only to be reintroduced in 2001. There was a 12% import tariff on most forest product imports.

5.2 Forest governance overview

Prior to 1998, the main governance problem was corruption in the form of crony monopolies associated with central government, while *adat* or customary law, which had provided some protection for local property rights, was marginalised. Following the fall of President Suharto, political power and rights became decentralised, but were dissipated in regional and district politics, resulting in little effective overall change in governance. *Adat* was reinstated in 1997-98, but its authority rejected by the main stakeholders (except forest communities).

In early 1999, the Ministry of Forestry announced that, due to strong indications of corruption, collusion and nepotism in several of the HPH (*Hak Pemungutan Hasil*) logging licences (issued directly by central government), a few licences would be withdrawn. These mainly large concessions were subsequently broken up into smaller concessions to comply with new regulations. Governors and Regents at the provincial and district level had the authority to issue permits for these smaller concessions. These small concessions became known as HPHH (*Hak Pemungutan Hasil Hutan*) and IPPK (*Izin Pemungutan dan Pemanfaatan Kayu*), respectively. HPHH were supposed to be limited to the use of non-mechanized timber extraction methods, while IPPK licences were for small community plantations.

Within weeks of this policy announcement, Regent offices in East Kalimantan were flooded with applications for HPHH and IPPK permits. In Berau district, by the end of 2000 more than 100 applications had been submitted. This pattern was repeated across most districts, and small concessions became the dominant form of log production. These concessions were mainly taken up by formerly illegal loggers. Since the policy rationale behind small concessions was to allow disenfranchised rural communities to access forest resources, regulatory measures to supervise the emergent sector have been minimal. The movement of large quantities of heavy machinery to operate the small concessions has been documented.

Devolution of political power also resulted in increased economic autonomy for the regions. However, a prolonged economic crisis stemming from devaluation in 1997 led to increased conflict over natural resource revenues, a situation made more acute by political instability. Local communities, and people who lost their jobs in the

¹ The research was undertaken by Charles Palmer and Krystof Obidzinski in April 2002, and was based on meetings with a range of forest stakeholders including FD officials, communities, timber trade associations, loggers and other timber industry representatives, as well as secondary data. Within East Kalimantan, the research focused on Berau District, the most important timber export region.

economic meltdown, began to rely increasingly on forest resources to meet their needs. In the new era of *reformasi*, local governments have to appear sympathetic to local needs; this includes 'turning a blind eye' to illegal logging. The economic crisis also affected the operations of larger logging companies, many of which were plagued with large debts as well as accusations of corruption. Some companies were forced to leave their concessions idle; local communities have moved into these concessions to conduct illegal logging activities.

Political and financial instability, a haphazard decentralisation process, legal confusion, and autonomous decision-making in the forest sector have been the main drivers of weak forest governance in East Kalimantan. These factors have led to a short-term business mentality. As a result of power struggles between different administrative levels of forestry bureaucracies, regulatory frameworks have turned into a maze of mutually incompatible, counterproductive and frequently contradictory rules. Inseparable from this is the institutionalised corruption and patronage, with almost all security and law enforcement agents suffering from a collapse of morale, low incomes and lack of incentives for good governance. For example, forest law enforcement is mainly ineffective since bribing is much cheaper than paying official taxes, and the bribes are eagerly accepted.

5.3 External trade pressures and policies as forest governance drivers

The illegal export trade: fuelling the system

The (estimated) two million m³ (roundwood) illegal log export trade between East Kalimantan and Sabah is reported to play a central role in supporting the patronage and clientelism in East Kalimantan's governance system. Export traders admitted they make substantial payments to district and province level government institutions, particularly the military and police. For example, one trader said he pays a monthly fee (or salary) to district 'commanders', and covers all the official and private travel costs of medium and higher ranking officials.

Regional trade and governance pressures on Indonesia's forest governance

The case study observes that regional trade pressures, linked to the rapid economic growth of China and forest governance improvements in Sabah and China, have combined with political and economic instability as the main drivers of illegal logging (and deforestation) in Indonesia. External trade pressures on East Kalimantan have particularly increased as a result of stricter regulation in Malaysia, Indonesia's wealthier neighbour. A stricter concession policy was introduced by Malaysia in 1997, resulting in slightly improved control; the annual log production of Sabah was roughly halved to about 200,000 m³. This resulted in a large domestic market shortfall in Sabah, and higher timber prices than in East Kalimantan. While timber smuggling and a timber price discrepancy between East Kalimantan and Sabah is not new¹, the price difference may be increasing in relative, if not absolute, terms². Sabah's low import tariffs (3% on logs and veneer) have also increased the demand pressures on

¹ There has been a history of cross-border smuggling with Sabah since the 1960s.

² The study reported that the price of Red Meranti logs over the 1990-2000 period was in a range of \$60-70 per cubic metre in East Kalimantan compared to \$110-125 in Sabah, whereas over 2001-2002, the price ranges were \$30-50 and \$80-105 in the two countries respectively.

East Kalimantan. China, with its rapid economic growth, logging ban and zero tariff on log imports exerts similar pressures.

Furthermore, any effort to improve forest governance in East Kalimantan is constrained by consumer preferences in China, Japan, South Korea and Taiwan – the other main destinations of the province's timber exports. There is only a very incipient interest in certified timber products in these countries. While there are a few hopeful signs for an eventual change in consumer preferences, this will be a long-term process.

Effects of the 2001 log export ban

The 2001 log export ban was introduced to protect the domestic plywood industry, but a combination of trade pressure, both external and domestic, and weak existing governance capacity, have limited its effectiveness. Key informants reported that the export ban has made little difference to export flows since the system of law and order is too weak for it to be effective. Log export traders admitted that almost all their illegal shipments get caught by the Indonesian navy or customs, who are on the lookout for bribes of up to hundreds of millions of Rupiah to supplement their meagre incomes. East Kalimantan FD officials confirmed that timber smuggling through illegal exports continues largely because of the complicity of the army, navy, police and customs.

Thus the main impact of the ban has been to increase both public and private sector corruption, with the money ending up in the hands of individuals rather than the state. It has resulted in an increase in rent available for rent-seekers; an increase in bribe levels; and an increase in the number of rent-seekers, due to an increase in the number of government officials, supposedly to enforce the log ban. The illegal logging trade, together with other factors, was also helping fuel political tensions between Indonesia and Malaysia. The latter subsequently introduced an import ban on logs from Indonesia in June 2002.

Race to the bottom

Political and economic instability in Indonesia has resulted in an unattractive business environment for foreign investors interested in legitimate and long-term investment. Less scrupulous timber traders with close relationships with local politicians and Malaysian investors have been attracted.

Importance of the domestic timber trade as a governance driver

Not only external trade pressures are driving illegal logging and rent-seeking behaviour. Almost 80% of East Kalimantan's timber production goes into domestic processing industries, although most of this ends up on international markets, mainly as plywood exports. Trade protection has helped create industrial over-capacity, which demands a constant supply of cheap raw materials.

Decentralisation and the redistribution of rent-seeking opportunities

One of the consequences of decentralisation has been conflicts of interest between administrative layers of the forestry service, with district authorities adopting an (overly) assertive stance over concession policy vis-à-vis provincial and central

government. District heads (*bupati*) were quick to establish control over forest resource allocation and use. Thus rent-seizing has shifted from central to provincial and district government, and to companies with good connections at these levels. This shift has been accelerated with the decentralising 1999 regulations and increasing community claims. Timber traders also felt that the demand for bribes had increased substantially with decentralisation.

Certification – the hope for better forest governance?

Many NGOs, timber companies and government officials felt that certification was the way to improve forest governance in Indonesia. But certification efforts, although promoted by donors like GTZ, have lacked policy support, long-term planning (due to instability) and suffered from a culture of corruption and patronage. NGO efforts have suffered from lack of cohesion. Timber certification initiatives have therefore been difficult to sustain. Some informants see them as little more than a policy stunt to improve the country's image and secure international financing.

5.4 Conclusions for forest governance impacts of trade policies

For East Kalimantan, trade policies and external demand pressures have been less important drivers of forest governance than political and financial instability, the lack of law and order, the decentralisation process, and unregulated FDI (Barr, 2001). Corruption and weak forest governance has not changed much in recent years; the growth of the illegal export trade has only made corruption marginally worse than before. This is partly because 80% of industrial timber is destined for national consumption or processing (although much of this goes into plywood exports). Forest governance impacts are also difficult to identify due to the complexity of trade and governance interactions.

While external trade measures have probably only marginally increased governance problems, the case study does identify some significant external trade impacts on forest governance. Firstly, it found that the demand for logs from Sabah and China was driving the illegal export trade: governance problems in Indonesia are at least partly driven by regional trade pressures, including those emanating from slightly better forest governance in wealthier trade partners with minimal import barriers. Secondly, it was observed that the 2001 log export ban sharply increased public and private sector corruption without reducing the external demand pressures. This confirms that without regulatory capacity, imposing a trade restriction is likely to increase corruption or illegalities.

6. Mexico case study¹

6.1 Introduction

Mexico presents a clear case of forest trade liberalisation, dating from 1986; before this the forest economy was highly protected and subsidised, making it virtually closed to external trade pressures. Also the social and environmental impacts of the North American Free Trade Agreement (NAFTA), implemented in 1994, are very well documented (although the governance impacts rather less so). Any analysis of Mexican forestry must start from an appreciation of its social importance in the form of the dominant community forestry sector; the somewhat unique 'private common property' land tenure system; and its proximity, and free trade relationship, with the world's two most powerful forest sector trading nations. This case study attempted to assess the forest governance impacts of trade liberalisation from a causative analysis of changes in key forest governance indicators.

6.2 Forest governance and trade policy overview

Between 70 and 80 per cent of Mexico's forest area is owned by an estimated eight to nine thousand community forestry enterprises (CFEs) belonging to indigenous communities and 'ejidos'. Community forestry was effectively established by the Agrarian Revolution (1910-1917). The 1917 Constitution established inalienable property rights of indigenous communities over forest and farm land; it also created *ejidos* from land expropriated from larger landowners and redistributed to peasant communities. About a quarter of these CFEs have forest management plans and enter the formal forestry market.

Subsistence forestry was the norm until 1947, when the government unconstitutionally established an industrial forest concession system. Forest policy over the next 40 years revolved round the development of a powerful, but heavily subsidised, parastatal sector. CFEs could only sell logs or standing trees to private sector or parastatal concessionaires, for which they were paid a nominal stumpage fee. This '*rentista*' model was riddled with private and community-level corruption, as concessionaires attempted to maximise timber extraction. As one forestry minister said, this led to "destruction, pillage and injustice", and many analysts blame it for much of the violence and poverty of rural Mexico. But in the 1970s, the parastatal model was in decline due to dwindling log supplies and rising costs, while peasant movements in several States mobilised (often violently) over the issues of land rights, access to forest and labour rights. In 1985, following a severe macro-economic crisis, Mexico signed a SAP. The reduction or removal of subsidies led to the collapse of the last forest parastatals by the end of the decade.

In preparation for entry into GATT, and to complement the SAP, in 1986 import tariffs were slashed from over 50% to 15-20% on most forest products, and the system of export quotas was removed. The 1986 Forest Law returned the forests to the communities, while at the same time increasing regulatory control over the forest sector. This led to rapid growth of the community forestry sector. Another watershed year for forest policy was 1992, when in preparation for entry into NAFTA, a deregulatory forest law was implemented, leading to widespread illegal logging. Also

¹ Undertaken by Michael Richards in October 2002, and based mainly on discussions with a range of key informants and relevant secondary data and literature.

in 1992, reform of Article 27 of the Mexican Constitution permitted the 'sub-division' and sale of *ejido* agricultural land if a majority of *ejido* members agreed to it. While sub-division was not permitted on forested land, this introduced an obvious incentive for deforestation. While this did not happen on any scale, the reform created major internal (to the *ejido*) and external institutional uncertainty. NAFTA itself was implemented in January 1994 with a phased reduction of import tariffs from 15-20% on most forest products down to zero over a five to ten year period, although import tariffs were eliminated immediately on a few products like veneer and construction lumber. NAFTA also introduced WTO-style rules for 'trade-legal' NTMs.

Following a period of virtually unregulated logging, a second u-turn was made in 1997 when the Forest Law re-instituted a more regulatory approach by re-introducing the harvesting, transport and processing controls lifted in 1992. Recent forest policy has reflected an uneasy tension between trying to develop an internationally competitive plantation sector (with little success) and supporting the community forestry sector.

6.3 Trade liberalisation as a forest governance driver

More positive forest governance impacts

Table 3 is a crude attempt to summarise the costs and benefits of forest governance due to trade liberalisation, based mainly on a causative analysis of key forest governance indicators by key informants. It appears at first glance that the positive or benefit column is the 'winner', but the parenthesis caveats are very important in terms of the study objectives. The key informant discussions revealed that improvements in indicators like high level corruption, certification, civil society participation and transparency have been only partly due to trade liberalisation – and that other drivers were usually more important.

An important impact of trade liberalisation was the way it stimulated change from the pre-1986 situation when forest governance was in a much worse state than at present. Various informants felt that the main benefit of trade liberalisation has been to 'shake up' the forest sector, and force the government and other stakeholders to tackle underlying structural problems, some of them caused by trade protection (e.g., obsolescent processing machinery). Lifting protection and reducing subsidies forced the industry to modernise; it was also the death-knell of the parastatals. Thus trade liberalisation facilitated the rise of the community forestry sector.

The shift from a protected forest economy has also greatly reduced the potential for high level public sector corruption. In the pre-1986 system, import prices were fixed by the ministry of agriculture, and a letter of permission was needed by importers, providing obvious corruption situations. Some key informants argued, however, that a more important cause of reduced political corruption was the pre-trade liberalisation shift away from the corrupt industrial forest concession model. Another major driver has been democratic progress; President Fox has introduced some powerful anti-corruption and pro-transparency measures. Petty or field level state corruption may also have fallen, but is more driven by the cost, time and complexity of permission procedures – therefore petty corruption fell after the deregulatory 1992 Forest Law, but at the cost of rampant illegal logging.

Table 3. Benefit-cost scorecard of forest governance and wider impacts of trade liberalisation in Mexico

Benefits: likely positive impacts	Costs: likely negative impacts
<p><i>Positive forest governance impacts:</i></p> <ul style="list-style-type: none"> ➤ Reduced 'grand corruption' (but shift from industrial concession system was more important) ➤ Reduced 'petty corruption' (but still prevalent, mainly determined by slow procedures) ➤ New institutions associated with NAFTA (but limited capacity due to SAP budgetary cuts) ➤ Incentive for certification (but non-trade motives important for CFEs) ➤ Foreign companies are more law-abiding ➤ Civil society participation and transparency (but democratic process is main driver) <p><i>Wider benefits:</i></p> <ul style="list-style-type: none"> ➤ Accelerated change from parastatal to CFE model ➤ Forest industry forced to modernise in order to compete (but many smaller firms went broke) ➤ Stimulus to increase forest market values: diversification, payments for environmental services ➤ Cheaper products for consumers (but at the cost of increased externalities) ➤ Stimulus to develop efficient commercial plantation sector (but this has failed to date) 	<p><i>Negative forest governance impacts:</i></p> <ul style="list-style-type: none"> ➤ Probable increase in illegal logging by CFEs with lower social and natural capital ➤ Changes in NTMs have had a chilling effect on national regulatory capacity <p><i>Wider concerns or costs:</i></p> <ul style="list-style-type: none"> ➤ Increased vulnerability of natural forest management to market forces especially in tropical areas: reduced protection for SF objectives ➤ Increasing forest trade deficit ➤ Future commercial plantation development could have negative social and biodiversity impacts

Trade liberalisation also stimulated a number of positive institutional developments, civil society participation, certification, and the location of more law-abiding foreign companies in Mexico, but there were other important drivers of these changes.

More negative forest governance impacts

Forest trade liberalisation has resulted in a large trade deficit. Most imports are from plantation forests, including in Chile (with which Mexico has a separate free trade agreement) and Brazil. This puts Mexico's multiple objective CFEs at a disadvantage; economic comparisons show that much of Mexico's forestry is not competitive. But it is important to note that the import surge has been mainly of lower value products. It has therefore been the suppliers and processors of cheaper forest products (cheap construction timber, cardboard, paper and pulp, pallets, etc.) destined for the domestic market that have suffered most. In the industrial sector, sawmilling and cellulose plants have been most affected.

Trade liberalisation appears to have increased governance pressures on CFEs with low levels of natural and social capital. Various CFE studies show that profitability is a major driver of local level forest governance, since it provides the basic incentive for stronger community controls¹. Thus the economic pressures associated with

¹ This makes initiatives like the Mexican Forest Fund to develop payments for environmental services, and diversify CFE income through non-timber forest products and tourism, very important for CFE forest governance.

cheap imports have probably encouraged illegal logging as a means of reducing compliance costs; already weak traditional governance structures have been further weakened, leading to an almost open-access situation. The impacts of trade liberalisation have perhaps been most negative in the tropical and sub-tropical areas of southeast Mexico. Community-based broadleaf natural forest management is particularly vulnerable to market forces; trade liberalisation and structural adjustment have increased the market vulnerability of CFEs in these areas.

But the impacts of trade liberalisation (and associated neo-liberal economic policy drivers) have varied greatly by area (State) and forest type. They have proved a stimulus to better governance in central and northern Mexico CFEs with good quality pine/oak forests and higher stumpage values due to their greater proximity to the main national markets and the US border, and therefore with the (natural capital) capacity to respond to the competitive challenge.

Some NAFTA related incidents over the use of NTMs like phytosanitary measures, and a decision to compensate a US hazardous waste export company (Metalclad) for a Mexican local government decision to prevent a landfill project, indicate that interpretations and bargaining power is weighted towards trade criteria over domestic regulatory concerns. An analysis of NTMs by Guerrero et al (2001) concluded that there could be a chilling effect on domestic forest regulatory policies.

6.4 Conclusions for forest governance impacts of trade liberalisation

While the balance of the evidence suggests that trade liberalisation in Mexico has had a net positive governance impact overall, key informants consistently argued that other forest governance drivers have been more important, especially democratic progress, inappropriate sectoral policies, and the SAP. Trade liberalisation impacts were very difficult to separate out from the broader neo-liberal reform package accompanying NAFTA. The damaging sectoral policies included deregulation from 1992 to 1997, and reduced control of technical assistance support to CFEs by private sector extension agencies.

Others felt that trade liberalisation has been negative for CFE level governance, and that there are strong social and environmental externality arguments for protecting the community forestry sector against external trade pressures. A clear impact of trade liberalisation has been to widen the gap between those areas, forest types and CFEs with better and weaker forest governance, and between the formal and informal (unregulated) forest sectors. The Mexico case study thus appears to confirm that trade is a magnifier rather than a prime cause of forest governance impacts.

7. Russia Far East and Siberia¹

Russia and Siberia have extensive blocks of temperate and boreal forests, representing up to 20% of global forest cover, including the largest remaining old growth forest in the world (Dudley et al, 1995). Inaccessibility has long protected these forests, much of it traditionally managed by indigenous groups. But following the breakdown of the Soviet system and as part of an economic reform package involving privatisation, trade liberalisation and structural adjustment, the World Bank and other aid agencies have encouraged forest exploitation.

The last decade has seen a major change in the forest industrial structure in response to trade liberalisation and new trading opportunities with Japan and China. Whereas in 1992, 30% of logs from Russia Far East (RFE) were exported, in 2000 about 90% went for export (Forests Monitor, 2002). Russia now exports three times the *combined* export volume of Cameroon, Brazil, Chile and Malaysia. Log exports in 2000 were mainly to Japan (68%) and China (25%).

China's log imports from Russia increased from 358,000 m³ in 1995 to almost 6 million m³ in 2000. This has been due to favourable tariff and tax policies (e.g., 50% of normal VAT is charged on Russian timber), as well as the recently imposed logging ban. Russia is set to become China's largest supplier of logs, as China's timber deficit approaches an estimated 200 million m³ by 2025. Japanese plywood manufacturers have shifted their demand from tropical *Iuan* to Russian larch and ash. Meanwhile local Russian sawmills are unable to pay the higher log prices. According to Dudley et al (1995), exporter profit margins were ten times higher than domestic trade profit margins.

According to Forests Monitor (2002) and WWF (2001), illegal logging and corruption have soared in the more export-oriented forest economy. Ministry officials estimate that Russia's total illegal exports are approximately 50 million m³ per year, about the same as legal exports. Specific governance problems include widespread tax evasion, transfer pricing, false declaration of species (high value timbers labelled as pulp logs), and use of fake documents. It is reported that Chinese timber brokers and mafia have moved into RFE as a result of a crackdown on crime in China, part of an anti-corruption campaign to gain admission to WTO (Forests Monitor, 2002). Some timber companies are controlled by mafia type groups called *triads* with links to organised crime in Japan and Russia. Most of the logging is done by small-scale loggers who are reported by Forests Monitor to work under conditions "equivalent to slavery." They are prepared to accept very low profit margins in the absence of alternative employment possibilities.

Government control over forests has been severely weakened during the Putin administration, according to WWF (2001). In May 2000, the 200 year old Russian Forest Service was closed and its functions transferred to the Ministry of Natural Resources, which has more of a resource exploitation mission. Forest regulation has become increasingly decentralised to local and regional governments which are often influenced by criminal elements. According to Dudley et al (1995) there was an institutional vacuum in forest governance. An indication of this is shown by the aftermath of the 1992 Rainbow Warrior incident. In an area belonging to the Udege

¹ Based on published and website literature.

people, the Russian Supreme Court placed a veto on logging, but the regional administration ignored it and allowed illegal logging to continue (Dudley et al, 1995).

A bright spot in this gloomy analysis is the formation of the Association of Ecologically Responsible Loggers of Russia (WWF, 2002). This has developed in response to the influence and pressure of companies like StoraEnso, UPM Kymmene and IKEA. There are plans for FSC certification of over 2 million ha by the end of 2002, and another 8 million ha by 2005, corresponding to a seventh of Russia's commercial timber. But the main conclusion is that trade liberalisation with aggressive trading partners, combined with decentralisation, privatisation and SAP policies, and the poverty and livelihood problems of Russia's 'soft capitalist revolution' have aggravated *already weak governance*.

8. The interaction of trade policies with other variables

8.1 Introduction

This section attempts to reach a more nuanced understanding of the role of international trade in influencing forest governance by accepting that international trade *per se* is not a major determinant of governance, but can have a significant impact in association with other explanatory variables.

8.2 The 'resource curse' problem: windfall rents and governance pressures

There is a well-documented relationship between corruption and high levels of natural resource endowment and export dependency (Auty, 1990, Isham et al, 2002, Murshed, 2002). The 'resource curse' is that countries well-endowed with high value natural resources like oil, minerals and forests tend to have weaker institutions and be more prone to political and economic tensions. These 'point-source' economies end up with a lower national income, having squandered their resources. A political economy explanation of this is that the rents from these natural resources are more easily captured by a small number of rentier capitalists, who take advantage of weak governance to extract generous conditions or incentives to exploit the resource (Isham et al, 2002).

This analysis is extended to the forest sector by Ross (2001), who argues that forestry institutions in developing countries with valuable forests and a high dependence on natural resource exports¹ are particularly vulnerable to export booms (Box 2). An implication of this analysis is that forest governance should be easier when forest rents are lower, and forest product exports are relatively less important in the economy. The latter point is of course related to a country's stage of economic development. Of the case study countries, Indonesia fits the resource curse scenario best. The relatively wealthier Brazilian and Mexican economies have overcome their 'resource curse' (although in the case of Mexico it was based more on oil than forests), diversified away from natural resource dependence, and are exerting increasing control over rent-seekers.

8.3 The nature and length of democracy

The political regime is clearly key to determining forest governance impacts of trade. 'Political ecology' studies like that of Dauvergne (1997) document the importance of 'crony capitalism' and unstable autocracies in explaining Asian corruption and deforestation. Statistical analysis by Treisman (2000) also shows that the length of democracy is an important determinant of governance². Richer countries tend to have longer histories of stable democracy, which reinforces the link between wealth and governance. Again Brazil and Mexico have experienced more democratic progress and stability in recent years than Indonesia.

¹ Three quarters of developing countries derive at least half of their export earnings from natural resource exports (Ross, 2001).

² An important qualification to the assumption that a more autocratic political regime is bad for forest governance is provided by Ross (2001), who shows that when autocratic rulers are more stable, like Suharto in Indonesia and Marcos in the Philippines, they can introduce stricter controls.

8.4 Trade and political economy: ecological footprints

The previous two sections point to an international political economy explanation of how trade liberalisation magnifies forest governance problems for poor countries. Several authors describe how liberalised trade increases the flow of environmental resources from countries with weaker forest regulations to those with stronger regulations, enabling the latter to imprint their 'ecological footprint' on the former (Adams, 1997, Lofdahl, 2001, Andersson et al, 1995). The level of economic development and environmental governance capacity determines the size of the ecological footprint. According to statistical analysis by Lofdahl (2001), increases in GNP lead to increased deforestation not in the host country but in its poorer trading partners. Lofdahl's conclusion is that the superior environmental health of richer countries is due to their ability, through trade, to import natural resources from poorer countries and externalise the environmental consequences of their lifestyles. This synchronises with natural resource degradation in poorer countries.

When a better resourced or more organised country improves its forest regulations or governance, this almost always means a cut in domestic production (for example, by reducing illegal logging), and a domestic market shortfall. The size of the shortfall depends on (a) the wealth and lifestyles of the country's citizens; and (b) how effective the country is in bringing logging under control. The shortfall is met by poorer neighbours dependent on natural resource exports. Dauvergne's (1997) study of the ecological footprint of Japan shows the impact of tighter environmental restrictions in a regionally wealthy country (Box 7). Another example is Costa Rica, which has a regionally low level of illegal logging, but 'imports' much of its timber from its poorer neighbour Nicaragua. The Indonesia case study also shows how marginally better regulatory control in China and Malaysia have stimulated the illegal log export trade.

The same phenomenon occurs when countries introduce logging bans. China, Thailand, Vietnam, Philippines, New Zealand and Sri Lanka have imposed a partial or complete logging ban in recent years. An FAO report (Brown et al, 2002) has found that while the bans have resulted in domestic conservation and tree planting benefits, these countries have greatly increased their timber imports – much of it coming from illegal felling in Cambodia, Laos, Indonesia and Myanmar. Therefore the host country benefits need to be balanced against the environmental and governance impacts in neighbouring countries. This implies that a unilateral improvement in forest governance, especially in a regionally wealthy country, is unlikely to result in a net overall improvement in forest governance.

Box 7. Japan's ecological footprint (based on Dauvergne, 1997)

Over the last 50 years Japan's market has acted as a magnet for illegal logs from Indonesia, eastern Malaysia, PNG and the Solomon Islands. It has been able to do this largely through the *sogo shosha* timber companies. The latter have systematically promoted illegal logging, transfer pricing and smuggling; avoided investment in processing, reforestation and conservation; and cultivated political patronage or 'patron-client' ties in supplier countries. They concentrated first on the Philippines in the 1950s and 1960s until the primary forests became scarce, at which point demand shifted to Indonesia and Sabah. In the 1980s demand gradually shifted to Sarawak as Sabah's primary forest dwindled. In the 1990s, Sarawak timber was supplemented mainly by imports from PNG and the Solomon Islands. There is no doubt that the effect has been to weaken forest governance in these countries. For example, Japanese logging companies featured prominently in the Barnett enquiry into illegal logging in PNG (Filer with Sekhran, 1998).

8.5 The wider liberalisation package

Trade liberalisation does not normally occur alone. It usually forms part of a wider macro-economic package or SAP. Typically SAPs have combined trade and investment liberalisation, devaluation, deregulation, privatisation, state downsizing, and the promotion of forest and agro-exports (Tockman, 2001). Macro-economic policies like devaluation and agro-export development are powerful drivers of deforestation¹, and are therefore also likely to have significant governance impacts; for example, devaluation will increase the external demand pressures on forest governance as discussed in 3.3.

The most direct governance impacts of SAPs have been from state down-sizing, resulting in the weakening of state regulatory capacity. Many SAPs have included sharp cuts in FD or ministry funding, for example, a 40% salary cut and several hundred FD staff in Cameroon; a 36% budget cut to Nicaragua's Ministry of Environment and Natural Resources; a 40% cut in Russia's protected area budget (Tockman, 2001); a halving of Honduras' FD staff in the early 1990s; and a reduction in Peru's Ministry of Agriculture staff from 45,000 before 1990 to 4,000 in 1993 (Laarman, 1999). IMF-enforced policies or SAPs have also resulted in substantial environmental budget reductions in Brazil, PNG, Guyana, Indonesia and Tanzania (Tockman, 2001). The consequences of such reductions include reduced institutional capacity for SFM, weaker enforcement of forest protection, increased regulatory corruption, reduced demarcation of indigenous lands (and sometimes a weakening of indigenous property rights), and widespread illegal logging, especially in protected areas, at the same time as strengthening the power of the timber industry (Tockman, 2001; Contreras et al, 2001). In Mexico a SAP was signed in 1985 prior to the 1986 trade liberalisation. Key informants pointed out this had the effect of reducing state support for community forestry at the time it was most needed - many of the CFEs were at an early development stage.

The importance of key sectoral reforms have been discussed in section 3. A study of SAPs and forest policy reform in PNG, Cameroon, Kenya and Indonesia (Seymour &

¹ Econometric analysis reveals devaluation as a significant cause of deforestation (Kaimowitz & Angelsen, 1998). Devaluation is also a powerful trade driver; for example, after the 1994 devaluation of the Mexican Peso, forest exports to the US increased by 50% in a year; and after devaluation of the CFA, also in 1994, Cameroon produced 34% more logs than in 1993 (Gregory et al, 2000).

Dubash, 2000) showed that adjustment lending conditionalities have rather constrained sectoral policy reforms like concession bidding and effective forest taxation. Ironically “in every case-study country, the World Bank singled out the lack of institutional capacity as a principal impediment to long-term SFM” (op cit p.3). At the same time, the report felt the Bank was able to catalyse important forest sector reforms in PNG and Indonesia, where it was able to build on a national political commitment to reform and better quality engagement with stakeholders.

Decentralisation often accompanies trade liberalisation. In spite of the potential benefits of increased transparency and accountability of regionally and locally elected rulers, a decentralised system may be prone to corruption due to a loss of central authority and the separation of policy and control functions (Barr, 2001). As the state becomes weaker, other stakeholders become stronger including the police force, military, local government, etc. When there is corruption at the national level, this is invariably mirrored at the provincial, district and local levels (Reed, 2002). In Africa, political authorities at these levels wasted little time in establishing privileged relationships with the new economic agents (especially TNCs) following liberalisation as the latter sought to increase their access to natural resource wealth by bypassing the authorities. The Indonesia case study (5.5) also shows how local governments have become important rent-seizers, while the powers of central government and ‘crony’ forest industries have declined. Similarly, local businessmen and mafia leaders have moved into rent-seeking positions in Russia following decentralisation and trade liberalisation (Forest Monitor, 2002).

Trade and financial market liberalisation tend to go hand in hand. For some observers, capital liberalisation with insufficient regulation is a greater threat to governance than trade liberalisation. Box 8 describes how Indonesian pulp and paper industries have accessed international finance for projects involving large-scale and illegal clear-cutting, violent conflicts with indigenous landholders, and other problems (Barr, 2001). Export Credit Agencies (ECAs) have financed several doubtful forest projects, and come in for increasing scrutiny and criticism (Brack et al, 2002b).

Box 8. Capital liberalisation and Indonesia’s pulp and paper industries (from Barr, 2001)

Since the early 1990s, international investment banks have channeled over \$12 billion into Indonesia’s largest pulp and paper companies through direct capital loans and by organising bond offers from North American and European debt markets. Funds have also been obtained from equity shares on international stock exchanges, joint partners with offshore partners, and vendor financing arrangements. Northern ECAs have also played a significant role in encouraging FDI to these companies, largely to promote exports of paper machines and other capital goods by northern manufacturers. For example, the well-known Asia Pulp and Paper (APP) company was one of the companies funded by a European ECA. The companies have also benefited from various domestic subsidies and weak financial regulations which enabled them to discount their capital costs. It even appears that their massive debts will be paid off by funds from international and national tax-payers.

8.6 Trade and land tenure

The governance impacts of trade policies also depend on property rights, as shown by the comparison between Amazonas and Pará States in Brazil. Weak property rights make it difficult to exclude other users. More generally weak property rights and institutions go together, as in the Indonesia case study, just as the absence of

property rights (for example, over some global public goods) implies an absence of regulatory institutions (Pearce, 2002). Trade liberalisation increases the rewards to industrial stakeholders to override resident stakeholders with weak or unprotected (by the state) property rights. The most obviously vulnerable stakeholders to encroaching interests are indigenous groups. Protecting the rights and access of indigenous groups and the rural poor should be a countervailing policy to accompany trade liberalisation, but it appears that the opposite is more often the case (Contreras et al, 2002). The more promising experiences for community forestry in Bolivia, Mexico and Guatemala reported by White & Martin (2002) seem to be part of a general improvement in forest governance allied to more secure tenure, in contrast to Russia where there is no recognition of indigenous forest ownership.

8.7 Conclusion: trade as a ‘magnifier’

For Anderson & Blackhurst (1992), the most significant environmental impact of trade is to magnify existing policy and market failures. One source points out that “a failure to place a value on environmental resources would undermine sustainable development even in a completely closed economy. Trade is seen, rather, as a ‘magnifier’. If the policies necessary for sustainable development are in place, trade promotes development that is sustainable” (Andersson et al, 1995:29). Forest governance problems are likely to be greater when there is a wide gap between financial and ‘real’ economic forest values - the size of the gap indicates the extent of policy and market failure, including the failure to ‘internalise the externalities’.

Free traders argue that trade liberalisation removes an important policy failure, so should help close the gap. But as pointed out by Barbier et al (1994), trade restrictions can also magnify domestic policy and market failures. This is clearly shown in the case of the Philippines (Boado,1988); the Indonesian and Brazil case studies also show how trade restrictions can exacerbate governance and policy failures.

This section concludes that trade liberalisation is more likely to be positive for forest governance in wealthier and more stable (politically and financially) countries; when there are less policy and institutional failures (for example, insecure property rights) and governments are making efforts to ‘internalise’ environmental and social externalities; where SAPs do not fatally weaken regulatory capacity; where concession bidding and other sectoral reforms precede liberalisation; when there is effective civil society participation; and when there is not a ‘resource curse’ problem. But there is a high risk that improved forest governance in one country will cause forest governance problems for its poorer neighbours.

9. Policy prescriptions

9.1 National trade policies

There is a consensus that trade-based policies are less effective and reliable than environmental policies in achieving environmental objectives (Laarman, 1999; Barbier et al, 1994; Neumayer, 2001). The evidence also suggests that trade-based measures are unlikely to improve forest governance, and could worsen it through perverse impacts (Sizer et al, 1999). For example, Treisman (2000) concluded that an increase in trade openness has a “depressingly small” impact on corruption. Even certification may have a negative overall effect since it is causing tropical and transition economy suppliers to switch to less discriminating markets, as has happened with Brazilian mahogany. Another difficulty for trade-based approaches to improving forest governance is how to distinguish between legal and illegal forest products, especially since so much timber is fraudulently ‘legalised’ at source.

Despite its problems, for the longer term certification is one of the main hopes for combining governance and trade liberalisation benefits. The potential of certification is (a) to provide the market access incentive for the adoption of legal and hopefully SFM practices, and (b) act as an entry point for civil society participation and multiple-stakeholder forest policy and governance (Bass et al, 2001). But for certification to significantly influence external trade pressures in favour of more responsible forest governance, there needs to be both a strong regulatory basis (so that illegal products do not undercut certified products) and a significant change in domestic consumer preferences, including in Asian and other developing countries. There may be increasing scope to influence domestic consumers as they feel the increasing impacts of the loss of environmental services due to unsustainable management practices.

9.2 National environmental and governance measures

Various accounts show that the most reliable way of ensuring positive governance and environmental impacts from freer trade is by strengthening sectoral regulatory and institutional capacity, as well as measures to ensure transparency and civil society participation. For Neumayer (2001), regulation is the vital ‘stick’ to complement the ‘carrot’ of trade liberalisation. Table 4 attempts to show how trade policies and the strength of the regulatory regime combine to result in incentives for more or less responsible governance.

Stiglitz (2001) has persuasively argued that governance quality is key to liberalisation outcomes, and that regulatory capacity-building must *precede* liberalisation. Industrialised countries were able to do this in an era of relative protection. Reed (2002) points out that the mechanisms for regulating natural resources were not in place before the neo-liberal economic reform process, leaving African countries open to rent seeking and corruption. The paramount importance of sequencing is also a major conclusion of the Mexican case study. Otherwise trade liberalisation may merely convert public sector to private sector corruption. Better environmental regulation at both the global and national level should also greatly reduce trade-environment tensions, as they can reduce market failures in the international economic system (Esty, 2002).

Table 4. Incentives stemming from the combination of trade policies and regulatory capacity

	Weaker regulatory capacity	Stronger regulatory capacity
Trade liberalisation and higher stumpage values	Increased returns from corruption and illegal logging	Higher returns should encourage SFM, and a more efficient use of wood
Case study evidence	<i>Mexico: illegal logging following deregulatory forest legislation and implementation of NAFTA 1994-97</i> <i>Russia: corruption and illegal logging, especially following disbanding of Russian Forest Service in 2000</i>	<i>Mexico post-1997: NAFTA market opportunities have stimulated better governance, shown by strong interest in certification by community forestry enterprises with higher natural and social capital values</i>
Trade restrictions and lower stumpage values	Reduced profit margins encourage managers to cut compliance costs, and/or convert to other land uses	Reduced incentives for SFM and log efficiency, but better control prevents major illegalities
Case study evidence	<i>Indonesia: the 2001 log export ban has increased illegalities and corruption</i>	<i>Brazil: the better regulated export sector is law abiding, and is adopting certification</i>

Various other sectoral policy reforms should precede or at least accompany trade liberalisation. Reducing discretionary powers over concession allocation through competitive bidding is one key policy; another is effective forest rent taxation. A prescriptive conclusion from Ross's (2001) analysis is that the forest rent must be properly taxed, so that normal rather than windfall profits are available to potential rent-seekers, and as consistently argued by economists like Repetto and Gillis (1988). Appropriate forest pricing can regulate the demand for concessions, and therefore reduce corruption in concession allocation (Callister, 1999). However this will only work if public sector corruption is under control. Also higher forest fees are likely to stimulate clandestine logging if control is weak.

An old chestnut is the regulation of TNCs through a multilateral agreement. An analysis by Hansen (2002) favours regulation for four main reasons: policy liberalisation and technological developments increase the probability of environmentally damaging impacts of TNC activities in developing countries; national and international environmental laws are insufficiently developed to address cross-border impacts; the need for harmonised rules to ensure minimal standards for appropriate environmental conduct; and to support best international practice. Regulation could be part of a larger deal removing the obstacles to FDI according to Hansen (2002).

Information is vital for transparency and civil society participation. Capital markets have been found to be sensitive to environmental information which can be used to empower pressure groups, like environmental NGOs (Fredrikson, 1999). Summarising a wider literature, Andersson et al (1995) report that the more reliable and available information on a company is, and the easier it is for consumers to evaluate companies, the more sensitive they become to their environmental image. Information provision goes hand in hand with measures to increase public

participation in forest governance, for example, public monitoring of forest management audits.

According to Reed (2002), it has been the demands and protests of African civil society which have led to more responsible and accountable systems of governance, and more effective environmental regulation. Laarman (1999) suggests that public interest groups monitor the impacts of trade liberalisation, while Reed (2002) calls for capacity strengthening of African NGOs to monitor natural resource policy impacts. Kaufmann & Kraay (2002) conclude that access to information, giving voice to public service users, and effective external monitoring, are more important for reducing corruption than pay rises or internal monitoring. The inclusion of civil society in the reform process is also a key aspect of 'policy ownership', which the World Bank admits has been crucial to the structural adjustment experience in Africa (Reed, 2002).

The response to the 'magnifier' impact of trade on policy and market failure is logically to correct these failures, including weak or corrupt forest governance, rather than to reject trade liberalisation or another trade policy. As well as the sectoral reforms and efforts to increase civil society participation discussed above, other key policies with a bearing on policy and market failures include the removal of perverse and protective subsidies; protection of indigenous property rights and promoting more secure land tenure for forest managers; simplification and clarity of forest regulations; log export quotas, concession bonds and other innovative incentives mechanisms which 'internalise the externalities' (Richards, 2000). This is a demanding list, and beyond the means of most developing countries and transition economies experiencing governance problems. But progress is possible in lower income countries, as shown by recent governance improvements in support of SFM in Bolivia (Contreras & Vargas, 2002) and Ecuador (Box 9).

Box 9. Civil society participation in forest governance in Ecuador

Under Ministry of Environment leadership, five NGOs are working with the army and police on the Green Surveillance (*Vigilancia Verde*) programme to monitor and control logging activities (ITTO, 2002a). This takes place within the framework of a set of national Standards for Sustainable Forest Management, and is funded by a trust which receives 50% of the value of any illegal timber. Also, under the Forest Steward programme, independent foresters are employed by the state to approve and monitor forest management plans. It is important to note that these governance improvements have not come about through external trade pressures since Ecuador has negligible timber exports.

9.3 Multilateral trade and governance measures

Over the last few years pressures have been growing for regional and multilateral responses to the problem of illegal logging and trade. A clear finding of this study is that unilateral attempts to improve forest governance are limited. Improved control over logging in one country is only likely to redistribute logging and governance pressures to poorer neighbours; this usually manifests itself in the form of illegal logging, as in Indonesia. Governance improvements do not reduce aggregate demand. If a country can afford to, it will substitute national production by imports, and thereby increase its 'ecological footprint'.

There is a wealth of recent literature on various unilateral, multilateral and regional efforts to counter illegal logging. This includes the potential and constraints of

mechanisms, including consumer country, legislation to prevent the import of illegally produced or traded forest products (Brack et al, 2002a, 2002b); increased use of the Convention on International Trade in Endangered Species of flora and fauna (CITES); the regional Forest Law Enforcement and Governance (FLEG) process; government procurement policies; and the potential of multilateral agreements like the 1999 OECD Convention on Combating Bribery of Public Officials in International Business Transactions. It is beyond the scope of this study to go into further detail on these well-documented processes and instruments, but it is important to consider how they might impact forest governance in poorer producer countries.

Notwithstanding the major problems of distinguishing legally and illegally produced and traded timber, if there is a shift towards more discriminating timber import policies, this could have a similar effect to certification and other green market pressures (as discussed in 3.4). Like certification, it may encourage the flow of exports from the worst governance countries (unable to meet the increased demands and cost of supplying northern consumers) to less discriminating markets like China¹. Tropical hardwood products from natural forests are bound to be treated more sceptically by importers, customs officials and consumers due to the complexity of verification; the higher costs of verification could further reduce the competitiveness of tropical products (Rytönen, 2002). The higher cost of legal production may prove an incentive for illegality in weak governance situations. But against this, if consumer country measures prove to be an effective incentive for the legal export trade, this could result in major revenue gains for producer countries, as well as resulting in broader social and governance benefits.

Attempts to positively influence international trade could also exacerbate governance problems associated with domestic trade. If exporting becomes more demanding, there could be a switch of higher value species to the domestic market, which might have negative governance and environmental impacts if domestic regulatory capacity is weak. Consumer country discrimination between legal and illegal timber could have a similar effect to a trade restriction *if* the producer country is unable to raise its regulatory standards. These effects could include a fall in domestic timber prices, which is likely to have a negative impact on domestic trade forest governance. However, as stated in the UK-Indonesia Memorandum of Understanding, and proposed in a draft EU communication, it is recognised that any trade restriction needs to be accompanied by financial support; it is proposed that consumers help cover the higher compliance costs of producer countries (Duncan Brack, personal communication).

The regional FLEG agreements have obvious positive potential for governance improvements as a result of Ministerial commitments to tackle illegal logging and trade, enhance regulatory capacity, promote necessary policy, institutional and legal reforms, introduce chain of custody tracking systems, increase civil society participation in monitoring and audits, and other measures to increase transparency. But most of this requires additional resources as well as political will.

The implication of all this is that (a) strengthened regulatory capacity is essential for consumer country actions to lead to more responsible management as opposed to perverse impacts; and (b) considerable support is needed to enable poorer

¹ The EU FLEGT Workshop Report (EU, 2002) notes that China has been cited as receiving over 50% of globally traded wood, but that there is scope in the FLEGT process for the EU to address this issue.

governance countries to make the necessary transition. Such support is partly justified from the observation that the costs of introducing a globally desirable clampdown on illegal logging are likely to fall disproportionately on poorer producer countries. The Memorandum of Understanding partnership between the UK and Indonesia, itself an outcome of the Bali FLEG, is therefore a very important 'guinea pig' experience.

10. Conclusions

The main conclusion of this study is that the governance impacts of trade liberalisation are likely to be positive where there is already good governance, and negative where governance is weak, since trade is a magnifier of *existing* policy and institutional strengths and weaknesses rather than a major driver of forest governance change. In a weak regulatory capacity situation, either a shift towards freer trade (Russia) or protection (Indonesia) is likely to have a negative impact on forest governance. For example, with a weak regulatory basis, both increased log prices (increased return to illegal logging) and reduced prices (increased pressure to reduce compliance cost) can increase illegal logging. Stronger regulatory capacity and implementation, including monitoring and enforcement of compliance and adequate penalties, is therefore the essential 'stick' to complement the 'carrot' of trade liberalisation. At the same time great care is needed to ensure that a stronger regulatory approach does not increase the transaction costs of good forestry. Forest policies and regulations need to find ways of making it 'easier to be good' without making it 'easier to be bad'; one aspect of this is finding the right balance between demand-side incentives and supply-side regulations, as noted by the EU (2002).

But there is also evidence suggesting that trade pressures can be a catalyst for a downward spiral of worsening governance; the incentive to cheat is greater with 'windfall rents'. Ross (2001) shows how timber export booms in several Asian countries led to rent-seizing strategies and institutional breakdown, although political uncertainties indicate that trade was not the only factor. Trade liberalisation can also encourage a virtuous cycle in which countries tackle underlying policy and market failures, and create a more positive policy and institutional framework for sustainable forestry; however this normally only happens in higher income countries.

The literature also shows that trade and governance is a hard relationship to investigate and test, since trade impacts are weak, indirect and diffuse, and due to two-way causative relationships between governance and its explanatory variables. Trade liberalisation impacts depend on what else is in the package, e.g., state downsizing, decentralisation, deregulation, privatisation, concession bidding, forest taxation, etc., and the capacity and will of the government to implement it. Such accompanying policies, which are often more powerful governance drivers, can either mitigate or exacerbate the social, governance and environmental impacts of freer trade. Capital liberalisation and the persistence of a various perverse subsidies also appear to be more problematic for forest governance than trade policies.

One of the clearer impacts of liberalised trade on governance, but a cross-border one, is where improvements in governance in a wealthier country lead to increased governance and resource pressures on poorer neighbouring countries. The Indonesia case study reveals how the logging ban imposed by China and marginally better control in Malaysia have fuelled the illegal log export trade. Thus unilateral improvements may only make things worse somewhere else in a liberalised global trading regime. For example, commenting on stricter cutting regimes in western USA and British Columbia, Sedjo (1996: 66) points out that "logging restrictions in some places will simply be offset by logging increases elsewhere. In short, the issue is not whether to log, but where to log."

This indicates that regional and multilateral approaches to improving forest governance are essential. While the building momentum towards consumer country

discrimination between legal and illegal forest product imports must be welcomed for the longer term, there is a concern that, as for certification, this could cause further diversion of tropical forest products to less discriminating export markets. The Brazil case study shows how green market pressures (surrounding mahogany) can have perverse incentives. Again the key remedy is to raise regulatory capacity in poorer producer countries. The FLEG process is also essential in terms of building regional rather than national governance solutions, but must be backed up by donor support.

The case studies show that the emphasis on the governance problems of the export trade has reduced the attention being given to the lower value and quality domestic trade, which is much bigger and has more 'bad governance' problems. Since domestic green demand pressures seem some way off, although the formation of a buyers' group in Brazil shows there is hope, the emphasis must again be on supply-side controls, as well as on seeking ways to increase non-market values through payments for environmental services. Another finding, and a problem for the initial hypothesis, is that trade liberalisation has so far been a weak and erratic process. Reductions in tariff levels from already low levels have been counteracted by increased use of NTMs, and in the case of wealthier countries, a range of subsidies. The overall trend is probably towards increasing protection. In most tropical countries, domestic demand continues to increase while external demand is falling – this is another reason for giving more attention and resources to improving domestic trade-related forest governance.

Finally, there is an important political economy explanation to the way external trade policies or pressures interact with other factors to exert negative environmental and governance impacts. Many of the factors which, associated with freer trade, appear to encourage a downward forest governance spiral are linked to poverty, e.g., 'resource curse' economies that are highly dependent on natural resource exports, and the lack of a mature and stable democracy. This is why, while Mexico and Brazil may be entering a 'virtuous governance cycle', Indonesia seems to be locked into a downward spiral. In the final outcome forest governance is bound up with the broader processes of economic and political development. Achieving a level international market 'playing field', raising per capita income and education levels, and strengthening democratic institutions and processes are, in the final outcome, the most important means for improving forest governance in developing and transition economy countries.

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