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# Forest certification (eco-labeling) programs and their policy-making authority: explaining divergence among North American and European case studies

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## Abstract

In recent years, transnational and domestic non-governmental organizations have created private standard setting bodies whose purpose is to recognize officially companies and landowners practicing ‘sustainable forest management’. Eschewing traditional state processes and state authority, these certification programs have turned to the market to create incentives and force compliance to their rules. This paper compares the emergence of this non-state market driven (NSMD) phenomenon in the forest sector in eight regions in North America and Europe. We specifically seek to understand the role of forest companies and landowners in granting competing forest certification programs ‘legitimacy’ to create the rules. We identify distinct legitimation dynamics in each of our cases, and then develop seven hypotheses to explain differences in support for forest certification.

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## 1. Introduction

In recent years, transnational and domestic non-governmental organizations have created private standard setting bodies whose purpose is to recognize officially companies and landowners prac-

ticing ‘sustainable forest management’ (SFM) (Meidinger, 1997). Eschewing traditional state processes and state authority, these organizations have turned to the market, soliciting the support of customers of forest products in order to achieve compliance with their rules (Fletcher and Hansen, 1999).

This trend toward using non-state market driven (NSMD) governance to address matters of concern

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to global civil society has its roots in increasing economic globalization (Berger and Dore, 1996) and corresponding ‘internationalization’ (Bernstein and Cashore, 2000), where non-governmental organizations and international institutions have often acted to reverse the ‘downward’ effects of globalization on environmental, social and labor standards (Vogel, 1995).

Despite these forces for convergence, differences have emerged among domestic political struggles over which non-governmental certification program gets the right to create sustainable forest management rules. In particular, the support of forest land owners and forest land managers—those companies, individuals, and organizations who must actually implement the certification rules—has varied dramatically. In some regions, these ‘supply side’ audiences have committed to pursuing the detailed, prescriptive performance standards of the international Forest Stewardship Council (FSC) certification program, while in the other jurisdictions, supply side forest companies and landowners have coalesced around the more flexible industry and landowner initiated programs that were created to compete with the FSC for rule-making authority. In other cases, a hybrid has developed.

Given very similar global pressures for forest certification, why have supply side actors in some regions chosen to support the FSC, while those in other regions have maintained firm support for competitor programs? The answer to this question is important for the implications for forest management in different regions, but also sheds light on the conditions under which NSMD governance may or may not gain long-term rule-making authority.

This paper addresses the divergence question in three steps: First, it reviews the historical context behind the development of certification programs and briefly describes the ‘legitimacy framework’ we have employed in our comparative study. Second, it briefly reviews the methodological hurdles in comparing certification legitimation dynamics that move across regional, national, and international bodies. Third, using a qualitative case study approach, we use the classification system to offer a nuanced description of how forest owners and

forest land managers accept, or fail to accept, the rules of a particular certification program in Canada (specifically British Columbia and the Maritimes), the United States (specifically the Pacific coast region, the south-east and north-east), the United Kingdom, and Germany.

Fourth, we develop working hypothesis to explain key divergence among the cases. The central argument that emerges from this approach is that four related factors, together, explain the degree of support the FSC and its competitor programs achieved from supply audiences: a region’s degree of market globalization, the degree to which forestry practices in a region are seen as a ‘problem’ on the political agenda, the structure of a region’s forest industry (in terms of land ownership fragmentation and industry concentration), and the characteristics of the FSC’s competitor programs.

## 2. Historical context and emergence of forest certification as a non-state market driven governance system

The emergence and interest in non-state market-driven forest certification programs can be traced to the economic and political trends in the last 10 years in which market-oriented policy instruments have been given increasing salience domestically and internationally (Harrison, 1999; Rosenbaum, 1995; Tollefson, 1998). Originally research on economic globalization found that increased capital mobility, international trade, and foreign direct investment appeared to reduce or constrain domestic policy choices, sometimes leading to downward protection in environmental and social standards (Berger, 1996: 12). However, other scholars noted that a parallel process was taking place in which domestic policy arenas were facing increasing scrutiny by transnational actors, international rules, and norms (see Risse-Kappen, 1995; Keck and Sikkink, 1998), sometimes leading to a reversal of the ‘downward’ effect of globalization (Vogel, 1995), a process Bernstein and Cashore (2000) refer to as internationalization.<sup>1</sup> Indeed, ‘interna-

<sup>1</sup> A similar definition was first offered by Doern et al. (1996).

tionalization' processes often get their policy influence by using market-based boycott campaigns to force upward governmental and firm-level environmental protection. Internationalization provided lessons to environmental non-governmental organizations (ENGOs) about the power in using market forces to shape policy responses where efforts to change policy were often easier than attempting to influence domestic and international business dominated policy networks. This recognition increased the salience of market-manipulation campaigns generally, but also of forestry specifically (Stanbury et al., 1995).

Non-governmental organizations' interest in market mechanisms in forestry also increased following the failure of the Earth Summit in 1992 to sign a global forest convention (Bernstein and Cashore, 1999, 2000). ENGOs felt that they had spent significant effort and resources on state-sanctioned international fora with no discernible policy gains. As a result, transnational groups, led by the World Wide Fund for Nature (WWF)<sup>2</sup> turned to the market for influence by certifying forest landowners and forest companies, who practiced WWF's and other interest groups' definition of 'sustainable forestry', expanding the traditional boycott campaign's stick approach by offering carrots as well. These international trends were mirrored by increasing interest at domestic levels as well (Harrison, 1999; Rosenbaum, 1995; Tollefson, 1998).

The Forest Stewardship Council (FSC) itself can be traced back to 1990, when, following widespread scrutiny of tropical deforestation, timber retailers and distributors began looking for fiber from well-managed forests (Meidinger, 2000: 4). Following 3 years of discussions, the FSC was created in Toronto, Canada in 1993 and became legally registered in 1995 in Oaxaca, Mexico. The FSC originally created nine 'principles' and more detailed 'criteria' that are performance based, broad in scope, including tenure and use rights, community relations, worker's rights, environmental impact, management plans, monitoring and

preservation of old growth forests (see Moffat, 1998: 44; Forest Stewardship Council, 1999). Importantly, the FSC program required the development of regional or national working groups given the task of developing specific indicators and verifiers with which to apply the principles and criteria. This institutional dynamic is crucial because it directed many political struggles over certification to the territories designated as a national/regional working group. The FSC can be identified with a conception of NSMD governance that diverged dramatically from traditional clientele public policy processes, as it institutionalized decision making processes that limited business influence, forbade government involvement in rule making, and developed wide ranging policy initiatives.

In all the cases under review in this paper, introduction of the FSC program resulted in industry and/or landowner organizations developing their own NSMD programs to compete with FSC governance. These programs contained a very different conception of governance, highlighted by a belief in business dominating rule making, a narrow policy realm, and broad, flexible policy options. Our task in this paper is to document the levels of supply side support for FSC and alternative programs at two points in time: 'initial' support, when the FSC first emerged, and 'current' support, which, in our project, ranges from autumn 2000 to the autumn of 2001, and to explain changes and regional differences.

In order to facilitate comparison across an array of national and regional settings, our study developed a comparative heuristic that categorizes both the types of audiences from which certification programs seek authority, and the different levels of support these audiences give. To accomplish this task, we use Cashore (2002) application of Suchman's (1995) seminal article on organizational legitimacy, a subset of organization sociology literature. Suchman (1995: 574) defines legitimacy as:

...a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions.

<sup>2</sup> Although the acronym has not changed, The World Wide Fund for Nature changed its name from the World Wildlife Fund in 1995 but the Canadian and US sections opted to keep their original names.

Two sub-categories of legitimacy are central to this paper. *Pragmatic legitimacy* rests on the ‘self-interested calculations of an organization’s most immediate audiences’ (Suchman, 1995: 578), in which the material ‘well being’ of the legitimacy grantor is enhanced (Suchman, 1995: 589).<sup>3</sup> In contrast *moral legitimacy* reflects a “positive normative evaluation of the organization and its activities. It rests not on judgments about whether a given activity promotes the goals of the evaluator, but rather on judgments about whether the activity is ‘the right thing to do...’” (Suchman 1995: 579).<sup>4</sup> Our cases below reveal that, arguably owing to the nascent nature of forest certification, most firms evaluations fell into the pragmatic legitimacy category, with the choice over which certification program to support, if any, a central theme. On the other hand, moral legitimacy granted to the Forest Stewardship Council by environmental groups and other ‘core audiences’, played a key role in understanding how far the FSC could go in their efforts to achieve pragmatic legitimacy from supply side interests.

### 3. Methodological hurdles

Comparing NSMD legitimation dynamics in regions with different types of political boundaries (national and sub-national) comes with certain difficulties. Likewise, the certification programs that we are examining are also designed to act at different levels: international vs. national vs. sub-national. The FSC, on the one hand, is international

<sup>3</sup> The definition of pragmatic legitimacy falls outside existing political science international relations work on legitimacy (for a review see Bernstein, 2001) which sees legitimacy as entailing a ‘logic of appropriateness’ supported by moral or cognitive dimensions, and which stand in contrast to rational self-interest support for governance structures (March and Olsen, 1998).

<sup>4</sup> Suchman and our broader study identified a third category of *cognitive legitimacy*, which is based neither on interests nor on moral motivations, but rather on ‘comprehensibility’ or ‘taken for grantedness’. In the former case legitimacy is given because the actions of an organization are understandable, in the latter case legitimacy is given because ‘for things to be otherwise is literally unthinkable’ (Suchman, 1995: 583). We found no examples of this type of legitimacy in our current research, and thus leave out this distinction for purposes of this paper.

in scope, but asserts the need for certification based on specific standards, which are developed at the national/regional level. Conversely, competitor programs have gone in the opposite direction: while they generally have domestic origins, subsequent developments saw them moving to a regional, or even international, scale. While these issues raise methodological constraints—how does one compare a country with a sub-national region?—complex comparisons often yield more nuanced findings precisely because of this complexity. We address this in our comparison by shifting our research lens in and out, depending on the region and certification program being examined.

The cases that are investigated have two key components that make them relevant to this study. First, they are all actively involved in the production and consumption of industrial wood and paper products. In some cases, the United Kingdom (UK) and Germany, higher reliance on imports exists, while in another, British Columbia (BC), exports are the driver of local production. Since NSMD is based around market transactions and the process of production, distribution and end product consumption, this variety of market conditions provides an important continuum of supply side audience types. Second, given the emerging nature of NSMD, these cases are important, as they were all early participants in forest certification, which gives us the opportunity to identify key factors that lead to differing paths of development.

### 4. The cases

This section of the paper describes the initial and current levels of support given to the FSC and competitor programs in each region. Our inductive approach revealed that, in contrast to the relatively stable ENGO support for the FSC, support by forest companies and landowners for FSC varied among cases. Although the supply side audience initially gave legitimacy to the alternative program in every region, we observed a shift in BC and the UK, where the supply side has increasingly legitimized the FSC. See Table 1 for a summary

Table 1

Type of legitimacy given by forest companies and non-industrial private forest (NIPF) landowners to the FSC and the FSC's competitor program in our study regions. Bolded text indicates where changes from initial to current legitimacy have occurred

Case	Time	Forest companies		NIPF landowners	
		FSC	FSC's competitor program <sup>a</sup>	FSC	FSC's competitor program
British Columbia (Canada)					
	Initial	None	<b>Pragmatic Moral</b>	N/a	N/a
	Current	<b>Pragmatic</b>	<b>Pragmatic Moral</b>	N/a	N/a
Maritimes (Canada)					
	Initial	None	None	None	None
	Current	None	None	None	None
Pacific Coast (US)					
	Initial	None	<b>Moral</b>	None	Moral
	Current	None	<b>Moral</b>	None	Moral
Northeast (US)					
	Initial	None	<b>Pragmatic Moral</b>	None	None
	Current	None	<b>Pragmatic Moral</b>	None	None
Southeast (US)					
	Initial	None	<b>Pragmatic</b>	None	None
	Current	None	<b>Pragmatic</b>	None	None
United Kingdom					
	Initial	None	<b>Moral</b>	None	<b>Moral</b>
	Current	<b>Pragmatic</b>	<b>Moral</b>	None	<b>Moral</b>
Germany					
	Initial	N/a	N/a	None	<b>Pragmatic</b>
	Current	N/a	N/a	None	<b>Pragmatic</b>

<sup>a</sup> The alternative program is the CSA in Canada, the SFI in the US, the PEFC in the UK, and the PEFC in Germany.

of initial and current legitimacy for the FSC and alternative programs in each region.

#### 4.1. Canada

The case of forest certification in Canada illustrates the way international, national and regional level struggles influence legitimization dynamics and support for FSC and its competitor programs. The decision by FSC to create regional standards bodies in Canada, and the Canadian Standards Association (CSA) to stick with one national certification system in which individual companies created specific implementation rules, has meant that only a regional/national analysis can capture the complex ways supply side groups have acted to support the systems.

Once the FSC emerged in Canada in 1996, a two-pronged approach was taken. A national office was established to coordinate the FSC in Canada, while regional working groups in the Maritimes, the Great Lakes-Saint Lawrence and British Columbia, took on the responsibility of developing standards. Most of the political struggles have occurred within these regional processes, however, the presence of the FSC spurred the creation of the CSA forest certification program in which industry attempted to frame the certification debate as a national-level issue. Led by the Canadian Pulp and Paper Association (CPPA), 23 industry associations joined ranks to form the Canadian Sustainable Forestry Certification Coalition. This group approached the CSA in 1994 to develop an industry initiated Canadian forest certification program (Elliott, 1999). The process was completed by 1996, with the first successful certification occurring in 1999 (Canadian Standards Association Sustainable Forest Management System, 2000).

The major role offered to the Canadian forest sector in the development of the CSA program reflects the close relationship between the government and the forest industry. In the National Forest Strategy, the federal government proposed the following partnership: 'Industry and governments will work cooperatively to pursue joint technical discussions aimed at internationalizing product standards, codes and certification procedures' (National Forest Strategy Coalition 1997: 4–22). The portrayal of the CSA certification process as a partnership between government and industry, and its emphasis on using the CSA as a way to secure market access (Elliott, 1999), led to most Canadian forest companies granting it early pragmatic legitimacy. Environmental groups never appeared to give any type of legitimacy. Though there were some signs that ENGOs were consid-

ering granting pragmatic legitimacy, they quickly moved away from such explorations.<sup>5</sup>

While these national developments were key to CSA legitimacy dynamics, FSC dynamics were largely regional, and it is at this level where divergence in the acceptance of forest certification programs by supply side members is most clearly demonstrated by our two regional Canadian case studies. While ENGO support for the FSC has remained relatively constant throughout the development of certification in both British Columbia and the Maritimes, we have observed a shift in the attitudes of supply side members in BC, who have gone from strictly supporting the CSA program to the reluctant acceptance of the FSC program as what one industry official described as ‘a cost of doing business’ (personal interview). This shift did not occur in the Canadian Maritimes, where, on the contrary, the early support of FSC by the JD Irving company was later revoked.

#### 4.1.1. British Columbia

Initially, forest certification developments in British Columbia showed striking similarities to developments in other regions: local and international ENGOs were quick to give the FSC regional process moral legitimacy (i.e. they indicated that the FSC was consistent with their ideals), while forest companies played a central role in the creation of a competitor to the FSC, the CSA certification program. Environmental groups based in BC and international groups concerned over BC forest management were clearly excited about the prospects of increasing their influence on forest management policy in the province. The supply side, on the other hand, supported the national developments of the CSA (mentioned above) as a morally appropriate and pragmatically appealing body to develop a workable certification program (Lapointe, 1998; Abusow and Rotherham, 1998). At this point the BC forest industry believed that it could handle the forest certification agenda ‘in-

house’ using the CSA process (Paget and Morton, 1999: 7), and that the CSA program would meet the requirements of its buyers, avert boycott threats and ensure international customers that ‘Canada is working towards sustainability in its forests (Forest Alliance of British Columbia, 1996).’ Many companies announced early on that they were pursuing CSA certification and expressed skepticism about the FSC process (Forest Alliance of British Columbia, 1997, 1998; Lapointe, 1998). Similarly governmental actors expressed strong concern about the FSC (personal interviews).

The initial patterns of industry support for certification programs changed dramatically in 1998: the exclusive support of supply side members for CSA quickly fell apart, as individual forest companies targeted by ENGO’s expressed interest in the FSC (Stanbury, 2000). While not the first to announce intentions to pursue FSC certification, the moves of MacMillan Bloedel to adopt a new ‘green’ strategy, in which Greenpeace campaigners, at a highly reported press conference, presented then president Tom Stephens with champagne (MacMillan Bloedel Ltd., 1998a,b) are telling of the dramatic shifts that occurred within the supply side. Overall, by 2001, many of BC’s large supply side companies have expressed interest in the FSC (Stanbury, 2000; Hogben, 1998; Canfor Corporation, 1999). Even the Forest Alliance, often criticized by environmental groups (Forest Alliance of British Columbia, 1997), actually joined the FSC (Jordan, 1999), and the pro-timber industry IWA applied for membership in the FSC. It has also been reported that companies have provided direct financial support to the re-kindled BC FSC working group and its standards development team (personal interview). All these efforts appeared to fall under the ‘pragmatic legitimacy’ category. Companies still supported the CSA, and even later an expanded SFI (American Forest and Paper Association, 2000b), but many recognized that it was now necessary to shape FSC regional standards and show some kind of support (Hogben, 1998; Hayward, 1998; Hamilton, 1998), lest they be targeted as environmentally unfriendly. Some governmental agencies appeared to alter their position on the FSC. For example, initial opposition changing, with some agencies/divisions showing

<sup>5</sup> Although the first CSA technical committee contained a broad membership encompassing many interest groups, ENGO support was minimal from the start, perhaps related to the unauthorized listing of two prominent Canadian ENGO executives on the CSA technical committee, and their subsequent withdrawal from the process (Elliott, 1999).

signs of change. For example, the province's Small Business Forest Enterprise Program contracted PricewaterhouseCoopers to provide a gap analysis to determine how feasible it would be to become certified, not just under CSA rules, but also under the more stringent FSC approach (PricewaterhouseCoopers, 1999).

Interestingly, the increased involvement of the BC supply side in the development of FSC BC regional standards has been met with skepticism by some BC ENGOs, who fear that the rigor of the standards may be in jeopardy. Although most ENGOs are still behind the FSC, moral legitimacy may be withdrawn if the FSC's regional standards no longer resonate with the goals of ENGOs. Overall these pronounced shifts in industry support and potential shifts in ENGO support have set BC apart from many other regions in North America where the FSC is still pursuing support from the supply side while enjoying relatively unwavering support from ENGOs.

#### 4.1.2. *Maritimes*

Maritimes standards development began early in FSC history, with little national or centralized regional guidance. Research conducted by Lawson and Cashore (2001) found that local environmental groups, themselves products of anti-pesticide campaigns in the 1970s and 1980s, quickly gave FSC moral legitimacy, hoping to influence certification rules to embrace concerns they were unable to raise within traditional public policy processes. Aboriginal groups, also an important actor as a social interest with specific and evolving rights to forested areas, gave the FSC pragmatic legitimacy and were active in developing its rules (Lawson and Cashore, 2001).

On the other hand, non-industrial private forest (NIPF) landowners, who comprise roughly one-half of the forest land base in this region, were divided in their support for FSC. A highly active 'anti-industrial forestry' group gave FSC moral legitimacy and, like the ENGOs in the region, sought to create FSC regional standard rules that would fundamentally suit forest management in the region. However, the vast majority of landowners and other associations took a more typical approach, expressing strong concerns about the

influence of the FSC on their rights to manage their property.

Indeed, by 1996 many NIPF owners gave pragmatic legitimacy to the CSA standards, resulting in many joining a certification market project sponsored by the CSA (Lawson and Cashore, 2001; Moffat, 1998).

On the other hand, and mirroring many of the cases under review, large and medium-sized industrial forest companies either favored no certification at all, or if they had to, gave reluctant pragmatic legitimacy to the CSA. Government agencies at both the provincial and federal levels were disinclined to legitimate the FSC or the CSA at all.

The one exception to these general patterns was found with the region's most significant industrial forest company, JD Irving Ltd, who actively sought, and obtained, FSC certification in the region for some of its holding in the provinces (Elliott, 1999). Evidence indicates that this support was pragmatic in nature, as Irving felt it could gain market access and recognition as a green leader by being an industry leader and innovator (Lawson and Cashore, 2001). However, by the summer of 1999, Irving's initial support changed dramatically, removing its pragmatic support of FSC. It gave back its FSC certificate and withdrew from participation in the standards development process, which changed significantly as the politics over FSC regional standards became more intense and polarized.

The FSC case reveals fairly consistent positions on the part of the key immediate audiences, illustrating again that the supply side seems to be the most significant area of change in support for certification programs. The 'Irving exception' to these general patterns is also unique among our cases because in this case a large vertically integrated company supported FSC relatively quickly, but later removed its support—thus moving in the opposite direction from the way industry moved in British Columbia.

#### 4.2. *United States*

Similar to Canada, forest certification in the US is dominated by two programs: the FSC and the

American Forest and Paper Association's (AF&PA) Sustainable Forestry Initiative (SFI) program. And like Canada, part of the certification issue is a complex intersection of national and regional dynamics in which the SFI frames the issue as a national one in which companies are given flexibility in implementation of the rules, and the FSC, in which regional processes create region-specific certification requirements that are generally more prescriptive and wider in scope. The regional-national intersection is important because, as we will see, there are striking similarities among the level of supply side support for certification programs in our three US cases.

What is striking is that in all of the US cases, nearly all members of the forest industry, organized as the AF&PA, have rejected the FSC certification process: companies have resisted FSC certification on their own lands and have not participated in the FSC standards development process in their regions. NIPF landowners in all three regions are either uninformed about certification or support landowner-run programs like the Tree Farm program (Coulombe and Brown, 1999). ENGO support for the FSC has generally remained constant in all regions.

Although the origin of SFI is actually earlier than that of the FSC, the SFI's 'certification' role has been categorized as a direct response to the creation of the FSC program (personal interviews). The SFI program was originally created to address the polarized atmosphere that had developed in the US over forestry issues in the late 1980s and early 1990s.<sup>6</sup> For analytical purposes, we treat the SFI re-creation in 1994 as its forest certification origins.

Nationally, the SFI program initially enjoyed the support of industry as a program to address public concerns about forest management (Wallinger, 1995) and to increase the industry's lobbying presence in Washington DC. The program's principles were designed to focus on a combination of traditional measures of 'good' forest management

(e.g. prompt and successful regeneration)<sup>7</sup> and some broader environmental issues (e.g. clean water) (American Forest and Paper Association, 2000a,d). The requirements set were viewed as quite similar to existing state regulations, so the program was deemed an appealing public relations tool for regaining public faith.

Since the inception of the two programs, we have seen the FSC gain pragmatic legitimacy from the demand side audience while remaining unsupported by the majority of the supply side. The creation of the North American Certified Forest Products Council (CFPC) has been a major activity of the FSC at the national level (World Wildlife Fund United Kingdom, 2000). Membership in this includes high-profile companies like the Home Depot, Lowe's, and Kaufman and Board Home Corp (Caulfield, 1999; Carlton, 2000). This support appears merely to be pragmatic at this stage, as many of these companies have instituted purchasing policies, yet their implementation has been characterized as poor by some ENGOs (Forest Ethics, 2001). Whether this demand side support will increase supply side support for the FSC is not yet discernible.

While the FSC has focused on regional standards detailed below, the FSC national office has been undertaking increasing policy influence and legitimation achievement strategies, moving beyond coordinator to become a key source of expertise. Indeed, by the end of 2000, the national office was developing national guidelines in an effort to head off industry criticisms that its stan-

<sup>6</sup> The SFI was formally created after an AF&PA commissioned study revealed different perceptions on the part of civil society and industry about whether sustainable forestry was being practiced (Wallinger, 1995), cited in Hansen and Juslin (1999).

<sup>7</sup> In the 1999 SFI annual report the AF&PA state, 'it is not enough to reforest harvested areas—it must be done quickly. SFI participants have successfully reforested, on average, 99% of the acres harvested under the SFI program within 5 years. In 1998, 59% of sites scheduled for planting were replanted within 1 year; 98% were planted within 2 years (American Forest and Paper Association, 1999)'. While this is sold as an accomplishment, its ecological value could be contested given that late seral and early seral stages are categorized as the most beneficial for wildlife habitat. In particular, the brush stage that may occur in stands that naturally regenerate after disturbance are removed from the succession process when industrial planting techniques are employed. So, while reforestation is important, regenerating trees in the most expedited manner is not necessarily the most ecologically beneficial management strategy.

dards varied among regions not for ecological reasons, but for political ones.

#### 4.2.1. *Pacific Coast*

Initial legitimation dynamics in the US Pacific Coast generally converged with most other cases in this paper: ENGOs gave FSC moral legitimacy. ENGOs appeared eager to use FSC to force changes on private and state owned forest lands, which came on the heels of their successful efforts to significantly reduce harvesting on federally owned forest lands in the region (Cashore, 1997, 1999; Hoberg, 2000).<sup>8</sup> On the other hand, large vertically integrated forest companies in the region gave pragmatic legitimacy to the SFI program, which, as noted above, was designed to compete with the FSC in the US. Likewise, most NIPF landowners in the region either failed to support any certification efforts, or were attracted to the more flexible Tree Farm program. Indeed, members of AF&PA operating in the region failed to become involved with the FSC regional standards working group. Participation was limited to certain smaller companies, and landowners such as Collins Pine and the Hoopa Valley Native American tribe (Forest Stewardship Council United States, 1998). Their participation stood in stark contrast to the otherwise startling homogeneity of firm level responses.

However, unlike legitimation dynamics north of the border in BC, members of the AF&PA have to date maintained their support for SFI, failing to give the FSC any type of legitimacy. Indeed, the creation of the CFPC in 1997 (World Wildlife Fund United Kingdom, 2000), and well publicized commitments of large retailers and developers in the US (mentioned above) to purchase certified wood conforming to FSC standards, has led only a few companies and landowners to consider FSC certification. The program has yet to gain inroads with the regions larger operators.

Both the integrated forest companies and NIPF landowners were openly critical of the FSC regional standards setting process, despite their own boycott of these discussions. They argued that the

initial draft standards surrounding reduced clear cuts and selection harvesting systems were designed for drier interior regions, rather than for those operating in the temperate forest in the western part of these states.<sup>9</sup> This illustrates the national–regional dynamic, as there is evidence that concerns over these clear cut rules were a catalyst for the creation of the FSC regional standards harmonization process created at the national level. The supply side audience explains their lack of support for FSC by pointing to uncertainty surrounding how national harmonization will affect these regional standards and the ambiguous support demand side purchasing policies are offering the FSC. The latter being the concerns for ENGOs as companies have not been quick to implement policies favoring FSC wood (Forest Ethics, 2001).

Other immediate audiences have played a less direct role at this point. Governmental support for the FSC in the region has been mixed. Some US national forest service officials have expressed concern that its lands have been exempted from the certification process, while others have raised concerns about FSC rules and procedures, mirroring critiques by professional organizations such as the Society of American Foresters. At the state governmental level there is a split between forest management agencies whose procedures follow a more flexible approach (at least in Oregon and Washington), and those who lead more conservation-focused agencies who have expressed an interest in having state-owned land FSC certified (Price, 2000).

In the US Pacific Coast we observed clear legitimation dynamics, with FSC maintaining moral support from ENGOs, pragmatic from national retailers and some lumber dealers, and SFI maintaining pragmatic and arguably moral support from large vertically integrated forest companies. Landowners either failed to support certification at all, or opted for an FSC competitor program geared toward the NIPF landowner.

<sup>8</sup> Indeed, an important subtext is that many environmental groups in the area did not want FSC to apply on national forest lands, as they feared that this might allow increased harvesting in these regions (MacCleery, 1999).

<sup>9</sup> This inequity was reported as a point of debate among participants in the regional standards process: there were even discussions of splitting the region to better capture the different ecosystems in drier southern interior forests and the wetter northern coastal forests.

#### 4.2.2. North-east

US north-east legitimation dynamics largely played out in similar ways to experiences in the Pacific Coast and the south-east. In the early stages, many large industrial firms, especially pulp and paper producers, did not see any potential for certification at all, and feared the FSC's disclosure requirements and prescriptive rules process. Once the idea of certification was seen to be taking hold, most AF&PA members supported making SFI a condition of their membership as a way of countering the FSC. Thus, most large forest companies gave pragmatic legitimacy to the SFI, while ENGOs gave moral legitimacy to the FSC. On the other hand, some small-to-medium-sized timber brokers and specialty wood-products manufacturers joined the FSC process, seeing both pragmatic reasons to participate in niche markets by differentiating themselves from larger suppliers (Lawson and Cashore, 2001).

There were notable exceptions to the overall support of industrial forest companies for the SFI, for instance a Maine forest products company, Seven Islands sought and received FSC certification for its operation. And as in the Maritimes, the most marked initial support for the FSC came from JD Irving—and unlike its experience in the Maritimes, Irving has maintained its FSC commitment in this region, owing to more industry friendly FSC regional standards (Lawson and Cashore, 2001).

Few companies have joined the Irving and Seven Islands approaches. Instead, industry has worked towards enhancing the credibility of the SFI in the region. For example, the Maine SFI committee worked with the Maine Forest Products Council to expand the role of the SFI, increasing third-party SFI certifications, setting minimum criteria under such certifications, and created an expert panel at the local level that would report on such certifications to the legislature (Lawson and Cashore, 2001). Partly as a result, increased ENGO efforts to expand the FSC in this region have failed, mirroring broad national trends.

#### 4.2.3. South-east

Ownership and management of forest lands in the US South are generally conducted by two

distinct groups, with vastly different levels of knowledge about and involvement in forest certification: industrial forest companies, who manage a large proportion of Southern forest lands and virtually unanimously support the SFI program, and NIPF landowners, who generally know very little about forest certification (Newsom et al., 2002). Industrial forestry operations in the south-east rely on non-industrial private landowners for 60% of their raw materials (Hyde and Stuart, 1998)

Due to the national nature of the SFI and the regional nature of the FSC, the two programs developed in the south-east with relatively little influence on one another. Both the SFI program and FSC US south-east working group were developed in 1996 (Wallinger, 1995; The Forest Management Trust, 1999). Although all members of the AF&PA are obligated to participate in the SFI program, the degree to which southern AF&PA members gave moral legitimacy to the SFI appears ambiguous. Interviews conducted in the US south-east with key US forest company officials indicate that, although an element of moral legitimacy in the basic approach taken by the SFI may have existed, it appears that most SFI members in the region saw the program as a pragmatic marketing and educational tool from its very inception. NIPF landowners have generally not yet entered the certification debate in the south-east.

The FSC south-east working group gained moral legitimacy from regional environmental groups through its focus on minimizing the spread of plantations and other industrial forestry practices, but failed to get participation by members of the forest industry (Humphries, 1999). Interviews indicate that the refusal of virtually all south-eastern forest industry members to participate in the FSC standards-development process was a conscious decision: internal sanctions within the industry were used against one company that expressed interest in participating (personal interviews). The company in question eventually withdrew from the FSC regional process. In the absence of forest industry participation, the FSC standards setting team recruited the help of professional foresters to bring a 'realistic touch' (personal

interview) to the process and act as a proxy for the voice of the forest industry.

The FSC still faces entrenched opposition to its program in the south-east, mainly from the large industrial supply side actors. Those NIPF landowners that are aware of the certification issue consider local or state-level initiatives most appropriate, and give legitimacy to initiatives like the Tree Farm program, which is specifically run by and tailored to NIPF landowners (Newsom et al., 2002). Some NIPFs appear to give pragmatic legitimacy to the certification concept as potential protection against more stringent public policy (personal interview). Despite reports of having felt pressure from some national-level buyers group members (personal interviews), most large industrial members of supply side, with the exception of the Anderson-Tully Company (FSC US, 2001), are currently maintaining a strong resistance to the FSC, as are their counterparts in other regions of the US.

#### 4.3. Europe

Two programs dominate forest certification politics in Europe: the FSC and the Pan-European Forest Certification (PEFC) program. When the FSC made headway in Europe in the mid 1990s, supply side interests in the UK and Germany, supported by their respective state agencies, proposed labels of origin as a means of countering the FSC approach. The ‘local grown’ certificate was called the FICGB Woodmark in the UK (Forestry Industry Council of Great Britain, 2000; Kiekens, 1997) and the *Herkunftszeichen*, or ‘label of origin,’ in Germany (Klins, 2000). Generally there was agreement between the government and the forest sector that FSC certification was unnecessary given the extensive and rigorous set of state regulations (Forestry Commission, 1998) (Personal interviews). Their view of the FSC was that it had an environmental bias, a top down decision-making structure, lacked accountability, and was totally unnecessary in countries where government regulations were, they felt, more than sufficient.

The PEFC program was conceived in 1998 by forest companies and private forest owners in six European countries, including Germany (Hansen

et al., 1999). Although the PEFC has become a Europe-wide initiative with 15 members (including the UK) and an overarching set of principles, based on the Helsinki Criteria, developments within this program are still occurring mainly at the national, not European, level. Each member country proposes its own set of standards, which are then evaluated by the European PEFC office, and, if they conform to the requirements, are accepted. The member’s countries have their own national office, and much autonomy in terms of the development of national auditing system. Like the FSC national working groups, each national PEFC office is not constrained by its international framework when it comes to national-level political or strategic decision-making. This national focus allows us to examine each of our European case studies separately, without the problems of scale associated with our other cases.

##### 4.3.1. United Kingdom

Two opposing forces similar to those present in Germany and in North America shaped initial legitimacy dynamics in the UK. On the one side, a local industry, composed of NIPF owners and processors in concert with the government, stood behind existing forest regulations, defending their history of ensuring ‘good’ forest management. Representing the interests of local producers, the FICGB and the government’s Forestry Commission established the FICGB Woodmark (mentioned above) (Kiekens, 1997). With the addition of a new government felling license, this program was able to ensure that ‘wood (products were) derived from British grown timber and that the tree was felled in accordance with official government regulations (Forestry Industry Council of Great Britain, 2000).’

The opposing force was a coupling of environmental groups and members of the demand side audience who gave moral support to the international FSC program. The WWF and the Do-It-Yourself (DIY) retailer chain, B&Q, were two important supporters that saw the management of tropical forests as a key issue of concern (Viana et al., 1996). With the addition of a number of locally focused environmental groups, the FSC regional standards process was supported as an

important starting point for attaining global forest sustainability (Tickel and World Wildlife Fund for Nature, 2000). These groups were not satisfied with 'local grown' labels, since tropical timber imports often came with dubious sustainability claims (Global Witness, 1999). Only an international process independent of government was perceived as a credible and morally appropriate option to ensure the procurement of sustainable forest products.

Subsequent events provoked a significant change in the polarized views on certification; arguably, certification has become an accepted reality and has been deemed morally appropriate by most of the immediate audience (Tickel and World Wildlife Fund for Nature, 2000). However, the legitimacy dynamics are complex. The key element of this shift was the UK, Woodland Assurance Scheme (UKWAS), which was a government-facilitated process independent of the FSC that successfully merged the draft FSC Great Britain standard with the government's UK Forestry Standard (Goodall, 2000). UKWAS represents a compromise that achieved moral support from all members of the immediate audience. Yet, it is merely a standard rather than a certification program (UKWAS Steering Group, 2000) and its moral legitimacy has not been automatically transferred to the FSC. Only the environmental community and the government are giving moral legitimacy to the FSC. The WWF 95+ group has increased its membership, however, not all members are purely specifying FSC wood, and even B&Q, an original participant in the creation of the FSC, has begun to consider alternative sources of certified wood (Knight, 2000).

The processing sector has framed the debate in pragmatic terms. At present, FSC is the best alternative available; however, manufacturers and managers have expressed openness to other alternatives if their clients demand them. NIPF landowners are the least supportive of certification and their persistent mistrust for the FSC has provoked interest in the landowner-initiated PEFC program in Europe. The recently incorporated PEFC UK Limited hopes to gain access to the UKWAS standard (Pan European Forest Certification United Kingdom, 2001); however, this has been prevented

through the veto of certain members of the UKWAS steering group (Yull, 2000, 2001).

#### 4.3.2. Germany

Although the roots of forest certification were already present in Germany in the late 1980s, when boycotts of tropical wood were promoted by German environmental groups, certification would not directly impact domestic forest landowners and managers in Germany until nearly a decade later, in 1996. At that time, pressure for certification had spread from tropical to temperate ecosystems, and forest certification programs such as *Naturland* and eco-timber had been created by German environmental groups, including Greenpeace and NABU (Klins, 2000). The German Forestry Association (*Deutscher Forstwirtschaftsrat*), (made up of state forestry agencies, forest products associations, private landowner associations and academics), and private landowners rejected those labels, saying that they were inappropriate for German land ownership patterns, which saw 45% of forest land owned by private individuals or enterprises (more than 75% of which own less than 5 ha), and 55% of forest lands managed directly by state and municipal agencies (Bundesministerium für Ernährung Landwirtschaft und Forsten, 2000). Instead, the forest sector chose to create its own labeling program, the *Herkunftszeichen*, or 'label of origin', in 1996, which was available to all German forest owners (Klins, 2000).

When the German FSC working group was created in 1997, the forest sector reacted by working with other landowners and managers throughout Europe to create its own label, the PEFC, which was created in June 1998 and based on the Helsinki Criteria of the 2nd Forest Ministers Conference in 1993 (Hofmann et al., 2000). While the FSC had early buy-in from all major ENGOs, forestry labor unions, and a handful of forest landowners, state agencies and municipalities, the PEFC, with its systems-based standards and strong voice for private landowners, had broad support from nearly all private and state landowners. Although this support has a moral element, given the PEFC's recognition of the long tradition of sustained yield forestry in Germany, the PEFC is mainly given pragmatic legitimacy, because forest

land managers want to maintain their market access, and came to believe that in the absence of a competitor program, the market might force them to adopt FSC. Thus, the PEFC is almost seen as the lesser of two evils: one PEFC supporter even called the PEFC ‘the certification program that nobody wants’ (personal interview). This case reveals the importance of understanding how legitimacy granting for one type of NSMD certification program may affect the legitimacy of a competitor program.

Since the PEFC’s creation, the forest sector’s support for the PEFC has not changed significantly; if anything, early patterns of support have become more ingrained and two distinct and increasingly polarized factions—the FSC with its ENGO supporters and the PEFC with its landowner and state supporters—have emerged. Recent attempts at mutual recognition were unsuccessful and formal communication between the two programs was recently ended by the FSC (FSC Germany, 2001).

Table 1 summarizes the developments described in the previous seven case studies by showing the initial and current type of legitimacy given by forest companies and landowners to the FSC and competitor programs. Again, significant areas of divergence become visible, which are shown in bold type: the level of forest company support for the FSC changed from ‘none’ to ‘pragmatic’ in both the BC and UK cases. In all other regions, legitimacy has remained stable. Why do we observe change in BC and the UK, and stability elsewhere? Which independent or intersecting factors propelled these supply side audiences to embrace the prescriptive, broad ranging rules of the FSC? Our attention now turns to offering an explanation for the divergence observed in Table 1.

## 5. Explanatory variables

This section seeks to account for the differences in supply side audience decisions across the regions—namely why some forest companies and landowners would maintain resolute opposition to FSC certification programs (usually giving FSC competitor programs strong pragmatic and in some

cases moral legitimacy), while in other regions companies and landowners have begun to accept FSC authority and started the process of seeking certification with this program.

We draw on existing globalization, public policy literature, as well as our own observations of the cases to develop seven working hypotheses that fall under four interrelated factors: (1) the degree of a region’s dependence on foreign markets; (2) the extent to which forest management is seen as a ‘problem’ on the political agenda; (3) the structure of the supply side; and (4) the character of the FSC’s competitor programs. These factors, through both their independent and intersecting effects, help us to understand why the FSC has gained differing levels of supply side legitimacy in each region.

## 6. Degree of dependence on foreign markets

Much of the research on globalization and policy convergence has pointed to the susceptibility of a region to global and transnational pressures when it relies on foreign markets for the source of its products (Berger and Dore, 1996). One of the central ideas behind this argument is that it is easier for transnational actors to raise concern about a firm’s behavior when that firm is outside of the political system in which it operates. There can be no charges of breaching territorial ‘sovereignty’ (Bernstein and Cashore, 2000), nor do those exerting pressure have to be wary of domestic consequences of their actions. These ideas lead to our first preliminary hypothesis to explain divergence:

**Hypothesis 1.** Supply side companies in a region that sells a high proportion of its forest products to foreign markets will be more susceptible to demand side manipulations by the FSC and its supporters.

This hypothesis helps account for divergence among our cases because it addresses those heavily export oriented regions in which ENGO efforts to force change have been directed toward non-domestic purchases of the products. If this hypothesis has merit, it should most certainly help explain

legitimation dynamics in the province of BC, since it fits the description of an export oriented region in which transnational groups have gone to non-domestic purchasers of their products. We see both indirect and direct support for this hypothesis.

Indirect support comes from dynamics that occurred before certification but followed the same logic. From the beginning of the 1990s supply side companies in BC, particularly coastal producers, were under market pressure, first from boycott campaigns (Greenpeace International, 1993) and then later from demands for FSC certified wood (Greenpeace UK, 1998). In both instances, ENGOs pressured demand side companies in Europe and the US to terminate their contracts with companies operating in BC (Vertinsky et al., 1997; Stanbury, 2000). It was evident that BC coastal producers felt the heaviest impacts of these pressures, which were made worse by the limited US market access, owing to the 1996 Canada–US Softwood Lumber Agreement, and Asian economic woes peaking in 1998 (Taylor and van Leeuwen, 2000; Stanbury, 2000). This made Europe—a relatively small market for BC products—appear greatly important, as other alternative markets were inaccessible. As Bernstein and Cashore (2000) noted, going international allowed demand side members that had been operating in Canada, or more specifically, BC, to avoid national political backlash.

The BC forest industry attempted to counteract the demands of their international buyers, but with little success. BC's main forest labor union, the IWA, even mounted counter boycotts against companies that proposed terminating contracts with BC firms (Stanbury, 2000). However, with no stake in the domestic political ramifications of a buying policy specifying FSC wood, these international demand side companies appear to have been quite malleable to the demands of European ENGOs.

Direct support for this hypothesis is found in ENGO efforts to have retailers such as Home Depot in the US announce policies for FSC wood. This announcement had a discernible impact on BC, which imports most of its forest products to the US: many companies in BC announced their intention to become FSC certified following the

Home Depot announcement. In line with this hypothesis, the announcement had much more of a direct effect on forest companies in Canada than in the US. The Home Depot announcement in the US simply appeared to galvanize and reinvigorate support for the SFI, whose supporters believed that they could alter Home Depot's approach through a highly strategy domestic campaign.

While more research needs to be done into other similar cases, preliminary evidence indicates that companies operating in export-oriented markets and are the target of transnational campaigns to have purchasers adopt FSC wood are more likely to grant FSC pragmatic legitimacy.

**Hypothesis 2.** Supply side members in a region that imports a large proportion of its forest products will be more susceptible to demand side FSC manipulation strategies within its own borders.

When the supply side in a region is small and cannot produce the volume of forest products required to meet local demand, it becomes susceptible to competition from FSC imports. This was observed in the UK where the supply side responded to the combination of domestic demand for FSC, and increasing international competition. In 1999, the UK was the least self-sufficient EU country in terms of wood production capacity and, internationally, placed second behind Japan in terms of net value of wood products imported (Forestry Industry Council of Great Britain, 2000). When B&Q issued an ultimatum to its suppliers that by the end of 1999 it intended to purchase only FSC certified wood, local processors were not exempted (Stanbury, 2000; National Home Center News, 1998; DIY, 1998). And because competition from FSC-certified suppliers Sweden was increasing and the potential that countries in the Baltic States, such as Latvia and Estonia, would follow suit (Tickel and World Wildlife Fund for Nature, 2000; Hansen and Juslin, 1999), local producers recognized their market share was in jeopardy. This solidified the pragmatic appeal of the FSC, as it was a logical way to meet customer demands and maintain market share. The fear of increased competition from international suppliers of FSC wood also exists among the supply side

members in Germany, who sell most of their products domestically; however, these suppliers have not yet felt the combined effects demands for FSC wood and increasing international competition (personal interviews).

In sum, the use of the international market appears to have been salient for the FSC's success in gaining BC and UK supply side pragmatic legitimacy, which highlights the importance *dependence* plays in determining the success or failure of market manipulation strategies. Overall, the lack of market diversity—either as an exporter or domestic supplier—and openness to the international markets appeared to be key intervening factors that motivated the shift in supply side legitimacy in both these regions.

### 7. The extent to which forest management issues are seen as a 'problem' on the policy agenda

In the traditional public 'policy cycle', a problem is brought to the government's attention, policy options are formulated, and a particular course of action is put into effect and monitored (Howlett and Ramesh, 1995). When controversial forest management practices or issues have reached a region's policy agenda, supply side members may choose to rely exclusively on the government's solutions, or may choose to take independent action to avoid potential controversy and address the issue. We would expect to observe this type of action especially in an internationalized sector such as forestry, where trans-national environmental groups have the resources and expertise to publicize controversial issues quickly. We propose the following hypothesis:

**Hypothesis 3.** Supply side companies are more likely to give the FSC pragmatic legitimacy when forestry practices are perceived to be a major problem on the governmental policy agenda. The strength of this relationship is heightened when governmental initiatives have failed to remove the issue as a perceived problem.

In each of our study regions, the appropriateness of certain forest management practices, to some

extent, were an issue on the political agenda. Yet in particular instances these issues reached a heightened prominence that forced supply side members to find solutions to controversies themselves, even after governments had sought to develop public policy solutions. To the extent that the perceived problem is a threat to profits or a loss of 'social license', we expect that supply side audiences will give pragmatic legitimacy to the FSC.

The BC case provides support for this hypothesis. There, both domestic and international civil societies were well aware of the global significance of BC's few remaining coastal temperate rainforests. Documented evidence pointed to a history of mismanagement (Tripp et al., 1992; Tripp, 1994), which was closely linked to criticism of existing public policy (Wilson, 1998; Marchak et al., 1999). Initially the provincial government acted independently to develop an internationally defensible Forest Practices Code (British Columbia. Ministry of Forests, 1996) and associated land use planning process (British Columbia. Integrated Resources Planning Committee and Ministry of Forests, 1993; Wilson, 1998) and the federal government acted, in concert with industry, to back the CSA (Elliott, 1999). However, the salience of the ecological crisis increased in fervor as ENGOs in North America and Europe continued to press for changes (Greenpeace UK, 1998; Stanbury, 2000). Finally, when MacMillan Bloedel, one of the hardest hit forest companies, released its Forest Plan, certification was one component of a series of reforms tailored to address deep-seated concerns within civil society (MacMillan Bloedel Ltd., 1998a,b); as a solution, this move went beyond what was required by public policies. The persistence of the perceived 'ecological crisis' can be viewed as a key element of this shift, which has been absent from the other cases we have studied.

In the UK and Germany, supply side buy-in to the FSC was not associated with a specific domestic ecological issue but rather concerns about tropical and temperate rainforests. Both countries import large amounts of wood from these types of ecosystems (Forestry Industry Council of Great

Britain, 2000; European Forest Institute, 2001).<sup>10</sup> Hence, the perceived ecological crisis was the deforestation and the associated loss of biodiversity occurring in these forests. Morally implicated by their dependence on imports, ENGOs in both regions responded with campaigns for the adoption of a certification standard domestically, to ensure international parity in their demands: in the UK, the standard became the FSC for reasons discussed in the previous section, while in Germany, the PEFC was seen as adequate. In the US south-east, the proliferation of pine plantations and the resulting loss in biodiversity is considered a problem by many regional ENGOs: the number of acres in southern pine plantations increased from less than two million acres in 1952 to over 24 million acres in 1992, and is expected to continue increasing (Hyde and Stuart, 1998). However, this problem has not reached a crisis level among the general public, and has not, therefore, had market or social license implications for supply side members there.

It appears that the persistence of an ecological problem and demands that it be addressed heighten a company's search for solutions, which in the BC case, involved FSC certification. By conforming to the moral ideals of domestic and international ENGOs the FSC has been able to offer a 'way out' for forest companies that were under campaign scrutiny. Unlike the traditional state-centered policy responses to 'ecological crises', the FSC offered a set of standards endorsed by both domestic and international ENGOs that indicated to civil society that a solution was being pursued.

## 8. Structure of the supply side in a region

By understanding the way that forest lands are distributed, and the avenues through which the managers of those lands relate to each other, we are able to build an understanding of the motivations companies might have for participating in a certain forest certification program. The following

<sup>10</sup> Six percent of UK softwood sawnwood and 15% of its pulp imports in 1997 were of Canadian origin (Forestry Industry Council of Great Britain, 2000), and of its tropical imports 90% were reported to come from Brazil, Indonesia, and Malaysia (Matthew, 2001).

two hypotheses are an exploration of this relationship.

**Hypothesis 4.** Supply side members in a region where land ownership is fragmented will be less likely to grant the FSC pragmatic legitimacy, owing to high transaction and implementation costs.

The roots of this hypothesis derive more from traditional economic theory than public policy literature. Nevertheless, it appears to be an important explanation in supply side legitimation dynamics. If this hypothesis holds, regions with a large number of small land holdings will show a low acceptance of FSC certification owing to the diseconomies of scale associated with certifying small forest tracts. We found both direct and indirect evidence in our cases that support this hypothesis.

The most illustrative support exists in the US south-east. Most forestland is owned by NIPFs in small tracts, which together supply the majority of the region's domestic wood fiber (United States Forest Service, 2000; DeCoster, 1998). Wood processors in the region require a continuous fiber supply in order to feed their highly specialized capital-intensive mills (Hyde and Stuart, 1998: 24); consequently industrial forest companies consider the logistical problems associated with the FSC's chain of custody requirements overwhelming given their large number of small fiber suppliers (personal interviews). The FSC's attempts to address this practical barrier have met with little success. The regional working group has promoted group certification and resource manager certification as options for the many small landowners in the Southeast, but neither industrial managers nor NIPFs themselves have taken much interest in them.

Conversely, we observed cases in which there were a small number of large landowners who enjoyed economies of scale in the costs of FSC certification. In BC, land is concentrated in the hands of a few large companies (Marchak et al., 1999) (and ultimately in the hands of one landowner—the provincial government), and in the UK, land is held by the government (Forestry Industry Council of Great Britain, 2000). Although

economies of scale and cost issues were not mentioned explicitly during interviews in BC, they were cited during UK interviews as an important reason for supply side support for FSC there.

While chain of custody requirements were a hurdle for UK processors, two factors made a resolution possible there. First, the FSC took a conforming strategy to meet the substantive needs of these companies through a change to the threshold percent-requirements for an FSC product to carry a label (Forest Stewardship Council, 2000).<sup>11</sup> Second, the successful FSC certification of large areas of government lands meant that processors had sufficient FSC wood supply even without the certification of any large portion of the private growers (personal interview). Consequently, where certification has been stifled by a complex wood basket in the US south-east, the presence of one key landowner open to certification has made possible broader acceptance of the FSC in the UK.

The different structural and economic limitations on owners of small and large land holdings appear to have explanatory power when exploring the divergent levels of supply side support for FSC in our cases.

**Hypothesis 5.** Members of the supply side in a region where companies and landowners are well represented and unified are less likely, everything else being equal, to grant the FSC pragmatic legitimacy.

Inhibiting the production of FSC certified products in a region, and therefore blocking FSC supporters' market strategies by keeping supply of FSC certified wood low, would seem to be an effective way to prevent the FSC from gaining headway. However, any such unified action runs the risk of being sabotaged by defectors—in the case of certification, the defectors would be companies or landowners who take advantage of a relatively high demand for FSC certified products that is not being met. The ability of a region's forest sector to keep supply side members from

defecting should be a measure of its success in denying the FSC legitimacy.

This hypothesis appears to be an important explanation for FSC's lack of success in gaining legitimacy from any large portion of the US supply side. Up until the early 1990s every element of the US forest sector was noticeably fragmented (Lertzman et al., 1996). However, with the threat of declining access to timber from National Forests in the Pacific Northwest the industry as a whole moved to increase their national presence.<sup>12</sup> The result was the AF&PA that amalgamated a number of national associations (Cashore, 1997).

When certification emerged, the AF&PA was well resourced and situated to develop an industry wide response to the demand side and environmental group pressures. Throughout the US the SFI has rapidly developed tougher standards and third-party procedures (American Forest and Paper Association, 2000a), in an attempt to win ENGO support or at least to neutralize general societal recognition for ENGO policy (personal communications). The strength of the industry's cohesion is central to its resistance of the FSC in the US. Not only has the surprising consistency in the industry's 'boycotting' of the FSC regional processes been important, but also the AF&PA has agreed to recognize the existing American Forest Foundation's Tree Farm Program as the most appropriate approach to certifying NIPF landowners (American Forest and Paper Association, 2000c), demonstrating that the industrial portion of the supply side has united with one of the only nationally, broadly supported landowner associations. Their joint stance on certification represents unprecedented unity in a country that has traditionally been characterized as extremely politically fragmented (Grant, 1989).

By contrast, the Canadian forest sector was represented by a fragmented and regionally focused associational system (Coleman, 1987, 1988), which inhibited the adoption of a unified

<sup>11</sup> In fact, when the changes occurred, many of the UK mills were immediately able to offer FSC certified panel products to the market.

<sup>12</sup> The achievements of the environmental movement in the north-west had resulted from court action seeking proper implementation of federal statutes by the certain agencies. The industry felt it lacked the ability to lobby the federal government to ensure future legislation did not give the environmental movement this kind of power.

stance on certification issues, and helps explain the pragmatic legitimacy the supply side in BC has given to the FSC. Lacking a logical association in which to house an industry response, the Canadian forest sector drew on the expertise and resources of the CSA to create its FSC response (Abusow and Rotherham, 1998; Lapointe, 1998). Within BC, unified supply side support for the CSA was further restrained given dynamics created with the emergence of the Forest Alliance of BC (FABC). Its mandate was to bolster the public image of the BC forest industry. However, when the FSC became a serious issue, neither the already established Council of Forest Industries (COFI) nor the FABC had a clear mandate to develop a response. It seems that the FABC's diverse membership limited its ability to act purely on the industries behalf. Once a few companies showed an interest in pursuing FSC, 'the dam broke' and other companies followed suit (personal communication).

## 9. The nature of the FSC's competitor programs

**Hypothesis 6.** Supply side members are more likely to give the FSC pragmatic legitimacy when the alternative programs have rigorous standards, even when alternative programs might provide market access.

**Hypothesis 7.** Supply side members are more likely to give the FSC pragmatic legitimacy when the alternative programs have lax standards accompanied with poor market access.

While seemingly contradictory, our inductive research seems to indicate that in order for FSC competitor programs to maintain support from companies and landowners (or at least, not have to share legitimacy with the FSC), they need to develop a program that walks a fine line between being too prescriptive (and thus the costs of FSC do not seem more difficult) and too weak (thus the market will not accept the program).

A central element of pragmatic legitimacy is an evaluation on the part of the supply side member of the 'costs' and 'benefits' of certification under different programs. In these hypotheses we consid-

er how the costs of different programs, in terms of compliance with the program's standards, and benefits, in terms of market acceptance and expected economic gains, have affected supply side support for the FSC. Empirical evidence seems to indicate that supply side members' decisions to support the FSC (or not) are influenced strongly by how well the competitor program balances costs and benefits.

In some cases, the standards of an FSC competitor program were perceived as being too rigorous to be acceptable by the supply side. Canadian supply side companies initially endorsed the CSA; however, the costs, level of public scrutiny, and time commitments of many aspects of this program eventually met or exceeded those of the FSC (personal interview), yet could not offer the potential market benefits of the FSC. Consequently what had been a program that was meant to limit FSC success, became one among a number of certification alternatives (Forest Alliance of British Columbia, 2000). In its attempts to gain support from the ENGO community by conforming to existing Canadian public policy norms about public consultation, it appears that the program lost some of its pragmatic appeal with the industry.

Likewise, a competing certification program may have less onerous standards than the FSC. This may be pragmatically appealing to the supply side, but may be a disincentive for participation if the system has no market acceptance. However, we did not observe this situation in any of our cases: rather, it appeared that when the alternative program had weaker standards and low market acceptance, it provided other, less tangible benefits that mitigated against the lack of market support. For example, in the case of Germany, no retailers or wood processors are demanding PEFC certified wood; however, the PEFC is associated with the avoidance of *Fremdbestimmung*, or the 'ruling from the outside' of domestic forest practices, which is seen by supply side members as the major threat of the three-chamber FSC system. Similar feelings persist even in the UK, where the private growing community is seeking recognition of the UKWAS, a standard recognized as equivalent to the nationally endorsed UK FSC standard, to the

PEFC for mutual recognition under its framework (Yull, 2000, 2001).

In the US, SFI certified wood has not been accepted by members of FSC buyers groups in the US or elsewhere, but the SFI offers supply side members an opportunity to maintain a cohesive front and ‘starve’ the US demand for FSC certified products. Furthermore, the SFI, being initially created as a public relations program to regain public trust, has continued to offer its members other benefits. For instance, the SFI continually uses informing strategies directed at general society that point to the many beneficial things the program is achieving (American Forest and Paper Association, 2000b,c,d). While linked to its competition with the FSC, these give tangible benefits to participant companies that are, in a sense, independent of market acceptance.

Overall, the cases highlight the struggle that the FSC’s competitor programs face to keep the level of certification standards acceptable to supply side members while simultaneously getting acceptance in the marketplace. So far, no competitor program has met this challenge; however, some programs have managed to offer the supply side other important incentives. It appears that, in many of our cases, these non-market benefits tend to be reason enough for supply side support.

## 10. Conclusion

Supply side response to the creation of the FSC certification program and its competitors began with remarkable homogeneity in all of our study regions: with few exceptions, supply-side forest companies and landowners gave pragmatic and sometimes moral legitimacy to the competitor programs. However, since 1998 a dramatic shift has occurred, which saw the supply side audience in BC and the UK moved to give the FSC pragmatic legitimacy. In this paper we explored this divergence and offered a first attempt at applying a heuristic developed by Cashore (2002) that builds on the seminal work of Suchman (1995) on organizational legitimacy. Its importance hinges on the way in which it allows us to investigate firm response to rules generated outside the purview of the state, and governed by inter-

actions in the market. Our research found that emerging NSMD governance programs, while theoretically able to garner pragmatic, moral and cognitive support from supply-side members, are presently focused on gaining pragmatic and moral legitimacy, the least durable categories.

Empirical evidence showed that forest companies’ and landowners’ decisions to support a certain certification program are constrained and influenced by a complex group of factors. Supply-side members in regions with a high reliance on foreign markets appear to be more likely to support the FSC program, since these members’ international buyers can make (sometimes controversial) demands for FSC certified wood without risking the political backlash that domestic companies might experience. Supply side members in regions where forest management practices have reached the status of ‘problem’ on the policy agenda are more likely to support the FSC as a way to expedite problem resolution and avoid controversy, or as a way to gain ‘social license’. The structure of the forest sector was also shown to be closely related to diverging levels of FSC acceptance: regions with fragmented land ownership faced more resistance to the FSC, due to hurdles such as increased transaction costs and decreased economies of scale. A high level of forest sector cohesion, on the other hand, was closely related to the ability of the supply side to resist FSC certification. The inability of competitor programs to simultaneously minimize the substantive costs of certification yet maximize market acceptance appears to be related to a higher level of supply side support for FSC in some cases; however, in other cases, competitor programs have secured supply side support through the provision of other non-market incentives, despite being unable to promise market acceptance.

While the methodological hurdles of such a study are significant, the importance of a new governance system like forest certification means that more research needs to be done to understand just what is emerging, who is giving it support, and how durable this support might be. This paper is an initial effort to do this by focusing on issues of divergence, which may shed light on where certification is headed in other regions and other

sectors. It also serves as an example of another policy realm that has come under intense pressure for convergence, but has nonetheless experienced important divergence.

## References

- Abusow, K., Rotherham, T., 1998. Canadian progress toward SFM system certification. *Forestry Chronicle* 74 (3), 405–408.
- American Forest and Paper Association, 1999. SFI: 4th Annual Progress Report. Washington DC: American Forest and Paper Association's SFI program.
- American Forest and Paper Association, 2000a. Fifth Annual Progress Report. Washington, DC: SFI Program.
- American Forest and Paper Association, 2000b. Fraser 3rd Party Certifies all its Forestlands: Lands in Canada First Outside U.S. to be Independently Audited under SFISM. Washington DC: American Forest and Paper Association's SFI Program.
- American Forest and Paper Association, 2000c. SFISM AFF's American Tree Farm System® and AF&PA's Sustainable Forestry Initiative (SFI)SM Program Collaborate to Expand the Practice of Sustainable Forestry. Washington DC: American Forest and Paper Association's SFI Program.
- American Forest and Paper Association, 2000d. Sustainable Forestry Initiative Standard: Principles and Objectives. Washington DC: American Forest and Paper Association's SFI Program.
- Berger, S., 1996. Introduction. In: Berger, S., Dore, R. (Eds.), *National Diversity and Global Capitalism*. Cornell University Press, Ithaca and London.
- Berger, S., Dore, R., 1996. National Diversity and Global Capitalism. In: Katzenstein, P.J. (Ed.), *Cornell Studies in Political Economy*. Cornell University Press, Ithaca and London.
- Bernstein, S., 2001. Legitimacy in Global Governance: Three Conceptions. Paper prepared for delivery at the annual meeting of the American Political Science Association, August 29–September 1, San Francisco.
- Bernstein, S., Cashore, B., 1999. World trends and Canadian forest policy: trade, international institutions, consumers and transnational environmentalism. *Forestry Chronicle* 75 (1), 34–38.
- Bernstein, S., Cashore, B., 2000. Globalization, four paths of internationalization and domestic policy change: the case of eco-forestry policy change in British Columbia, Canada. *Canadian Journal of Political Science* 33 (1), 67–99.
- British Columbia. Integrated Resources Planning Committee, and Ministry of Forests, 1993. *Land and Resource Management Planning: A Statement of Principles and Process*. British Columbia.
- British Columbia. Ministry of Forests, 1996. *B.C.'s Forest Practices Code: An International Comparison*. Victoria: Province of British Columbia. Ministry of Forests.
- Bundesministerium für Ernährung Landwirtschaft und Forsten, 2000. *Land- und Forstwirtschaft in Deutschland: Daten und Fakten*.
- Cashore, B., 2002. Legitimacy and the privatization of environmental governance: how Non-State Market-Driven (NSMD) Governance systems gain rule-making authority. *Governance* 15 (4), 503–529.
- Canadian Standards Association, Sustainable Forest Management System, 2000. *Certification Status in Canada: Shaping the Future of Canadian Forests* [Internet]. CSA/SFMS, December 10, 2000 [cited December 19 2000].
- Canfor Corporation, 1999. *Annual Information Form*. Vancouver.
- Carlton, J., 2000. Home Builders Centex and Kaufman Agree Not to Buy Endangered Wood. *Wall Street Journal*, March 31.
- Cashore, B., 1997. *Governing Forestry: Environmental Group Influence in British Columbia and the US Pacific Northwest*. PhD, Political Science, University of Toronto, Toronto.
- Cashore, B., 1999. Chapter Three: US Pacific Northwest. In: Wilson, B., Kooten, K.V., Vertinsky, I., Arthur, L. (Eds.), *Forest Policy: International Case Studies*. CABI Publications, Oxon, UK.
- Caulfield, John. 1999. Selling 'safe' wood gets a major advocate. *National Home Center News*, October 11.
- Coleman, W.D., 1987. Federalism and Interest Group Organization. In: Bakvis, H., Chandler, W.M. (Eds.), *Federalism and the Role of the State*. University of Toronto Press, Toronto.
- Coleman, W.D., 1988. *Business and Politics: A Study of Collective Action*. McGill-Queen's University Press, Kingston.
- Coulombe, M., Brown, M., 1999. *The Society of American Foresters Task Force on Forest Management Certification Programs: The Society of American Foresters*.
- DeCoster, L., 1998. The Boom in Forest Owners—A Bust for Forestry?.
- DIY, 1998. Hodkinson tells World Bank of B&Q's FSC plans. DIY, January 23, 1998.
- Doern, G.B., Pal, L.A., Tomlin, B.W., 1996. *The Internationalization of Canadian Public Policy. Border Crossings: The Internationalization of Canadian Public Policy*. Oxford University Press, Toronto.
- Elliott, C., 1999. *Forest Certification: Analysis from a Policy Network Perspective*. PhD, Departement de Genie Rural, Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland.
- European Forest Institute, 2001. *Country Reports—Germany*. 2001 [cited 2001]. Available from <http://www.efi.fi/cis/english/creports/germany.html>.
- Fletcher, R., Hansen, E., 1999. *Forest Certification Trends in North America and Europe*, New Zealand.
- Forest Alliance of British Columbia, 1996. *Sustainability—defining the goal*. In: *Choices: Issues and Options for B.C. Forests*. Vancouver: Forest Alliance of British Columbia.
- Forest Alliance of British Columbia, 2001. *Greenpeace boycott campaigns hits BC* [News release]. Forest Alliance of British

- Columbia 1997 [cited February 14 2001]. Available from <http://www.forest.org/frameset.cfm?pagerequest=mediacentre>.
- Forest Alliance of British Columbia, 1998. FSC should get the axe. Vancouver: Forest Alliance of British Columbia.
- Forest Alliance of British Columbia, 2000. Forest Alliance pleased with provincial government commitment to certification. Vancouver, BC: Forest Alliance of British Columbia.
- Forestry Commission, 1998. Forestry Briefing, Forestry Commission of Great Britain, Secretariat Divison, Edinburgh.
- Forestry Industry Council of Great Britain, 2000. A reference for the forestry industry. London: Forest Industry Council of Great Britain.
- Forest Stewardship Council, 1999. FSC Principles and Criteria: Forest Stewardship Council.
- Forest Stewardship Council 2000. FSC Policy of Percentage Based Claims. Oaxaca, Mexico: FSC International.
- Forest Stewardship Council United States, 2001. Pacific Coast Working Group, Draft Standards [Archived item]. Forest Stewardship Council United States 1998 [cited April 8 2001]. Available from [http://fscus.org/html/standards\\_policies/us\\_regional\\_standards/archives/pacificnorthwest.html#p1](http://fscus.org/html/standards_policies/us_regional_standards/archives/pacificnorthwest.html#p1).
- Forest Ethics, 2001. Employment Opportunities: Job Posting: Corporate Advisor—Traction Consultant [online job information]. Forest Ethics 2001 [cited March 20 2001]. Available from <http://www.forestethics.org/html/eng/939-AA.shtml>.
- FSC Germany, 2001. Annäherung der Zertifizierungssysteme nicht möglich: Keine weiteren Gespräche auf Vorstandsebene zwischen FSC und PEFC. Forest Stewardship Council Arbeitsgruppe Deutschland e.V.
- FSC US, 2001. Anderson-Tully Company First Southeastern U.S. Timberland Company To Earn Forest Stewardship Council Certification For All Its Lands. Washington DC: Forest Stewardship Council United States.
- Global Witness, 1999. Made in Vietnam—Cut in Cambodia: How the Garden Furniture Trade is Destroying Rainforests. London: Global Witness Ltd., in association with Friends of the Earth.
- Goodall, S., 2000. Forest Certification and the UK Woodland Assurance Scheme. *Quarterly Journal of Forestry* 94 (3), 239–244.
- Grant, W., 1989. *Government and Industry: A Comparative Analysis of the U.S., Canada and the U.K.* Aldershot Hants, England: Edward Elgar Publishing Limited.
- Greenpeace International, 1993. *Greenpeace Annual Report 1992–1993*: Greenpeace International.
- Greenpeace UK, 1998. *Spring Campaign Report*. London, UK: Greenpeace, UK.
- Hamilton, G., 1998. MacBlo Decides to Abandon Pro-Logging Forest Alliance. *The Vancouver Sun*, August 18, Internet posting.
- Hansen, E., Forsyth, K., Juslin, H., 1999. *A Forest Certification Update for the ECE Region, Summer 1999*. Geneva, Switzerland: United Nations Economic Commission for Europe and Food and Agriculture Organization of the United Nations, Timber Section.
- Hansen, E., Juslin, H., 1999. *The Status of Forest Certification in the ECE Region*. New York and Geneva: United Nations, Timber Section, Trade Division, UN-Economic Commission for Europe.
- Harrison, K., 1999. Talking with the donkey: cooperative approaches to environmental protection. *Journal of Industrial Ecology* 2 (3), 51–72.
- Hayward, J., 1998. Certifying industrial forestry in B.C.: European market drives big timber to the FSC. *Understory* 8.
- Hoberg, G., 2000. How the way we make policy governs the policy we choose. In: Salazar, D., Alper, D. (Eds.), *Forging Truces in the War in the Woods: Sustaining the Forests of the Pacific Coast*. UBC Press, Vancouver.
- Hofmann, F., Kill, J., Meder, R., Plachter, H., Volz, K.-R., 2000. *Waldnutzung in Deutschland: Bestandsaufnahme, Handlungsbedarf und Maßnahmen zur Umsetzung des Leitbildes einer nachhaltigen Entwicklung*. D.R. v. S.f. Umweltfragen. vol. 35: Metzler-Poeschel Stuttgart.
- Hogben, D., 1998. Western seeks certification to satisfy European buyers. *The Vancouver Sun*, June 5, 1998, F2.
- Howlett, M., Ramesh, M., 1995. *Studying Public Policy Policy Cycles and Policy Subsystems*. Oxford University Press, Toronto.
- Humphries, S., 1999. *Forest Certification Handbook: For the Southeastern United States*. The Forest Management Trust, Gainesville, FL.
- Hyde, B., Stuart, W.B., 1998. Chapter Two: US South. In: Wilson, B., Kooten, G.C.v., Vertinsky, I., Arthur, L. (Eds.), *Forest Policy: International Comparisons*. CAB International, Oxon, UK.
- Jordan, D., 1999. Forest Alliance to Join the Forest Stewardship Council. *Business in Vancouver*, June 15, 1999, 3.
- Keck, M.E., Sikkink, K., 1998. *Activists Beyond Borders: Advocacy Networks in International Politics*. Cornell University Press, Ithaca and London.
- Kiekens, J.-P., 1997. *Certification: International Trends and Forestry and Trade Implications*. Environmental Strategies Europe, Bruxelles.
- Klins, U., 2000. *Die Zertifizierung von Wald und Holzprodukten in Deutschland: Eine Forstpolitische Analyse*. Ph.D., Forstwissenschaftliche Fakultät, Technische Universität München, München.
- Knight, A., 2000. *Seeing the Customer and the Trees: A Proposed Revised Buying Policy for B&Q for Beyond 2000 for Consultation*. B&Q, Chandlers Ford, Eastleigh, Hampshire.
- Lapointe, G., 1998. Sustainable forest management certification: The Canadian Programme. *Forestry Chronicle* 74 (2), 227–230.
- Lawson, J., Cashore, B., 2001. *Forest Certification Experiences in Maine and the Canadian Maritimes: A Comparative Institutional Study*. Paper presented to the Auburn Forest Policy Center's Conference on Globalization and Private Forestry, March 25–27, Atlanta, Georgia.

- Lertzman, K., Wilson, J., Rayner, J., 1996. Learning and change in the B.C. forest policy sector: a consideration of Sabatier's advocacy coalition framework. *Canadian Journal of Political Science* 29 (1), 112–133.
- MacCleery, D., 1999. NFS Certification Issues. USDA Forest Service, Washington, DC.
- MacMillan Bloedel Ltd., 1998a. MacMillan Bloedel to Phase Out Clearcutting; Old-Growth Conservation is Key Goal; Customers to Be Offered Certified Products. Vancouver, BC: MacMillan Bloedel.
- MacMillan Bloedel Ltd. 1998b. MB Plans to Stop Clearcutting. *MB Journal* 18 (7).
- March, J.G., Olsen, J.P., 1998. Institutional dynamics of international political orders. *International Organization* 52 (4), 943–969.
- Marchak, M.P., Scott, L.A., Herbert, D.M., 1999. *Falldown: Forest Policy in British Columbia*. David Suzuki Foundation and Ecotrust Canada, Vancouver, BC.
- Matthew, E., 2001. Import of Illegal Tropical Timber into UK. Friends of the Earth, Living World Campaign, London.
- Meidinger, E., 1997. Look who's making the rules: international environmental standard setting by non-governmental organizations. *Human Ecology Review* 4 (1), 52–54.
- Meidinger, E., 2000. 'Private' Environmental Regulation, Human Rights, and Community. [Online Paper], [cited March 2001] Available: <http://www.law.buffalo.edu/homepage/eemeid/scholarship/hrec.pdf>.
- Moffat, A.C., 1998. Forest Certification: An Examination of the Compatibility of the Canadian Standards Association and Forest Stewardship Council Systems in the Maritime Region. MES, Environmental Studies, Dalhousie University, Halifax, Nova Scotia.
- National Forest Strategy Coalition. 1997. National Forest Strategy 'Sustainable Forests: A Canadian Commitment' Final Evaluation Report. Hull, Quebec: National Forest Strategy Coalition.
- National Home Center News. 1998. B&Q pledges to work towards forest certification. *National Home Center News* 24, 9.
- Newsom, D., Cashore, B., Auld, G., Granskog, J., 2002. In Press. Forest Certification in the Heart of Dixie: A Survey of Alabama Landowners. In: Teeter, L., Cashore, B., Zhang, D. (Eds.), *Forest Policy for Private Forestry: Global and Regional Challenges*. Wallingford, UK: CABI Publishing.
- Paget, G., Morton, B., 1999. Forest Certification and 'Radical', Forest Stewardship in British Columbia, Canada: the Influence of Corporate Environmental Procurement. Paper presented at Greening of Industry Network Conference—1999, November, Kenan-Flagler Business School, University of North Carolina, Chapel Hill.
- Pan European Forest Certification United Kingdom, 2001. New company will promote certified timber production in Britain [Press Release]. Pan European Forest Certification UK Ltd., September 15, 2000 [cited February 17 2001]. Available from [www.pefe.co.uk/page4.html](http://www.pefe.co.uk/page4.html).
- Price, W., 2000. Forest Certification Pilot Projects Expanded on State and Tribal Lands. Pinchot Institute for Conservation, Washington DC.
- PricewaterhouseCoopers, 1999. B.C. Ministry of Forests Small Business Forest Enterprise Program (SBEEP) Certification Pre-Assessment. Vancouver: PricewaterhouseCoopers.
- Risse-Kappen, T., (Ed.) 1995. Bringing Transnational Relations Back In: Non-state Actors, Domestic Structures and International Institutions. Cambridge: Cambridge University Press.
- Rosenbaum, W.A., 1995. *Environmental Politics and Policy*. 3rd ed. CQ Press, Washington.
- Stanbury, W.T. 2000. Environmental Groups and the International Conflict Over the Forest of British Columbia 1990 to 2000. Vancouver: SFU-UBC Centre for the Study of Government and Business.
- Stanbury, W.T., Vertinsky, I.B., Wilson, B., 1995. The Challenge to Canadian Forest Products in Europe: Managing a Complex Environmental Issue. Forest Economics and Policy Analysis Research Unit, University of British Columbia, Vancouver.
- Suchman, M.C., 1995. Managing legitimacy: strategic and institutional approaches. *Academic Management Review* 20 (3), 571–610.
- Taylor, R.E., van Leeuwen, G., 2000. Outlook for Hemlock Prices & Volumes in Japan and Western Red Cedar Prices & Volumes in the USA. R.E. Taylor & Associates Ltd, Vancouver, BC.  
Produced for Coastal Forest & Lumber Association.
- The Forest Management Trust, 1999. *Forest Certification Handbook: for the Southeastern United States: The Forest Management Trust*.
- Tickel, O., World Wildlife Fund for Nature, 2000. *Certification: A Future for the World's Forests*. Godalming, Surrey, UK: WWF Forests for Life Campaign.
- Tollefson, C., (Ed.) 1998. *The Wealth of Forests: Markets, Regulation, and Sustainable Forestry*. Vancouver: UBC Press.
- Tripp, D., Nixon, A., Dunlop, R., 1992. The Application and Effectiveness of the Coastal Fisheries Forestry Guidelines in Selected Cut Blocks on Vancouver Island. D Tripp Biological Consultants Ltd, Nanaimo, B.C.  
Prepared for the Ministry of environment, Lands and Parks.
- Tripp, D., 1994. The Use and Effectiveness of the Coastal Fisheries Forestry Guidelines in Selected Forest Districts of Coastal British Columbia. Victoria.
- UKWAS Steering Group, 2000. Introduction to the UK Woodland Assurance Scheme, UKWAS Steering Group, Edinburgh.
- United States Forest Service, 2000. 1997 RPA Assessment: The United States Forest Resources Current Situation (Final Statistics). Washington, DC.: United States Department of Agriculture.
- Vertinsky, I.B., Stanbury, W.T., 1997. Boycotts in conflicts over forestry issues: the case of clayoquot sound. *Commonwealth Forestry Review* 76, 1.

- Viana, V., Ervin, J., Donovan, R., Elliott, C., Gholz, H., 1996. Certification of Forest Products: Issues and Perspectives. Island Press.
- Vogel, D., 1995. Trading Up: Consumer and Environmental Regulation in a Global Economy. Harvard University Press, Cambridge, Mass.
- Wallinger, S., 1995. A commitment to the future: AF&PA's sustainable forestry initiative. *Journal of Forestry* 93 (1), 16–19.
- Wilson, J., 1998. Talk and Log: Wilderness Politics in British Columbia. University of British Columbia Press, Vancouver.
- World Wildlife Fund United Kingdom, 2000. WWF 95+ Group. Surrey, UK: World Wildlife Fund for Nature.
- Yull, L., 2000. Comment and analysis: pressing engagements. *Timber Growers Autumn* 2000 (156), 12–13.
- Yull, L., 2001. Comment and analysis: certification progress steady. *Timber Growers Spring* 2001 (158), 10.