Scandinavian Forest Economics

No. 42, 2008

Proceedings

of the Biennial Meeting of the

Scandinavian Society of Forest Economics

Lom, Norway, 6th-9th April 2008

Even Bergseng, Grethe Delbeck,

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Further thoughts on certification and markets

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Abstract

Under the "polluter pays principle" of traditional environmental policy, society imposes on polluting producers a tax equal to marginal environmental damage. This is passed on as a higher consumer price for environmentally unfriendly products. By contrast, certification is seen as a way of ensuring that what people buy is what they want, and passing a higher consumer willingness to pay for environmentally friendly products to the producer. But requirements for and structure of certification in practice may not deliver the desired environmental improvements. At the same time producers see certification variously, as a means of improving public image, avoiding bad publicity, or accessing wider markets. These advantages, too, are little related to actual environmental impact. For some, certification merely authenticates existing practice, so verifiability rather than sustainability is transacted. The premium that consumers are willing to pay, translated to forest level, far exceeds any extra payment received or expected by timber growers. The idea that it represents a transaction connecting consumers with the cost and means of creating sustainable forest ecosystems is thus far-fetched. Instead, the premium should be regarded as a vote for valuing long-term environmental and social impacts of forestry explicitly, as by traditional cost–benefit analysis.

Key words: forest certification, green markets, cost—benefit analysis

Introduction

At the Uppsala meeting of the Scandinavian Society of Forest Economics in 2006, the lead author presented some sceptical thoughts on the interpretation of premia for certified timber (Price, 2006). These thoughts are here pursued further, with the benefit of survey data, collected by the co-authors, from agents in the UK timber supply chain.

"Polluter pays" versus "consumer purchases"

In the neoclassical model of the polluting firm, society should impose a tax equal to the marginal social cost of pollution on each unit produced

(Pigou, 1926). In a policy context, this came to be known as the "polluter pays" principle. Of course, the polluter is just producing the goods that consumers demand, and the cost of any pollution tax is passed on to the consumers, not through a deliberated decision of the polluters collectively, but through the operation of the market mechanism. Pigou did not believe that the market would be competent to regulate the whole process: society had to intervene to face the polluters with the full marginal cost of pollution.

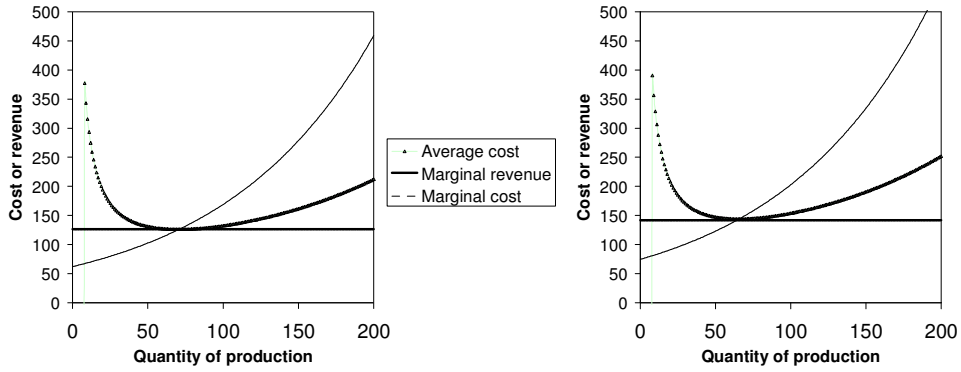

Figure 1: The classical account of social intervention for externalities: public intervention (right-hand side) raises the marginal cost curve in line with marginal cost of the externality, and equilibrium price rises also

In the real, diffuse, international world of timber production, profound difficulties arise in applying the theory:

- measuring the negative externalities of timber production that is environmentally and socially deleterious, and unsustainable;
- the variability of their incidence;
- the long time periods involved; and
- imposing and policing any such arrangement.

Hence the system has remained in the comfortable quarters of academia. Even carbon markets appear to be voluntary (polluter's conscience money?). Their instigation is chiefly driven by the perception among financial marketers, that a mark-up can be made by operating them.

The philosophy of marketing a certification premium is almost diametrically opposite.

- Price differentials originate with the consumer, not the production system.
- The consumer pays something extra, not for "polluting" timber products, but for "non-polluting" ones.
- The payment depends on the consumer's *desire* to avoid "pollution", not for the *actual* damage caused by "pollution".

- The payment is made not for each component of externalities generated, but for a certificate of assurance that a certain fixed set of standards has been met, according to the desiderata of the certifying body.

This changeover reflects a market-wards shift in political thinking. Within this way of thinking, a market is a collection of sellers and buyers of a product in contact and exchange with each other. The market mechanism is a way of directly valuing the products people want – including "the environment". Within a market system, certification is a way of ensuring that what people buy is what they actually want (it *is* what it says on the tin), while replacing bureacratic government regulation or cost–benefit analysis by efficient market transactions.

But does this reflect the reality that is delivered by the agents involved in the certification process, as illustrated in figure 2? Examples from the process as it applies in the UK may shed some light on this.

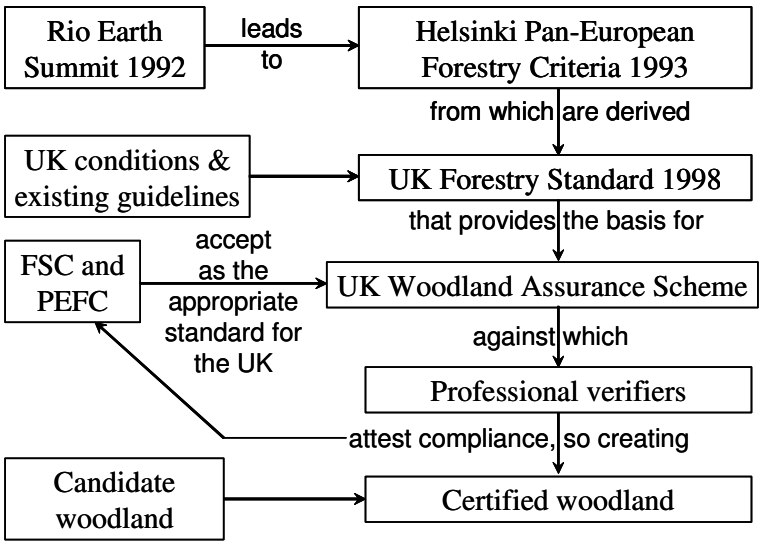

Figure 2: Agents involved in the certification process

On the face of it, the UK Government stands in a rather ambivalent position, disengaged in some respects, but engaged in others. It has no role as a legal enforcer: private individuals are at liberty to certify or not, as suits their professional judgement. The government is still, however, a dominant producer, supplying roughly half of domestic wood production. Its own plantations are certified. It is a provider of grants to compliant woodland, e.g. Better Woodlands for Wales grant requires compliance with the UK Forestry Standard, as a minimum standard, with encouragement to progress

to the UK Woodland Assurance Scheme (UKWAS, 2006): i.e. the government subsidises production systems that, according to consultation processes, represent what the public wants. By contrast, it is the provider of conditional felling licences, a means of censoring unacceptable externalities. Finally, as a purchaser it exerts an influence by requiring, from 2009, public procurement to be of certified timber.

Next, what is it that is assured by the UK Forestry Standard, produced through a public consultation, and accepted by the certification bodies? Some key characteristics are as follows (Forestry Authority, 1998).

- Flexibility is granted: the owner decides on the best way to meet objectives, within certain requirements.
- 15% of area is devoted to nature conservation.
- Native species and local stock are preferred *unless* productivity is reduced. This would almost invariably be the case, so the force of this provision is uncertain.
- If it is physically possible on the site, the preference is for
  <65% of the primary species,
  >20% of the secondary species,
  >10% as open space,
  >5% of native broadleaves,
  >1% as long-term retentions.
- Lower impact systems are favoured, which again invariably have lower productivity.

The owners' motivations for entering a certification scheme in Wales (Cooper and Taylor, 2006) are shown in table 1.

Table 1: Owners' motivations for buying into certification in Wales

Owner	Motivation	Consideration
Forestry Commission	Non-financial	Sustainability
National Trust Woodland Trust Royal Society for Protection of Birds	Ethical	Contribution to public image as "ethical owners"
Private > 500 ha	Financial	500-1000 tonnes/year needed
	Price premium to pay cost of certification	£1-2 per tonne
	Access to markets	Avoid long transport
Private < 100 ha	Ethical more important	Group certification

Owners' attitudes could be generally summarised as follows.

- Bureacratic costs often exceeded costs of compliance with the UKWAS: woodlands had often been compliant before certification.
- There was often initial over-compliance, followed by rationalisation and streamlining.
- Benefits could be derived to the enterprise: certification led to standardisation of procedures and documentation.
- There was a widespread belief that consumers do not even understand forest management, let alone certification.

Intermediaries in the supply chain had the following motivations for engagement with certified timber.

- Timber merchants sought access to markets that might be closed to non-certified supply.
- Timber processors saw supply to large retailers as sensitive to political pressure from green groups (rather than the public themselves) and to requirements of public bodies. (This did not apply to industrial timber, e.g. pallets.)
- Retailers were driven by *policy pressures* rather than *consumer demand*.

So the owners seem to be selling *approval* by a body that assures a certain standard of management. But many owners had managed to that standard previously, so only an *increased probability of sustainable management* is being sold to consumers. Some owners "sell" sustainable

forestry, not sustainably produced *timber.* So consumers are paying for one product (timber), but actually buying another one (land management). And, as is argued below, there is almost no conception of the relationship between the amount of product and the amount of land managed in order to produce it.

Although a certain financial calculus is entailed, price premia are not generally very attractive. The "polluter" (= producer of uncertified timber) hence pays, not the measured cost of any negative externalities, but the cost as perceived by politically motivated and activated pressure groups, who, having no idea of what the actual costs of uncertified production are, implicitly attempt to impose an indefinitely high cost through an absolute proscription of uncertified timber being marketed.

Thus the primacy of the consumer within an apparently market-orientated system of purchase is compromised because what is actually being sold is

- a higher probability that the product was made through a process
- which the consumer does not understand, and which might not
- represent the products actually desired.

As argued previously (Price, 2006, 2007), it is actually very difficult to reconcile the idea of a rational self-interested consumer with what goes on in the process of purchase. Direct individual benefit from environmental improvement and greater sustainability is not a rational motivation, because of the free rider problem: almost all such effects on an individual result from decisions whether or not to buy certified timber made by all other individuals collectively. Purely altruistic motives seem implausible, and in any case are compromised by the ignorance of an individual about what it is that *other* individuals desire from certified products. The actual effects of certification are unknown, because:

- the mode of production *without* certification is uncertain (there is no assurance scheme for a base-line of "uncertifiedness", though a "controlled wood" status exists as a kind of minimum);
- it is implausible that consumers can relate the product purchased to the hectare-years required to produce it (and recall that many forest owners deliver certified *forestry* rather than certified *timber*);
- effects such as net CO_2 fixation are highly debated among scientists and subject to complete quantitative ignorance by consumers.

What is actually certified may not even be approved by consumers in explicit cases. For example, the UKWAS requirement, that adjacent coupes may not be felled within as much as 15 years of each other may obstruct the aesthetic redesign of the original, geometrical, compartment boundaries. The draft UK Forestry Standard stated that "Felled areas in public view should not exceed 5-10 ha." Yet the UKWAS states that "The scale and

layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape" – which may sometimes be on the scale of many square kilometres. Where there are debates, UKWAS provides that the public are to be consulted. But *which* public, and *with what* questions? A very different implication may be taken from phrasing a question in these two different ways.

"Do you think felling should be on a small scale?"

"Do you think felling should be on a scale to match the landscape?"

The answer to the first question below will probably favour continuous cover forestry: that to the second will probably favour extensive clear felling.

"Do you think continuous cover forestry should be practised/clear felling should be forbidden?"

"Would you like to see plenty of views from the forest?"

The answer to the first question below will oppose the planting of Norway spruce: the answer to the second will favour it.

"Do you think we should plant non-native species?"

"Do you think we should do everything we can to conserve red squirrels?"

Thus a certification process based on UKWAS does not have an outcome that people would necessarily want: it does not even have a *predictable* outcome. As to timber products originating in unknown countries, whose own, different "appropriate standard" as accepted by the certifying bodies is even less known, the product of certification would be even more a mystery. In these circumstances people can hardly be characterised as purchasing a desired product.

There are even potential negative spillover effects from the acceptance of standards for certification. For example, obliging the use of less productive species or systems within one country may mean that the demand for desired products may be transferred to other, uncertified or differently-certified sources.

In circumstances where producers are not entirely producing with a profit motive, where certification may not effect much change in the actual mode of production, where consumers have little idea of the effect of their purchase on the management of forests and may not even approve of that effect, the conception of a market where producers and consumers meet to exchange a defined and desired product becomes murky and far-fetched.

To illustrate how little connection there seems to be between desire and outcome, consider the following. A 20% price premium on a product costing £25 containing 5 kg timber implies a certification mark-up of 20% × £25 = £5 for that 5 kg, which given conversion losses is probably equivalent to 10 kg of roundwood. That implies a mark-up of £500 per tonne of timber in the forest, as a willingness to pay a certification premium. The actual

premium received by UK producers is around £1–2 per tonne. What happens to the other £498? Surely this cannot be the cost of operating the chain of custody! Who, then, is creaming off the profit? Who has the largest motive for certification? Why doesn't the market work to connect consumers with producers?

As I have argued before (Price, 2006), what consumers are actually doing is purchasing a warm glow, or "moral satisfaction" (Kahneman and Knetsch, 1992). Such an interpretation accords with a common-sense interpretation of the pursuit of enlightened self-interest. A warm glow is the one thing that can be assured by paying a certification premium, and cannot be achieved without paying such a premium. It is the only product that comes remotely near to achieving the conditions for a functional, value-denoting market. Answers to a direct question about motivations for buying certified timber confirmed overwhelmingly that what people want to do is "act rightly" – by the planet and by its people (see table 2).

Table 2. Motivations of a generally ethical nature (from Price, 2006)

Motive for buying certified timber	**Number of responses**
That was all that was on offer, as a way of expressing concern about environmental, social justice and sustainability issues in timber production.	5
I have a general commitment to doing what I think is right.	10
I believe I should pay the full economic, environmental and social cost of what I buy.	6
One or more of the above	14
All respondents	18

What is also evident is that none of these responses offer any clue as to how important are the effects of certification. Respondents wanted to express concern, but what is *the right level of concern*, given other desirable uses of resources? Respondents had a commitment to acting rightly, but *what constitutes right action* in an exceedingly complex physical and moral world? Respondents wanted to pay the full cost of what they purchase, but *how can they know what that cost is,* given that the market conveys neither the costs of "polluting" production, nor the costs of complying with "non-polluting" standards? To incorporate these desires requires a process of explicit valuation that stands apart from certification, though functioning alongside it. Consumers might not know what cost–benefit analysis is. But in a sense their stated willingness to pay for certified timber and their motives for so doing could be interpreted as a vote in favour of cost–benefit analysis, rather than as a completed valuation of certified timber. The

certification premium is not a substitute for cost–benefit analysis. Far from it. It might better be regarded as a mandate for applying the method more widely.

References

Cooper, R.J. and Taylor, R.C. [authorship unattributed on document] (2006). *Forestry Certification in Wales*. Unpublished report to the Robinwood Project, Bangor.

Forestry Authority (1998). *The UK Forestry Standard*. Forestry Authority, Edinburgh.

Kahneman, D. and Knetsch, J.L. (1992). Valuing public goods: the purchase of moral satisfaction. *Journal of Environmental Economics and Management*, 22, 57-70.

Pigou, A.C. (1926). *The Economics of Welfare*. Macmillan, London.

Price, C. (2006). Buying certification: pigs in pokes, warm glows, and unexploded bombs. *Scandinavian Forest Economics*, 41, 265-72.

Price, C. (2007). Sustainable forest management, pecuniary externalities and invisible stakeholders. *Forest Policy and Economics,* 9, 751-62.

UKWAS (2006). *The UK Woodland Assurance Standard*. UKWAS, Edinburgh.