Optimal Harmonized Standards for Promoting Cross-Border Trade.*

Juan José Ganzuŷ and Fernando Gomez⁺

Universitat Pompeu Fabra, Barcelona
Ramon Trias Fargas 25-27
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Abstract

The European Union is currently in the process or re-elaborating consumer protection legislation and moving towards some degree of harmonization of the rules of Contract Law that would govern economic transactions— including, and probably most particularly, consumer transactions—across European borders. Legal scholars are hotly debating the constitutional—in the EC Treaties—basis for such processes, and also the legal status and the content of the bodies of rules that would be the outcome of existing efforts. In this paper we present a simple model of optimal standard-setting to promote trade across national and legal borders, and point at the factors that determine the relationship of optimal harmonized standards with respect to existing ones. We show that, under certain conditions, the optimal harmonized standards for a market that extends over legal borders may be higher than the existing national standards.


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†Department of Economics. E-mail: juanjo.ganuza@upf.edu. Juan José Ganzuŷ gratefully acknowledges the Financial support of the Spanish Ministry of Science and Technology under project SEC2003-08080-C02-01

‡Department of Law. E-mail: fernando.gomez@upf.edu. Fernando Gomez acknowledges the financial support of the Spanish Ministry of Science and Technology under project BJU2001-0936.
Among the fundamentals reasons for the existence, and among the major sources of policies and activities, of the European Union one should mention the establishment and implementation of an internal market. The notion of what constitutes the internal market is now in art. 26 of the –not yet in force- Treaty on the functioning of the European Union (similar to art. 14 EC Treaty), according to which: “1. The Union shall adopt measures with the aim of establishing or ensuring the functioning of the internal market, in accordance with the relevant provisions of the Treaties. 2. The internal market shall comprise an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of the Treaties.”

Goods, services, capital, and also persons, move across national borders, in Europe as elsewhere, typically through economic interactions that are not free from the reach of legal rules and regulations. Cross-border transactions involving the provision of goods and services, and the investment of capital, are governed by the Laws and regulations of the contained in the different national legal orders involved. The fragmentation and disparity of legal systems can be, to some extent, alleviated through adequate Choice of Law rules that may determine the application to the transaction at hand of the rules of a single legal order, or at least determine which subsets of rules of different legal orders will be governing the transaction. But even the most intelligently designed rules on Choice of Law are unable to remove all the obstacles and transaction costs that legal fragmentation may erect in the way of cross-border trade and unified markets. It is, of course, true, that legal diversity and the availability of different options from which the parties to a transaction may select –through the adequate Choice of Law provisions- the most fitting set of legal rules to apply to the transaction may bring efficiency gains to the parties and may, under some conditions, give rise to welfare-improving regulatory competition.

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2See, Hesselink (2007) for the view that Choice of Law rules cannot by themselves rule out the negative consequences for cross-border trade of legal and regulatory diversity.
3See, Gomez (2008, forthcoming) for a somewhat not so rosy picture of the conditions necessary for desirable regulatory competition to take place, at least in contract Law and related areas.
It is clear, however, that choice of legal order by the parties to the transaction, and healthy rivalry among competing legal systems is not always to be expected, and cannot provide in all circumstances the desired outcome. There are, undoubtedly –natural or man-made- costs linked to that choice that may sometimes –even often- be high enough to prevent adequate choice and regulatory competition.

One source of such costs may be that, in the production and distribution of goods and services, the relevant choice of action for firms frequently has to be taken before any anticipated choice of legal order by the parties to the transaction can be effectively made, let alone the outcome of such choice can be made known to the firm. This scenario is particularly likely with respect to goods and services produced for mass consumer markets, in which quality standards concerning many features of the good and service cannot be reasonably tailored to fit the diverging requirements of the various legal orders that may be involved, when prospective buyers that can profitably be served by the firm are located in different jurisdictions, and the outcome of the choice of Law cannot be confidently anticipated by the producer. Sometimes, it is possible to defer to a later stage production decisions that are affected by legal rules and regulations, such as packaging – contents, language, information to be included- which can be undertaken locally in each national market, but usually at a cost. For other dimensions of goods and services, this possibility may simply be technologically unfeasible or economically prohibitive.

Another source of such costs is the lack of information by buyers, most typically consumers, who will be at best ill-informed about the content, let alone the likely advantages for them, of alternative legal or regulatory standards in other foreign legal orders. The incentives to learn and become informed are commonly very weak, particularly in one-shot transactions, and often reputation of the foreign producer of goods and services will not suffice to dispel the clouds that many consumers may reasonably hold against the standards in a different legal system.

Moreover, in the field of consumer markets, mistakenly or not, legal rules almost entirely eliminate the choice of governing Law, and subject the transaction to the Law of the home country of the consumer4. There is little, if any, indication that the regime would be significantly

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4See, art. 5.1 of the Proposed Rome I Regulation, based on the principle of the Law of the consumer’s habitual residence.
altered in the future. Art. 12 of the European Product Liability Directive\textsuperscript{5}, that forbids contract clauses excluding or limiting liability is held to forbid also choice of Law clauses that lead to the application of a legal order that is not harmonized according to the rules set out in the said Directive\textsuperscript{6}.

Given this constraint on choice, legal fragmentation would then impose costs on parties intending to transact across national borders (firms willing to serve several national markets, consumers willing to be served by sellers in different countries, who may be hesitant to be subject to a foreign Law).

These latter kinds of beliefs give rise to the potential desirability of taking steps towards the harmonization of the diverse legal and regulatory standards in the various National legal systems, so as to eliminate or, at least, to reduce, the costs of regulatory diversity afflicting cross-border transactions. This explains, for instance, why in the European context the EU has been granted powers to adopt measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market (art. 114 of the –not yet in force- Treaty on the functioning of the European Union, formerly art. 95 of the EC Treaty).

The negative effects of costs produced by legal and regulatory fragmentation and heterogeneity for a single transnational market are probably higher in the area of consumer transactions. On the one side, goods and services produced and distributed in mass consumer markets are typically less tailored and individualized –also with respect to the applicable legal and regulatory standards- to the specificities of the buyer, than those that prevail in markets for other firms. Second, firms are repeat players with overall more at stake in cross-border transactions, thus facing greater opportunities to learn how to overcome the costs of legal diversity, and also facing greater incentives to incur the costs of doing so. Consumers, on their part, are for many transactions just one-shot players, with higher costs of learning and significantly lower incentives to invest to reduce the effects upon them of legal fragmentation.

It is not surprising, thus, that the language of removing barriers that hamper the smooth functioning of the internal market in goods and services, looms large in the reasons provided by


European legislation to justify the introduction of common or harmonized rules in the area of Consumer Protection Law. It seems not too controversial to claim that harmonized rules and standards for consumer goods and services serve the functioning of the internal European market. They allow a reduction for firms of the costs of doing business in various national markets: If a firm plans to launch a product in several Member States, the costs of compliance with legal constraints are obviously higher, may be even much higher, in the presence of different legal requirements than with a single set of legal conditions for the business campaign⁷.

It must be acknowledged, however, that legal and regulatory diversity will not dissipate entirely as a consequence of a harmonizing legal body of rules and standards in Consumer Protection Law. The reason would lie primarily in the fact that Law is not a single-dimensional product, but a complex one. Even if the standard is, on the books, set jointly for all National legal orders, the Law as outcome may well differ, due to the impact of Courts and other adjudicators, legal procedure, legal culture and environment in general, which will remain national. Also, the need to adapt to local market conditions will always impose costs on cross-border activities by firms.

Moreover, consumer perceptions about legal and other uncertainties and shortcomings of transacting over the national borders may well be the key building blocks of the barriers to cross-border trade⁸. The crucial legal obstacles to trade and contracting across the boundaries of legal and regulatory jurisdictions would be, in this view, essentially demand-driven, that is, those that consumers view, perhaps mistakenly, as negatively influencing their decision to contract cross-border.

Legal commentators⁹, aware of the real importance of legal and regulatory fragmentation for a robust single consumer market in Europe, have advanced the idea of allowing firms to sell and distribute consumer goods in compliance, not of one of the 27 legal regimes in the territory of the EU, but a different, entirely “European” set of rules and regulations, that would supersede the legal system of the consumer’s home country. Firms would see the costs of selling goods all over the European market, because they would no longer need to care about the national standards, but would be safe to comply only with the single European ones. Consumers, given the –at least

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⁸See, Collins (2003).
⁹See, Schulte-Nölke (2007) for an exposition by the original creator of the idea of the “Blue Button” (the term refers to the color of the European flag in the context of e-commerce, one in which the proposal is presumed to be more relevant for reducing transaction costs in cross-border trade). Along similar lines, see, Beale (2007).
in theory—appeal of the European standards and the confidence they would raise in terms of an adequate level of protection for consumers, would be willing to enter into transactions governed by the European rules and standards, and not by their regulations in their home country, of which they are presumably more familiar.

For this or other schemes based on harmonizing diverse national standards to work and improve social welfare in the affected societies, a crucial issue is that of determining the adequate harmonized standard of consumer protection. Specifically, in the European context, whether the European standards should simply reflect the current minimum level of protection contained in the Directives already in force, or whether they would correspond to the minimum, average, or maximum levels of consumer protection now observed in the different national legal systems.\footnote{See, Hesselink (2007).}

The present paper tries to provide a general theoretical response to such types of questions, by presenting a model of optimal standard-setting for consumer protection when there are various national legal systems in place and a single market can be achieved through harmonization. There is already a large body of economic literature on the design of optimal standards for protecting consumers against risks arising from consumer goods and services: Leland (1979); Chan and Marino (1994); Crampes and Hollander (1995); Daughety and Reinganum (1995); Constantatos and Perrakis (1998); Marette, Bureau and Gozlan (2000); Garella and Petrakis (2004); Garella (2006); Marette (2007). But none of the previous contributions try to determine the relationship of a harmonized standard to promote cross-border trade with respect to the pre-existing national standards.

The basic point of the paper is that optimal harmonized standards in consumer protection to induce trade across national borders depend essentially on the technologies of the firms that will produce the goods and services and on the preferences of the populations in the countries that build the unified trade area. Crucially, whether the technological parameters and the parameters for consumer protection are independent or correlated, and the sign of the correlation, if it exists, determine whether the optimal standard is intermediate between the preceding national standards, equals the more exacting standard, or even, counterintuitively, exceeds the toughest standard among the national Laws.

The paper is organized as follows: Section 2 presents the basic model of optimal harmonized
standards to promote cross-border trade; Section 3 derives implications for the current harmonization efforts in Europe, and Section 4 briefly concludes.

2 Simple Model of Safety Standards

We set up a simple two-country model to study the implications of an economic union over the optimal standards of safety/consumption. The countries are called $A$ and $B$. There is one single firm in each country producing a dangerous product. The probability of accident of this product is denoted by $p_i = 1 - s_i$. Where $s_i$ is the care exerted by firm $i$. The marginal cost of the good depends on the exerted care, $\beta_i s_i^2$, where $\beta_i$ is an exogenous efficiency parameter.

Regulator establishes a minimum safety standard, $s_i \geq \bar{s}_i$. Firm of country $j$ must incur in a cost of $\beta_j \frac{\bar{s}_j^2}{2} q + k_j^i$ for satisfying the standard of country $i$. Where $q$ is the produced quantity and $k_j^i$ is the administrative cost of certifying the standard, that may differ from the foreigner firm. Initially we consider that consumers are identical, and their expected utility for buying the product of firm of country $i$ is $V - p_i \theta_i - P$. Consumers do not observe $p_i$ but only $s_i$. Given that information structure, they correctly anticipate that the provided quality will coincide with the standard, $s_i = \bar{s}_i$. We consider that all consumers are homogenous regarding the cost of accident and we denote by $\theta_i$ the cost of accident of consumers of country $i$. We start by considering the simplest possible scenario of autarky, $k_i^i = 0$ and $k_i^j = \infty$.

2.1 Autarky

The domestic firm has monopoly power and it can extract all consumer rents by setting a price equal to $V - \theta_i (1 - \bar{s})$. Given that, the domestic total surplus of the market is $W_i(\bar{s}) = \alpha_i [V - \theta_i (1 - \bar{s}) - \beta_i \frac{\bar{s}_i^2}{2}]$ where $q = \alpha_i$ is the total demand (population size) of country $i$.

The next Lemma characterizes the first best. The social optimal standard that maximizes the total surplus of country $i$ in autarky

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\bar{s}_i^* \in \arg \max \{\alpha_i [V - \theta_i (1 - \bar{s}) - \beta_i \frac{\bar{s}_i^2}{2}]\},
$$
Lemma 1  The optimal standard for country $i$ in autarky is

$$\pi^*_i = \frac{\theta_i}{\beta_i}$$

Notice that this optimal standard does not depend of the size of population, but only on the utility and efficiency parameters.

2.2 Economic Union

Consider now that countries $A$ and $B$ form a economic union and they set a common standard $s_U$ that allow them to sell in both countries with the same administrative cost $k_i^i = k_i^j = 0$. Given the cost advantage, only the most efficient firm will produce in equilibrium (consider without lost of generality that the efficient firm is firm $i$). We define as optimal union standard the one that maximizes the sum of the total surplus of both countries. In particular, this efficient standard is the solution of the following problem

$$s_U^* \in \arg \max \{ \alpha_i [V - \theta_i (1 - \pi) - P] + \alpha_j [V - \theta_j (1 - \pi) - P] + (\alpha_i + \alpha_j)(P - \beta_i \frac{s_U^2}{2}) \}$$

The efficient firm will set a price equal to the marginal cost (given the standard) of the other firm, $P = \beta_j \frac{s_U^2}{2}$. However, total surplus do not depend on the market prices, since we are assuming that both markets are covered. The optimal harmonized standard in this case will be

Lemma 2  The optimal union standard is

$$s_U^* = \frac{\alpha_i \theta_i + \alpha_j \theta_j}{(\alpha_i + \alpha_j)\beta_i}$$

Notice that the optimal union standards is characterized by the most efficient technology and an average between the preferences parameters of two countries.

2.3 Comparing Economic Union with Autarky Standards

An interesting research question is to compare the harmonized standard with respect to the pre-existing optimal standards. The next proposition characterizes this relationship.
Proposition 1 The relationship between harmonized standard, $\bar{u}^*$, with respect to the pre-existing optimal standards depend on the relationship between technology and preferences between the two countries:

- I) If both countries have the same technology the harmonized standard is intermediate. $\beta_i = \beta_j = \beta$ and $\theta_i < \theta_j$,

$$\bar{s}^*_i = \frac{\theta_i}{\beta_i} < \frac{\theta_j}{\beta_j} = \bar{s}^*_j = \frac{\theta_j}{\beta_j}$$

- II) If both countries have the same consumer preferences the harmonized standard is the tougher one. $\theta_i = \theta_j = \theta$ and $\beta_i > \beta_j$

$$\bar{s}^*_i = \frac{\theta_i}{\beta_i} < \frac{\theta_j}{\beta_j} = \bar{s}^*_j = \frac{\theta_j}{\beta_j}$$

- III) If $\theta$ and $\beta$ and negative correlated, then the harmonized standard is intermediate. Take $\theta_i < \theta_j$, then $\beta_i > \beta_j$

$$\bar{s}^*_i = \frac{\theta_i}{\beta_i} < \frac{\theta_j}{\beta_j} = \bar{s}^*_j = \frac{\theta_j}{\beta_j}$$

- IV) If $\theta$ and $\beta$ and positively correlated, or they are independent, then the harmonized standard is tougher than the minimum one, but it can be intermediate and even tougher than the ex-ante toughest one. Take $\frac{\theta_j}{\beta_j} < \frac{\theta_i}{\beta_i} < \frac{\theta_j}{\beta_j}$

$$\frac{\alpha_i}{\beta_i} < \frac{\alpha_j}{\beta_j} + \frac{\alpha_j}{\beta_j}$$

The intuition of the proposition is as follows. In the first case the harmonized standard is intermediate because there is not efficiency gain from trade, and the harmonized standards must be determined by the convex combination of the preferences of both countries. The second case analyzes a situation in which countries have the same preferences but different technologies. In such case, the harmonized standards must be the tougher one because only the efficient firm will produce in equilibrium. Case III analyzes the case in which preferences and technologies are negatively correlated. Countries less prone to increase the standard are also the less efficient ones. In such case, harmonized standards is intermediate as in the case I due to the convex combination of the preferences of both countries. The most counterintuitive case is displayed in case IV. The harmonized standard may be higher than the both pre-existing ones. This can be the case, if
two conditions are met: a) preferences and technologies are not negatively correlated and b) the population of the most efficient country in small enough.

3 IMPLICATIONS FOR EUROPEAN HARMONIZATION IN CONSUMER LAW

One of the major tasks of Law is to set standards of behavior in various contexts and organize appropriate enforcement of the legal standards. Determining what the content of the standard should be is generally no easy task, and when pre-existing legal and regulatory diversity is added to the picture, things do not improve, quite the opposite.

Despite the complexity of setting harmonized standards against the background of national standards already in place in national legal systems, it may be an unavoidable effort in order to build a larger market without borders and national barriers, a goal that looms large in the entire European Union enterprise. When standards are necessary to try to ensure optimal behavior on the part of market participants –typically, firms- and when technological, legal, cultural or other barriers prevent firms in one country to serve consumers across national borders, designing harmonized common standards may be necessary to exploit the efficiency gains from larger markets and cross-border transactions. The harmonization effort, thus, cannot be viewed as solely the consequence of an unfettered megalomaniac or Niskanian European bureaucracy, but as an effort that may, if aptly conducted, produce welfare gains for European firms and consumers.

From our basic model of harmonized standards to promote trade some lessons may be drawn for the current process inside the EU of re-elaborating consumer protection legislation, and moving towards some degree of harmonization of Contract Law governing economic transactions.

First, quite obviously for some, may be not so for others, is that the content or level of the standard matters, and it is not trivial to get it right. It is crucial to look in the right direction and in the right places. Our results suggest, quite intuitively, that law-makers and regulators, when determining the content of common standards for consumer transactions all over Europe, should essentially weigh the costs of satisfying the standard for the most efficient European firms in the relevant sector, and actual societal preferences for consumer protection in the different Member States. Obviously, to obtain, process, and use the factual information concerning those two main building blocks for the standards is no easy task, but it seems unavoidable in order to properly
perform the task.

Secondly, that the underlying function of the standard, and the purposes that may be served by it, are relevant for the design of the harmonization process. Let’s assume that the standard is—as seems, at least to us, more natural to assume in the setting of consumer protection—that the standard is a minimum quality or safety standard, designed to avoid that some consumers may be attracted, or lured into, some low levels of quality that are socially undesirable. The undesirability may arise from different sources: lack of information on the part of the potential buyer of the true consequences and risks of the transaction, leading to an underestimation of the resulting harm, or to an externality—to other members of society, or to the public health system—arising from the quality choice of some consumers. These minimum standards set a threshold on the relevant quality dimension of the transaction, below which firms would not be able to produce and sell. But, of course, higher levels will be transacted and observed, since firms may be able to signal higher quality through reputation, advertising, warranties, and similar quality safeguards.

In this setting, when the starting point is one in which the actual level of cross-border trade is negligible, due to the existing barriers, of diverse nature, a single harmonized standard, optimally set, along the lines shown in our basic model, is likely to be a more desirable solution over the pre-existing situation of national standards that prevent active cross-border transactions. We would be squarely in the world of our basic model. Such a harmonized standard allowing a larger market may be preferable if it is technologically more efficient due to economies of scale, or if the different national legal orders, as seems likely, will not simply allow that foreign firms using their own national standards, enter the home market. Under such a system of mutual recognition, given that the standards are minimum quality ones trying to restrict consumers from making bad choices for themselves or producing an externality, we would either observe either no entry—if foreign firms are less efficient—or that the firms of the country with the lowest standard would prevail, with just this standard being observed (race to the bottom).

The harmonized standard, optimally set, would here replace the existing national standards, allowing for the benefits of a larger market through cross-border trade to be enjoyed. And would in this setting a system of a harmonized standard that coexists (and competes) with the existing ones, along the lines, for instance, of the blue button proposal be more attractive? The implications of our model, in this setting of minimum quality standards, would suggest a negative answer to
the previous question. Coexistence and competition among national and harmonized standard could either leave things unchanged, with the harmonized standard not being used, and national markets remaining separate, thus the benefits of cross-border trade remaining unrealized, or the harmonized standard would only serve to lower existing minimum standards in those national legal orders with higher levels of minimum quality, an undesirable outcome if one assumes, as we do – albeit it is a strong assumption, of course – that the pre-existent national standards were optimal from the point of view of the costs of local firms and local conditions (information, extent of externality, and so on).

Although, our first specification of the model consider only the replacement of pre-existing national standards by the harmonized European standards, there may be potential welfare gains in allowing that national and harmonized standards coexist. The idea is as follows: consumers may have different preferences concerning their willingness to pay for avoiding risk. Several standards may improve the welfare since they allow for better match between consumer preferences and firms efforts in reducing the probability of accidents.

Thus, harmonized European standards could be thought as instruments to be deployed not as a replacement of the existing national standards, but as additional standards that may allow the most efficient firms to exploit the gains from cross-border trade, given that, at least arguably, the harmonized standards could be able to overcome the existing barriers preventing active transactions serving consumers across national borders, while at the same time being respectful of the real diversity in Europe, in terms of the preferences and the basic economic conditions of the societies in which the rules are to be applied.

On the one hand, it is hard to deny that European societies and economies are diverse both in terms of preferences by citizens on many issues, and also in levels of wealth and distribution of that wealth among different societal groups. Particularly if one is dealing with harmonizing standards of broad scope and coverage – such as general consumer protection or Contract Law rules and standards –, it is far from clear that a uniform pan-European content of the chosen rules would be optimal for the conditions of all national markets, and the heterogeneous societal preferences concerning desired solutions. One must concede that even under some new European body of standards in consumer protection and Contract Law, firms would not be subject across Europe to exactly the same set of requirements and rules of conduct. It seems that many of
the standards would, in the real world, be general and abstract enough to allow ample room for interpretation and judgement in accordance with the specific circumstances of the national and/or product market affected, and thus, permit a relative variety of substantive outcomes. The enforcement of the rules will also be left to the agencies and courts of the Member States, reflecting a large range of legal cultures, traditions, organizational modes and enforcement strategies, thus keeping a significant source of variety in the real solutions implemented in the different countries.

There is a second source of concern, related to the disparate levels of wealth across European countries, and the different internal distributions of wealth and income within a given society, even for countries with roughly similar levels of GDP per capita. When the standards are enforced through monetary remedies—monetary public sanctions or damage payments—it has been shown that the standards—even assuming the same level of social benefits from subjecting behavior to a given standard—should not be independent of the level of wealth of the group of people (or firms) subject to the standard, nor independent on how wealth is distributed among groups of potential infringers of the standard. Rules of this kind, thus, should be responsive to the economic conditions (both in terms of level and distribution of wealth) of the society in which they are imposed11.

We believe, however, that in the area of consumer protection, and more generally when dealing with legal and regulatory standards, the setting of minimum quality standards to restrict a—variable in size—tail of transactions, and not one of standards to suit heterogeneous consumer preferences, seems the most natural to assume, given the operation and functioning of the standards, and the role of other forces (brand reputation, warranties, etc...) to satisfy diversity of preferences in terms of quality levels. This claim, however, should be made with some caution, at least until we find further evidence to support it.

4 Conclusions

In this paper we have developed a very stylized model of trade between two countries in a setting in which consumers can not observe the quality of the goods and they are protected by minimum standards. We have shown that domestic regulators in autarky may set standards

according with consumers’ preferences and firm’s technology. Introducing an harmonized standard for promoting trade, may enhance welfare due to the replacement of inefficient technologies. We have also characterized how this harmonized standard depend on preferences and technology parameters, and we have established the relationship of the harmonized standard with respect to the pre-existing national standards.

There are several extensions of the basic model that we want to analyze in future drafts. Firstly, we want to study the standards in a setting in which consumers have perfect information over the quality of the good but they do not completely internalize the social cost of an accident. While this model seems very different to the one analyzed in this version of the paper, we expect it to produce very similar outcomes. We want also to allow for consumer heterogeneity regarding the elasticity of their willingness to pay to the probability of accident. As we have explained above, consumer heterogeneity may make it desirable that harmonized standards coexist with the pre-existing national standards.
References


