Overcomplying for profit

Gilles Grolleau, Naoufel Mzoughi

Overcomplying For Profit: A Note[1]

Gilles Grolleau
UMR INRA-ENESAD (CESAER)
BP 87999, 21079 Dijon Cedex France
Tel: + 33 3 80 77 24 43, Fax: + 33 3 80 77 25 71
E-mail: grolleau@enesad.inra.fr

Naoufel Mzoughi
Université de Bourgogne - UMR INRA-ENESAD (CESAER)
BP 87999, 21079 Dijon Cedex France
Tel: + 33 3 80 77 24 39, Fax: + 33 3 80 77 25 71
E-mail: mzoughi@enesad.inra.fr

Abstract: To maximize their profit, multinationals can design and implement the same and toughest standard in all locations, regardless of domestic regulations. We discuss this kind of overcompliance and stress its underpinnings. Some potential extensions are suggested.

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Several motivations for firm overcompliance with regulation have been proposed such as seeking a competitive advantage and preempting regulatory threats (Segerson et Li, 1999; Lyon, 2003). The purpose of this note is to consider a further explanation of overcompliance. In contradiction to the "pollution haven hypothesis[2]" predicted by neoclassical economics, popular press and anecdotal evidence, certain multinational corporations apply the toughest standard in different locations, regardless of host country regulation. Quoted by Hansen (1999), "Rappaport et al (1991), in a study of 98 US multinationals with affiliates in Mexico and Brazil, found no systematic differences in [Environmental Health & Safety] performance between OECD and developing country operations of the participating corporations. The surveyed [transnational corporations] largely implemented the same management systems regardless of location and 20 percent of the respondents reported having an explicit statement "to meet or exceed US laws overseas when foreign law is less stringent". Ruud (1995) (…) found that TNCs involved in bauxite mining in developing countries, had adopted state of- the-art environmental practices, e.g. in regard to land reclamation, regardless of local requirements and regulations".

Applying more stringent standards in host countries where environmental standards are lenient constitutes a voluntary overcompliance. At the exclusion of other reasons, if the overall costs of complying with two or more different regulations are higher than applying the same and tougher standard in each location, a maximizing profit firm will choose to

[2] The so-called pollution haven hypothesis suggests that dirty industries will delocate from high regulation countries to less stringent countries, in order to maximize their profits.

overcomply in lenient countries[3]. Several reasons can explain why it can be more costly to meet different standards in different countries (or less costly to apply a single and toughest standard to world-wide operations), regardless of the weaker regulation which may exist in a particular country. These reasons are not mutually exclusive. First, according to the so-called Porter hypothesis (Porter and Van Der Linde, 1995), applying –voluntarily or not– stricter and well-designed environmental standards (rather than profiting from weaker standards) does not harm firms' competitiveness but can increase it. Second, reputation constitutes the main asset of many firms and applying different standards according to the location can generate negative reputation spillovers that are projected on the overall image of the company. Grolleau et al. (2004) argue that ethical activism can target the firm in the consumption market e.g. boycott, political pressures, regardless of the location where the environmental degradation takes place. A testable hypothesis resulting from this point is that firms with highly valuable reputation are more likely to apply a single standard, regardless of their operation locations. Third, applying the same and toughest standard can allow economies of scale. Such economies of scale can come from spreading fixed costs more thinly or 'learning-by-doing' effects. Moreover, the firm may have developed competencies for applying a stricter standard. The significant initial investments in knowledge, skills, materials, and time to meet the strictest standard imply initial sunk costs. Once acquired, these abilities can generate a kind of "self lock-in", making the application of the same standard everywhere less costly. Fourth, multinational firms may anticipate regulatory changes at different levels. For instance, in the home country, the government can seek to regulate –more or less directly – offshore activities. Multinationals may also anticipate tougher host country

[3] The insight described in this paper can be extended to other cases than a multinational applying the strictest standard in all its operation locations. For example, a firm can distinguish several subgroups of locations and apply a specific standard in each subgroup, e.g. all plants located in the same region.

standards and enforcement in the future, and seek to avoid the relative high costs of retrofitting by implementing state-of-the-art technologies from the outstart (Hansen, 1999). Fifth, voluntary compliance with a more stringent standard can help a firm to win legitimacy and trust from various stakeholders. For example, complying voluntarily with a single and stricter standard may provide regulatory relief in case of violations (Potoski and Prakash, 2004). This list is not exhaustive, but shows that meeting a single standard to world-wide operations may help cutting production and transaction costs of managing compliance with different standards.

Let us assume a multinational corporation willing to design and implement plants in several countries –with different environmental standards – with a capacity of production q_i, where the subscript i corresponds to the country. Designing a plant according to a given environmental standard constitutes a fixed sunk cost, c_i^f. Suppose that c_1^f is the fixed cost for the toughest standard in the country 1, c_2^f is the fixed cost in the country 2 and so on. The design of the plant shapes constant marginal costs, c_i^v. Suppose that c_1^v is the production cost in plants designed according to the toughest standard in the country 1, c_2^v the production cost in plants designed in the country 2 and so on. Given these notations, a multinational corporation overcomplies in less stringent countries if the sum of fixed and constant marginal costs without overcompliance is higher to those with overcompliance. This condition is verified if:

$$\sum_{i=2}^{n} c_i^f > \sum_{i=2}^{n} (c_1^v - c_i^v) q_i$$

Under this condition, the multinational corporation minimizes its costs (and maximizes its profits) by designing and implementing the same and toughest plant in every country.

We showed that applying the strictest standard in all locations constitutes a form of overcompliance for profit. This overcompliance can be strategically used to shape regulation in a sense disadvantageous to competitors, e.g. by raising rivals' costs (Salop and Scheffman, 1983). For example, a multinational corporation can send a signal to host regulators that the costs of achieving certain environmental goals are lower than expected. Indeed, if a company can overcomply, surely others –notably domestic ones – could be compelled to do the same. The company can benefit from a first-mover advantage, which raises rivals' costs more than its own costs, resulting in a competitive disadvantage for competitors (Lyon, 2003). These extensions constitute a challenging topic for future research.

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