Is Harmonization of Legal Rules an Appropriate Target? Lessons from the Global Financial Crisis

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1 Introduction

The process of globalization in general and European integration in particular has, over the past decades, led to a broad wave of consent for more cross-border harmonization of law.

Calls for a more comprehensive harmonization of laws (legal rules) between legal areas are generally based on the assumption that legal diversity causes transaction costs and lowers economic trade and welfare, in particular by creating legal uncertainty. It is argued that consumers as well as small producers tend to refrain from contracts in foreign legal systems if the costs of information (about the law, about administrative procedures, about competent legal advice) and/or the costs of enforcement (by way of litigation or alternative forms of dispute resolution) seem too high or unpredictable. This unpredictability or uncertainty about the costs of cross-border transactions may stem from the diversity in the formal legal systems or diversity in judicial administrations across individual countries.

Against this background, there have been demands for governments to take steps to reduce the cost of legal diversity. The most obvious method of doing this is international coordination towards harmonizing previously different legal rules.

This article deals critically with the call for a comprehensive harmonization of legal rules, against the background of the lessons from the recent financial crisis. Before coming to the topic of harmonization of legal rules in section 3, section 2 first briefly deals with the question of why rules are necessary at all, and what the functions of rules are. Section 4 then deals with the lessons from the recent financial crisis for the topic mentioned, while section 5 concludes with some general hypotheses.

2 Functions of Rules

Starting with the question of when and why legal rules in market economies are needed, the following two detailed explanations can be made by leaning on the mainstream view in economics:

E1*: Rules are necessary framework conditions for economic transactions, or private trade in general, particularly in societies with large, complex markets where the market participants often do not know and trust each other. Such complex markets themselves result from a division of labor and need some form of regulation. While some rules (legal rules) are the result of intended organizational efforts, others are unintended – attributable to learning processes and taking the form of conventions and morals (see, e.g., Hayek, 1971). All these rules are expected to contribute to the solution of problems of coordination, cooperation, and innovation by creating stable behavioral patterns, and consequently stable behavioral expectations. Stable expectations about the behavior of others and the consequences of one's own behavior are important preconditions for the start of transactions and for the lasting stability of economic acting based on the division of labor.*

E2: *Legal rules develop their (expected) positive effects only if they are followed in general. However, we know that there is a general preference for offending against legal rules. With an increasing number of participants in markets or groups it becomes more and more difficult to successfully restrain somebody from violating a rule without threatening him with formal sanctions. In social (complex) economies credible threatening and sanctioning can only be realized by an external authority to which the power of sanctioning is delegated. Within a nation, the authority is the state which provides the compliance with legal rules. The national state can only fulfill this role if there is an inner-national harmonization of laws. Otherwise, non-uniform legal rules could be circumvented by evasion through arbitrage and exploiting of inter-legal loopholes, Insofar, we can state that - within a nation - the functioning of a private market economy requires rules and institutions[1] such as private ownership, freedom of contract, and rules to protect competition, which have to be harmonized and protected by the state (Mueller, 1993; McMillan, 2008).*

[1] "Institutions" are grown and intentionally created systems of mutually respected rules whose execution can be controlled and which cause mutually reliable behavioral expectations of the individuals (see, e.g., Schotter, 1981, pp. 8f., and North, 1990, pp. 4ff.).

In contrast, harmonization and protection of legal rules is more complicated in international contexts as will be argued in section 3 below.

Against this general background, covered in the above two explanations, I shall classify the economic functions of rules into the following four categories:

***E3**: (To be efficient,) Rules should create framework conditions so that*

1) *uncertainty is relieved,*
2) *externalities are abolished or internalized,*
3) *adequate (optimal) supply of public goods is ensured,*
4) *market power (monopolization) is restricted.*

On (1): Relief of uncertainty

One positive effect of rules is that they imply the reduction of alternative options (or opportunities) for actions. This reduces individual information costs and general uncertainty because the complexity of acting declines. Thus, economic transactions may increase since the "wait and see" attitude often caused by uncertainty declines.

Uncertainty or information asymmetry is often emphasized in the literature as a cause for the necessity of rules and institutions (see, e.g., North, 1991, or McMillan, 2008; it can even be traced back to John Locke's "Two Treatises of Government" (1689)).

However, there are also disadvantages in introducing rules that should be taken into account: *The reduction of alternative options (or opportunities) for actions can also mean a cost for economic agents in specific situations where flexibility is needed.* Since there is a trade-off between flexibility and rules, rules are not always good or optimal.[2] Each individual actor (including the state) thus must regularly conduct benefit-cost analyses with respect to the usefulness of self-restriction by rules (see also section 3 below). However, many rules are optimal or useful from a social (overall) point of view, but not from an individual one.[3] These have to be enforced by the state.

On (2): Abolishment of negative externalities

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[2] This is discussed for example in the time-inconsistency literature in macroeconomics.

[3] This is the reason for the "*general preference for offending against rules*" mentioned above.

Rules also serve to protect non-involved private individuals from the negative externalities of economic trading.[4]

Rules can be created to provide an incentive for trading partners and investors to produce fewer or no negative external effects for non-involved third parties. This can be attained by directly reducing trade or investments, or it can be done by attributing the costs of negative externalities to the causers. The latter is not always possible since causers cannot always be determined exactly ex post (see, e.g., in section 4 with respect to determining the causers of the recent financial crisis; in contrast, the non-involved agents, here mainly tax payers, workers, and welfare recipients, can easily be ascribed); moreover, there is usually more than one guilty person or institution,[5] and the relative share of responsibility can hardly be assigned to single culprits due to conditions of insufficient transparency and asymmetric information.[6]

Insofar, rules can serve as an instrument of consumer protection as well as of protection of small and medium-sized firms against big firms producing negative externalities for other firms by (from a social point of view: excessively) risky and false investments.

A main mechanism for reducing these negative externality costs is to abolish non-transparency and diminishing asymmetric information, which are responsible for private individuals' inability to shelter from these costs. One possibility of shelter would be to buy expensive insurance against the risk of negative externalities. However, there are not enough such insurance markets, due to the great degree of indeterminacy and uncertainty of future development of social attitudes or reactions to partly uncertain future contingencies, combined with problems of asymmetric information, adverse selection, moral hazard, etc. Insofar it usually remains the task of the state or government to create legal rules and institutions to take care of this problem and protect the public, by helping to establish such markets or by undertaking responsibility itself.

In contrast, a policy without (adequate) rules tends to produce significant macroeconomic costs such as inflation, public (over)indebtedness, suboptimally high taxation (see, e.g., Brennan and Buchanan, 1985, chapter 6; and, in macroeconomics, the theory of time

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[4] Externalities are costs or benefits transferred between agents, without any related economic transaction between those agents. This means, there are 'missing markets' so that negative or positive benefits remain uncompensated.

[5] For the recent financial crisis see, e.g., Wagner (2010).

[6] As will be shown in the following sections, legal uncertainty and legal diversity are main causes of such non-transparency and asymmetric information.

inconsistency, which has worked out the costs of discretionary policy without rules[7] (see, e.g., Kydland and Prescott, 1977)).

On (3): Adequate supply of public goods

Rules also serve to deal with the problem of public goods.

Public goods are characterized by non-excludability and non-rivalry so that they cannot be produced profitably. Consequently they are usually undersupplied in private markets. One example of a public good is the legal system that provides and enforces basic market rules for every economic agent in the jurisdiction. In the case of public goods, there are incentives and opportunities for individual actors within a group or an economy to act as free riders, i.e. to participate in the consumption of public goods without adequately participating in the production or the financing of these goods. In the end, fewer public goods than necessary (or socially desirable) will be produced; that is, the result is sub-optimal. Therefore, the state is attributed with the function of ensuring sufficient production of public goods.

In principal, there are two opportunities for the state to do this. The first one is to introduce incentives or sanctions to improve the willingness of members of society to participate adequately in the production of these goods, usually implemented via legal rules. A second opportunity is to use its monopoly right to charge the public by gathering compulsory levies (fees, taxes, etc.). However, as said before, on a global level there is no state that has such a monopoly right. Therefore, on an international or global level, only the first option remains to combat an undersupply of global public goods and to reduce international externalities produced by free riders.

On (4): Restriction of market power (monopolization)

A fourth function of rules is to restrict market power or, respectively, monopolization (elimination of competition). The main advantage of (perfect) competition is that no individual can influence exchange/trade in her favor since the exchange relationships are anonymously determined through the market. In equilibrium, prices equate supply and demand at an efficient solution.

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[7] For the costs of discretionary policy coordination see, e.g., Wagner (2009), part 3. One example of such costs is currency depreciation races, which tend to end up in inflation without any positive real macroeconomic effects.

Here it has to be taken into account that market power may, but need not, depend on an apparently high concentration of firms. If there is a credible threat of potential competition (contestability), such market characteristics yield no power. However, if there are barriers to entry that keep such potential competition at bay, already established firms may enjoy market power (see, e.g., Pelkmans, 1997, p. 109).
One of the duties of the state is to establish appropriate legal rules or institutions for restricting market power or, respectively, monopolization.

3 Are Uniform Rules Appropriate? – Some General Arguments –

Whether or not national legal rules should be harmonized for international transactions is the main topic of the present contribution. In section 2 it was argued that on the national level legal harmonization is needed for a state to fulfill its functions of sanctioning violators of rules, or credibly threatening to do so. However, on the international level there is no state that can perform the same task of credibly sanctioning violators of (uniform) rules. Do we need uniform rules nevertheless? The answer has to depend on a cost-benefit analysis. Although, as was argued above, it is more difficult (more costly) to implement uniform rules without a global state, benefits from (successfully implementing) uniform international rules would, nevertheless, be high. The reason for the latter is:

E4: *Open economies are associated with international economic interdependencies and externalities. Therefore, the functions of the rules (1)-(4) listed in section 2 become relevant for cross-border trading as well when economies open up (globalization).*[8]

However, when carefully analyzing the pros and cons of legal harmonization in a cost-benefit analysis, one probably will not end with a definite "yes or no” answer, because the costs also increase in an open economy (as argued in the following chapter). Hence, the conclusion will probably have to be "It all depends (on the respective circumstances)”.[9]

The general pros and cons of legal harmonization have already been worked out in some of my prior studies (Wagner, 1995; Wagner, 2005, and Wagner, 2007). In this section a short

[8] Uncertainty increases; externalities become more extended (esp. via contagion); (global) public-good production becomes (relevant and) more difficult since in open economies exit-opportunities of investors and owners of scarce factors, even of governments (see, e.g., Wagner, 2001), arise.

[9] This means it has to be looked at the concrete circumstances that are different across locations and time.

summary of those arguments will be given, before (in section 4) the lessons from the financial crisis regarding the appropriateness of uniform rules will be discussed. Sections 3.1 and 3.2 will – in some parts – draw very closely on parts of sections 2 and 3 of Wagner (2005), but the studies discussed there will be updated and supplemented by newer ones.

3.1 Traditional pro-arguments

E5: *The conventional pro-argument for uniform legal rules in cross-border transactions refers to a reduction of transaction costs.*

3.1.1 Avoidance of microeconomic transaction costs

By creating legal uncertainty, leal diversity generates the following transaction costs:
(i) Costs of collecting information (due to lack of knowledge of foreign statutes),
(ii) Costs of legal disputes (which are much greater in the event of international legal disputes than in the case of a domestic legal dispute (cf. Freyhold, Gessner, Vial and Wagner (eds.), 1995, part II)),
(iii) Costs of setting incentives for pushing through legal claims (including private attempts to speed up approval procedures, and legal procedures in the broadest meaning of the term),
(iv) Other transaction costs (e.g. due to difficulties in making warranty claims and higher costs in exchanging goods).[10]

These transaction costs alone are often regarded as reason enough to harmonize legal regulations across borders (see, e.g., EU, 1999). Usually the analysis remains at the microeconomic level (*micro bias*) demonstrating an increase in costs for consumers and firms. Macroeconomic consequences are seldom drawn and analyzed in detail, though they could strengthen the argument in favor of legal harmonization. And normally there is also a *partial-view bias*, insofar as only the effects on partial-interests of special groups or sections are looked at. A general equilibrium view is seldom taken – though a good institutional solution is only one that can be implemented and is sustainable (as the result of a bargaining process

[10] Sometimes it is even claimed that “(D)oing business abroad without fully understanding local laws and tacit customs can lead to a legal nightmare.” (‘The Independent on Sunday' 29 August 2010, p. 8).

between various interest groups hit differently by transaction costs), which can only be seen from a general equilibrium analysis that takes system-relevant costs into account.

3.1.2 Avoidance of macroeconomic costs

Actually it may be argued that the above-mentioned transaction costs tend to lead to negative trade and income effects on an aggregate level. These effects are static or level costs of legal uncertainty that could be derived by using the following presumed causal chain: legal uncertainty implies higher transaction costs. These are reflected in higher prices or in reduced revenues or benefits for the (representative or average) entrepreneur or consumer. Both lead – on an aggregate level – to lower investment, lower consumption and lower national income (see in more detail, Wagner, 1995, and Wagner, 2005).

In addition to this, even more important macroeconomic effects can be derived that, however, are also more difficult to prove, namely dynamic or growth effects of legal uncertainty. In the (mainstream) theory of growth, "technical progress" is regarded as the central engine for economic growth. We can derive several effective channels through which legal uncertainty can have a negative impact on economic growth:[11] first, efficient use of existing capital is prevented due to reduced marginal yields, so that there is less knowledge-creating investment, innovative research is retarded and state infrastructure is only insufficiently available. Second, international trade exchanges are inhibited, so that the knowledge incorporated in traded goods does not spread as rapidly and the deficient use of comparative advantages leads to the waste of innovative potential. This results in reduced growth dynamics not only for individual states but also for the global economy in general. Theoretical contributions have mainly focused on growth and welfare effects resulting from the global harmonization of intellectual property rights. For a recent review see, for example, Chu (2009) and Archibugi and Filippetti (2010). In a North-South endogenous growth model, Tanaka et al. (2009) show that global patent harmonization maximizes global welfare. This result is in line with Dinopoulos and Kottaridi (2008), who also show that the rate of international technology transfer is increased in the case of global patent harmonization.

3.1.3 Lessons from empirical studies

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[11] Beyond that, legal uncertainty can be introduced endogenously. On the theoretical derivation of the dynamic costs of legal uncertainty see, in more detail, Wagner (2005; 1997) and Wagner (ed. 1995).

There are various empirical research studies on the effect of legal uncertainty (caused by legal diversity) on economic trade and growth. Most of these studies derive legal uncertainty from factors such as political instability, lack of juridical credibility or a lack of civil liberties. They concentrate on explaining cross-country variations in growth due to differences in legal uncertainty within a country in world-wide samples or for developing economies.[12]

In their seminal contributions La Porta et al. (1997; 1998) demonstrate that certain legal rules or procedures matter for economic and social outcomes in terms of income per capita, financial development, employment and the like. In a recent reassessment, La Porta et al. (2008) confirm the general results for an extended data set covering 189 countries and a time period from 1913 to 1999, showing that legal systems with greater security of investor and property rights, as well as better contract enforcement (so-called civil law legal origin) significantly favor superior economic outcomes.

Another approach focuses explicitly on the effects of *cross-border* legal uncertainty. Using standard gravity equations, Turrini and van Ypersele (2006), as well as den Butter and Mosch (2003), find for a sample of OECD countries covering the time period 1990 to 2001 and 1993 to 1999 respectively, that a country pair with a similar legal system, and thus less legal uncertainty, trades on average 50% more with each other than countries with different legal systems. Drawing on the argument that cross–border legal uncertainty is an integral part of international trade costs, several studies have analyzed the productivity or growth effect of a reduction in trade barriers. Using firm-level data of 11 European countries covering a period of 1994 to 2003, del Gatto et al. (2006) show that a 5% reduction in international trade barriers results in a 2% increase in productivity due to a more competitive environment. In a similar approach, Kneller et al. (2008) estimate the importance of foreign trade costs for the export intensity and additional market entry of exporters of UK manufacturing firms in the period of 1988 till 1998. The overall effect of a reduction of one unit in foreign trade costs leads to a 3.5% increase in export intensity and an increase in the probability of additional market entries of 0.6 percentage points. Among the different components of the overall foreign trade costs indicator, the legal structure and property rights have the second largest impact on the export intensity and are far more relevant for trade than direct policy instruments such as tariffs, quotas or exchange rate restrictions. Using again firm-level data from 11 European countries for a time period from 1999 to 2003, Chen and Novy (2009)

[12] Studies of these kinds mainly apply the method of Ordinary Least Squares (OLS) regressions and therefore sustain the problems of mutual dependency and reverse causality due to the endogeneity of the institutional variable independently of how it is measured.

show that nearly 60% of the observed increase in trade can be accounted for by a corresponding reduction in trade costs.

3.2 Traditional counter-arguments

E6: *Traditional counter-arguments against legal harmonization refer to*

(1) the instability (inefficiency) of uniform rules,

(2) the costs of implementation (overlooked opportunity costs due to partial undesirability, and infeasibility/enforceability), and

(3) other aspects such as incredibility and redistribution conflicts.

On (1) Instability (Inefficiency) of uniform legal rules

Many studies focus only on optimality conditions regarding the benefit of introducing harmonized rules, measured by the costs of legal diversity, without taking into account the stability of such harmonized rules, or even the costs of implementing such rules.

The efficiency of uniform rules depends upon their stability. Rules can develop their positive effect only if they are followed by the community. However, there is a general preference for breaching rules (see E2 above; see also Berg et al., 1999, pp. 178 ff.). This means that there is need for surveying and sanctioning breaches of the rules. Therefore an external authority has to be appointed, and this is usually the state. With international surveillance and sanctioning, specific problems arise because there is no state with a monopoly of the legitimate use of force on an international level, and if power is delegated to private agencies (such as the rating agencies in the financial sector), interest conflicts are pre-programmed[13] (see section 4).

Moreover, as shown in my prior studies on this topic (Wagner, 2005, and Wagner, 2007), the implementation of legal rules can itself present a severe impediment, since for most participants it may prove to be individually suboptimal, and might therefore be undesired and costly (see also Axelrod, 1997). This aspect is often neglected in the literature.

On (2) Costs of Implementation

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[13] And in this case a multi-level principal-agent-problem has to be solved.

Unstable rules tend to be inefficient because they are associated with losses due to the non-payment of the costs of implementation ("sunk costs" for investors). These losses are associated with the breach or negligence of two principles: (a) the desirability of legal harmonization, and (b) the feasibility of legal harmonization.

(a) Partial undesirability (overlooked opportunity costs)

There is a good deal of evidence that a general harmonization of legal rules would lead to substantial costs. These include direct costs for developing new bureaucracies or demolishing old structures, as well as costs stemming from the renouncement of the *advantages of system competition*, which appear in

(i) an adaptation to the variety of preferences,

(ii) efficiency advantages of regulative competition,

(iii) the minimization of "rent-seeking" costs caused by bureaucrats and politicians.

On (i): Economic structures differ across countries. These (different) structures must in a sense "harmonize" with the legal system that is to be effective in a country. That is, not every legal system "fits" into a country. This alone already militates against a harmonization of the legal system in an integration area with structurally-heterogeneous countries. The central argument as far as economic systems are concerned is as follows: a variety of regulations or laws reflects a variety of preferences.[14]

On (ii): Furthermore, having different regulations across countries or regions also means competition among rules, and therefore represents a process for discovering the regulations that fulfill the desired purpose with the lowest costs (Hayek, 1968). Diversity in laws enables states to experiment in their search for efficient and workable legal rules at relatively low risks and low costs. Competition between legislators may generate a learning process. Excessive harmonization would prevent such experiments and learning processes from arising and transaction costs from being lowered. In addition, dynamic competitive processes between legislators may produce voluntary harmonization.

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[14] See also Rodrik (2009) who emphasizes: "One problem with the global strategy is that it presumes we can get leading countries to surrender significant sovereignty to international agencies. (…) A second problem is that even if the leading nations were to agree, they might end up converging on the wrong set of regulations. (…) *But the most fundamental objection to global regulation lies elsewhere. Desirable forms of financial regulation differ across countries depending on their preferences and levels of development.*" (Emphasis by the author, H.W.)

On (iii): Beside market failures, regulatory failures happen as well. Bureaucrats and politicians often serve their self-interest by maximizing their budget or increasing their status and improving their working conditions. Competition is the most efficient mechanism to install for controlling this kinds of bureaucrats and politicians and restraining their rent-seeking activities. In contrast, legal harmonization can be considered as a restriction of competition analogous to a cartel, where non-member countries are outsiders.

(b) Infeasibility

Imposing legal rules entails the budgetary costs of enforcing them (Holmes and Sunstein, 1999). It is important to recognize that harmonization of behavioral structures, and therefore of the forms of realization of formal law, cannot be ordered from above simply through a formal decree. Legal harmonization is associated with different budgetary and non-budgetary costs of enforcement in different countries or regions. In other words, uniformity of law cannot be created simply by imposing rules through public policy. Compliance with the law requires more than just rules; it must match the (legal) culture of a country.[15] Imperfect matching hampers international trade, too. Formal harmonization decrees can only reduce this to a certain extent. A further reduction can only be achieved through "experienced integration" (by gradually overcoming ignorance and prejudice). This also includes a thorough reform of civil justice and of judicial administration in civil matters.[16]

In other words: Only formal legal rules can be harmonized through bureaucratic acts. Differences in degrees of implementation (due to different costs of enforcement of harmonized law for the different participants) would remain, and these differences are again a source of legal uncertainty. Therefore, legal uncertainty would, to a great extent, also remain.

On (3) Other aspects

There are still other, additional costs, or hindrances in the path, of implementing cross-border harmonization of legal rules that will be only briefly mentioned here. Harmonization of legal rules may be (a) a recipe for weak and ineffective rules; (b) incredible; and (c) associated with redistribution effects.

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[15] See as well: Rodrik (2005), pp. 200ff.

[16] Den Butter and Mosch (2003) tried to capture this effect by estimating an augmented gravity equation adding a variable of "informal trust", which they build from the Eurobarometer 1996. Their estimation results indicate that a change of one standard deviation of this variable leads to a change of 24 to 34 percent in trade volume. Another argument put forward by Carbonara and Parisi (2007) points to substantial switching and adaptation costs as a possible hindrance, or reason for delay, in full legal harmonization.

(a) Harmonization: A recipe for weak and ineffective rules?

One worry regarding harmonization of legal rules is that the likely result will be weak and ineffective rules. See, for example, Rodrik (2010) who emphasizes that "(g)lobal coordination, like global governance, sounds good. But the practical reality is that it cannot deliver the tough regulations. (…) In a world of divided political sovereignty and diverse national preferences, the push for international harmonization is a recipe for weak and ineffective rules."

(b) Incredibility of global rules

To be efficient, rules have to be credible, and they are only credible if there are no profitable opportunities for other players to violate them. In open economies, however, it is relatively easy to circumvent (global) rules, since there will always be countries that have not assumed the rules or give in to the incentive to act as a free rider and thus profit from regulatory arbitrage (see North, 1991; Axelrod, 1984; and Wagner, 2006).

Incredible uniform rules can even endanger the global system or an economic union as a whole. A topical example is the incredibility of the no bail-out rule in the Maastricht Treaty in the European Union. Hence, heavily indebted countries could run into debt without interest rates reflecting the risks adequately. The aftermath costs of the incredibility of this uniform rule during the financial crisis were huge and had eventually to be socialized. And they drove the union towards the edge of collapse.

(c) Redistribution effects of uniform rules

The implementation of a new rule means a reform that imposes transition costs on a part of the population so that opposition is to be expected – channeled by lobbying (see, e.g., Wall Street lobbying against the proposed regulatory rules for the financial sector in the U.S. after the financial crisis). Therefore, proposed rules tend to be watered down to weaker and more ineffective rules through the lobbying of opposing groups. Since such rules often have to be implemented very quickly to react to new challenges (during crises), the described opposition and lobbying over distribution conflicts[17] tend to lead to a delay of reforms and thus increase

[17] See in this context, e.g., the war of attrition models in political macroeconomics, see Alesina and Drazen (1991) or Drazen (2000).

the transition costs, so that the implementation of rules is going to be endangered and may even be stopped eventually.

4 When are Uniform Rules Appropriate? – Lessons from the Financial Crisis –

After the recent financial crisis, a rethinking about whether and how to harmonize legal rules internationally appears to be necessary.[18] As has been argued above for justifying legal harmonization (within a cost-benefit analysis), the various costs of legal diversity have to be analyzed and contrasted with the costs of (de-facto) implementation of enforcement of legal harmonization.[19] Here, it is important to take the following into account:

E7: *International harmonization of legal rules only makes sense when there are international relationships and dependencies or externalities.*

International dependencies and externalities can lead to undesired redistribution effects, which may induce retaliation campaigns and thus, in the context of locational competition, eventually unwelcome effects like "races to the bottom” (with regard to regulations, tax imposts, etc.) with general or global losses.[20]

Here the role of globalization has to be reflected since globalization is accompanied by a rise in international dependencies and externalities and in locational competition (Wagner, 2006).

E8: *Global financial crises can be regarded as a consequence of uncontrolled financial globalization. Globalization and deregulation have led to an increase in international dependencies and externalities (cross-national contagion effects) and thus, among other things, to more costly and more global financial crises.*[21]

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[18] As an example, the crisis has made it painfully clear that the world’s banking system needs new international rules to impose lending discipline and guard against any temptation to migrate to the weakest regulatory regime. Consequently, a new set (“Basel III”) has been proposed to do the job.

[19] De facto implementation means that the formal implementation of rules (legal harmonization) is not enough, these rules also have to be abided by.

[20] “Locational competition” refers here to the new competition in open economies between governments for mobile production factors and foreign investment (see, e.g., Siebert, 1996). Early models of locational competition were developed by Tiebout (1956), MacDougall (1960) and Kemp (1964).

[21] For more detail see Wagner, 2010, and Wagner and Berger, 2004. These effects of globalization are regarded as driving forces for arguing for international policy coordination (see, e.g., Wagner, 2009).
Regulatory arbitrage in the context of locational competition has played a crucial rule here (Wagner, 2006, and Wagner, 2001).

A main insight from this is that one can expect less and less that externalities can be internalized in a sufficient way, one reason being that with globalization *international* externalities have grown and there is no international state.

This was already visible in the Asian Crisis 1997-8 (see, e.g., Wagner and Berger, 2004). The most recent financial crisis shows even better the *huge, systemic effects of unregulated economic processes in an open economy*.

4.1 The recent financial crisis and regulation failures[22]

> "When the U.S. subprime crisis broke out in August 2007, it was first interpreted as an apparently rather small, regional crisis. However, despite of quick reactions from politics, it soon developed into a global crisis. (…) These events created a big increase in perceived counterparty risk when banks faced large write-downs and the solvency of established banks was questioned. This resulted in a flight to quality which depressed yields on government securities and diminished wholesale funding prompting a disorderly deleveraging process that proliferated across the rest of the global financial system. Liquid assets were sold at fire-sale prices and credit lines to leveraged financial intermediaries in the shadow banking system were significantly reduced. Bond spreads widened sharply and the flow of trade finance was interrupted. Banks continued to tighten lending standards when equity prices plummeted (see, in more detail, e.g., IMF, 2009).
> (…) The effects of the excesses and failures at the core of the banking system were quickly forwarded to all sectors and countries of the global economy. Furthermore, business and consumer confidence collapsed as doubts about economic prospects rose and uncertainty about policy responses distributed.
> Due to this squeeze on credit, sharp falls in housing and equity prices, and high uncertainty, not only in the United States but many other countries not involved in the origination of the crisis were affected, mainly by the slump in global trade, given its heavy dependency on manufacturing exports."
> (Wagner, 2010, p. 63f.)

The question arises how all this could happen and what caused the recent financial crisis. Already long before the crisis it was known that in modern societies there is generally high complexity of decision making that leads to an insufficient accomplishment of costly information processing. Therefore, governments early on have implemented risk management (supervisory and regulatory) agencies to handle such imperfections and distortions and help the private agents (by trying to give them the right incentives/rules) to overcome or internalize externalities so avoiding overall disequilibria and crises. However, the recent financial crisis has shown that the current regulation system obviously could not efficiently manage any more the globalization-driven increase in international externalities that worked out to contagious systemic effects.

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[22] The following discussion leans closely on Wagner (2010).

In order to be able to develop better rules or regulation systems one has to study carefully the ***failures on the part of supervision and regulation policy that led to the recent financial crisis***.

I shall here just briefly list the major failures (cited from Wagner, 2010, pp. 66ff.):

> ***"A The growth of poorly regulated segments***
> Particularly in the U.S., the 1999 Gramm-Leach-Bliley Act, which repealed the separation between commercial banking and investment banking as laid down before in the Glass Steagell Act of 1933, opened the door for a growing shadow banking system thus leading to regulatory arbitrage. (…)
> ***B The complexity and explosive power of recent financial innovations***
> These new instruments included the issuance of asset-backed securities (i.e., bundles of residential and commercial mortgages and of loans to businesses which were sold on by the loan originator, so shifting the associated risks), CDOs, CDSs, etc. Thereby, financial innovations – the process of securisation which spread risk – allowed the financial sector to lend to risky borrowers who before were rationed. (…)
> ***C The interconnected nature of the financial system***
> A major failure of regulation was that the risk of each bank was/is treated in isolation and that it did not focus on the externalities that contributed to systemic risk. It was not taken into account that banks which were forced into fire-sales also depressed prices for other banks; and that banks which hoarded funds or hided their own commitments created other externalities by producing uncertainty for counterparties. (…)
> ***D Incentive distortions in remuneration contracts***
> Financial executives were remunerated with bonuses in good years but not fined for poor performance in other years. This means that these remuneration contracts offered potentially unlimited upside rewards, but capped the downside losses thus encouraging traders to aspire after short run profits and take on excessive risk. This led, among other things, to leverage ratios that were excessive for shareholders as well as for the system as a whole.
> ***E Procyclicality in the behavior of financial institutions and investors***
> Financial institutions and investors accepted higher risks during the upper phases of the economic cycle whereas the reverse happened during the down phases. As a consequence, credit and leverage enlarged during expansions and contracted during recessions. The procyclicality of leverage was reinforced by the procyclical behavior of collateral.[23] (…)
> ***F Interest conflicts connected with the operation of rating agencies***
> Another major problem arose from the fact that rating agencies have been paid by securitizers. Therefore, one can suppose that the rating agencies have been in an interest conflict as they partially had to comply with the incentives of their clients. Since regulators were using some of these ratings to define the risk levels assumed by the regulated financial institutions, the problem was even compounded."

4.2 Lessons from the crisis: Uniform rules: Needed, but often not implementable

In section 3, it was argued that there is often a need for "strong" and effective uniform rules in a global economy, but no chance of implementing them. This has been validated by the experiences from the recent financial crisis.

[23] Capital requirements have been pro-cyclical as well. Regulation focused on the asset side of the balance sheet, but it did not focus on the externalities that contributed to systemic risk.

Insofar, the current calls for more international regulation and legal harmonization in the aftermath of the financial crisis are understandable, but often not differentiated enough. They merely resemble the typical cyclical emergence of calls for legal regulation and deregulation. After great crises or depressions of market economies there always have been loud calls for more legal regulation. Hence, there is often a tendency towards blanket legal over-regulation after crises. However, even if the need for more/better rules is recognized:

E9: *To avoid legal over-regulation and over-harmonization, the following caveats a)-g) should be taken into account.*[24] [25]

a) *Violations of rules in the public sector are more difficult to sanction than those in the private sector.*
The reason is that the state – which has to sanction violations of rules – is part of the public sector. Thus interest conflicts may arise that weaken the sanctioning mechanism.
In international areas in particular, contract violations based on non-transparency, cheating, etc., cannot be effectively sanctioned. One topical example is Greece with its problem of government debt and of allegedly faking data in the 2000s. Another example could be the violation of the debt criteria of the EU Treaty in (other) individual EU member states.

b) *Globalization, and hence complexity (information problems) and crisis-proneness, is much stronger in the financial sector than in the production sector.*
Comparing the globalization dynamics in international trade, international capital flows and international labor flows, one can see that the dynamics in international capital flows are by far the strongest (see Wagner, 2009, part 1). Therefore, regulation in this field of financial integration appears to be most urgent. This is strengthened by the fact that the working of the productive sector is dependent upon the functioning and stability of the financial sector. Insofar, the financial sector is system-relevant.[26]

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[24] Furthermore, the question can be put as to when international harmonization is an option, and when it is a must, and it can be answered as follows: International harmonization is an "option“ if it is only a question of increasing efficiency, or avoiding (locally) limited or microeconomic risks. It is a “must” if it is a question of avoiding systemic (global) risks (see also point d) in the following list). However, even if something is a “must”, it is not automatically implementable (see the arguments discussed above in section 3.2.2).

[25] I can here only give some shorthand explanations (due to page limits).

[26] This has been impressively proved by the recent financial crisis.

c) *In systemic risk areas it becomes more acute to harmonize legal rules than in non-systemic risk areas (and may even be a survival condition).*

In point b) we argued that the financial sector can be regarded as system-relevant. Therefore, the establishment of a new financial (risk management) architecture was seen as the most pressing task after the Asian crisis in the late 1990s and led to the foundation of the Basel II regulatory arrangement.

However, not only the financial sector itself is a system-relevant unit. Some big firms (in the financial sector, and in some other sectors as well) can also be regarded as system-relevant because of their size, as they are associated with the so-called "too-big-to-fail" problem, and sometimes also with the converse - "too-big-to-save".

Therefore, new macro-prudential measures and even proposals to break up (too) big companies are being discussed.

d) *Mobile factors are more easily hit by regulatory arbitrage and races to the bottom.*

Thus harmonization of rules is particularly used as a protection against loss of mobile factors. This is one result from "locational competition theory" (see above).

Costs of regulatory arbitrage have turned out to be much higher than previously expected. This is an important experience from the financial crisis. Therefore, there is much to be said for more harmonization:

If there is no harmonization of rules we may have two similarly undesirable results:

(1) Locational arbitrage (due to possibilities of exit into areas or countries with softer rules; of off-shoring, etc., if mobility of physical or human capital exists)

(2) Permanent unilateral transfer payments (between member countries in economic/monetary "unions" such as EU/EMU) may arise in the context with moral hazard and lead to lax compliance with rules in specific countries.[27]

e) *It is easier to agree on uniform* ***basic*** *rules (minimum standards; or basic laws, human rights) than on uniform rules with different stipulations for different groups or participants.* Such basic rules may be easier to agree on and thus faster to implement (see as well the many rules compromises in the EU Treaty). The question, however, arises whether such basic rules

[27] One example here is the pensionable age: with similar structural conditions in ageing, some EU countries with low pensionable age (such as Greece) will create higher debt to finance their pension system, and thus higher crisis vulnerability, the effects of which will have to be shouldered (in the case of a crisis) by other members with higher pensionable age (and therefore lower future debt-burden) to ensure the survival of the union.

are enough. That they may not suffice is shown again by the example of the difficulties facing Greece today (see also the arguments in point a)).[28]

f) *There are often even no single theoretically-optimal rule solutions.*
This is due to the difference between
(i) wrong model assumptions with respect to information (distribution) and/or social behavior behind regulation approaches, and
(ii) actual information (distribution) and/or social behavior, uneven distribution of implementation costs et al. in international policy coordination projects (see Wagner, 2009).
But this makes cooperation/agreement on specific uniform rules difficult.
And even if uniform rules are agreed, they may not be implementable (see Rodrik, 2009, for a more detailed explanation of this argument).

g) *Specific information or confidence dilemmas may even prevent second- or third-best rule solutions to be stable or sustainable.*
Therefore, invested transaction costs may exceed the additional value of such rules, at least for an extended period of time. Examples for this are the Stability and Growth Pact in the EU, and the fiscal rules in the Maastricht Treaty; see also the UN Climate Change Summit failure in Copenhagen in December 2009. Nevertheless, it might be useful to invest in such rules, as this could trigger learning processes that might make future sustainability more likely (dynamic versus static analyses of the use, or harmonization, of rules) and thus create long-term net benefits.

Summing up, integration of global financial markets was supposed to lead to greater financial stability, since risks were spread around the world. However, the financial crisis has thrown doubt on this conclusion. In the absence of appropriate regulation, privately profitable transactions may lead to systemic risk: a failure in one part of the system can now (in a globalized world) lead to system-wide failure (see also Stiglitz 2010). In order to prevent this

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[28] See also the statement of the IMF in its report for the G-20 (IMF, 2010): "International cooperation would be beneficial given the importance of complexity of cross-border financial institutions. (….) Unilateral actions risk being undermined by tax and regulatory arbitrage, and may also jeopardize national industries' competitiveness. Coordinated action would promote a level playing field for cross-border institutions and ease implementation. *Effective cooperation does not require full uniformity, but broad agreement on the principles*, including on the base (adjusting for accounting differences), minimum rate, risk-adjustment, and on avoiding double taxation across countries." (IMF, 2010, p. 21; italic emphasis by the author, H.W.; first sentence in original in bold)

"contagion" of the failure of one part of the system from spreading to others, we need circuit breakers. The question here is whether these circuit breakers should be "uniform rules".
An analysis of financial integration should weigh the costs with the benefits of uniform rules that may differ across individual countries, and ask if there are ways of designing the harmonization of (financial) rules. We need an architecture that minimizes the downside risk while preserving as much of the upside potential as possible (see ibid.).[29]

5 Conclusions and General Lessons

This paper conducted a kind of cost-benefit analysis of legal harmonization by looking at arguments in favor of and against uniform rules. It showed that not only the arguments in favor have increased after the recent financial crisis, but also the arguments against.[30]
It also showed that integration of global markets has not only increased the need for new uniform rules but also decreased the chances of their implementation; and that therefore today it is often better to improve the implementation of current rules instead of laying down new uniform rules.
In more detail, the following lessons can be drawn:

(a) Information asymmetry is the major problem

It should be taken into account that it is mainly information problems or asymmetries that produce the problem of non-internalized (international) externalities and thus the need for global rules (harmonization of laws). And it is the same information problems that often prevent an efficient use of such rules (by creating a kind of prisoner's or confidence dilemma: A participant only profits from such deals (or rules) if (s)he can expect that all participants comply with the rules. Since there is often distrust (experience of prior deceit), rules (cooperation deals) are often not realized or are not stable/sustainable).

[29] Stiglitz argues that we should investigate and differentiate between alternative architectures: Simple architectures include autarky, regional arrangements, and global or international arrangements.

[30] There have been many calls for legal harmonization in different fields, not only after the recent financial crisis, but also prior to this crisis – particularly within the European Union. There have regularly been problems with respect to finding and implementing common rules, even in assumingly less conflictive, i.e. purely business-related, fields. One example is the attempt to implement the so-called "Small Business Act" (SBA): Small and medium-sized firms (SMEs) in Europe have long called for a matching legal form valid across the EU (similar to that of the European company (Societas Europaea, SE) for large firms). Associated with these calls has been the expectation of significant cost reductions for businesses and further integration of the internal market. In response, the European Commission put forward a proposal in 2008 ("Small Business Act") for Europe that was passed by the European Parliament in March 2009 with some amendments, but did not achieve the unanimity required for it to be adopted. This means that the statute was not able to come into force as originally intended on July 1, 2010. For more details see Deutsche Bank Research (2010).

(b) Globalization matters

The irony here is: Deregulation has brought us globalization, and globalization in turn involves global systemic risk and contagion, and thus forces us to (try to) re-install regulation and (partially) harmonize law.

(c) Danger of (short-term) over-regulation

We only need high regulation for controlling systemic risk, and we only need substantial international harmonization of legal rules for dealing with global systemic risk. However, we are confronted with the difficulty of separating systemic from non-systemic risk, and global (cross-national contagion-related) from non-global risk. This separation problem poses a main challenge for current and future regulators to avoid over-regulation, the danger of which is particularly apparent or probable directly after a severe crisis.

(d) Narrow/limited time window for implementation

There is a good deal of evidence that stable uniform rules are the exception in real life. Whereas the incentive to install such uniform rules is greatest in times of crisis, the readiness to pay for such a reform tends to decline rapidly as soon as the crisis starts to slow down. A topical example is the G-20's initial unity (after the outbreak of the recent financial crisis) in its goal to implement new uniform, global regulatory rules rapidly to withstand future financial crises better. However, due to waiting too long with the implementation (caused by bureaucratic hindrances in many countries) this unity appears to have been broken in the meantime.[31] That is, the longer governments wait with the implementation of a reform of uniform rules/regulation systems, the more probable is a watering-down or an indefinite delay for reforms or uniform rules.

(e) Cultural diversity matters

Since we have cultural diversity, common rules do not fit diverse countries equally. The total costs of enforcing new rules not fitting some of the countries would have to be contrasted with the potential (uncertain) benefit from new common rules in the other countries. Even if

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[31] A lesson suggested by this experience is that it may not be optimal or sensible to stick to very ambitious goals (such as global rules, or comprehensive rules) for too long, but to try to have always a less ambitious worked-out solution plan or compromise (such as regional rules, or basic rules) in reserve. See the following lesson (f) on this.

there is a net benefit to be expected, there need not be mutual consent, since the distribution of the net benefit may be a controversial subject.[32] [33]

Hence, we would need differentiated uniform rules. However, such rules are difficult to implement, and even if possible, they would have to be re-negotiated regularly against the background of different ongoing developments across countries. Thus, simple (basic) rules could serve as a kind of feasible second-best. (f), (g) and (i) follow from this.

(f) Often better to target simple, second-best basic rules

Against the background of the implementation problems mentioned above, it may sometimes be better to aim solely at some basic common rules and give each participant the flexibility to adapt the rules to its structural specifics (although by doing this the problem of regulatory arbitrage would remain virulent; this problem would have to be solved separately and globally).

That means it is often not useful to stick to assumingly first-best global rules. The expectations regarding first-best global rules should not be too high. The more uniform and the more complicated rules are, the more costly they tend to be for individual countries. And the interests of individual countries or governments are too different to create optimism with regard to quick implementation. War-of-attrition costs with respect to the bargaining about which reform or rule to choose (bearing in mind that there are often several equally good rules with different costs for different groups involved) and about the sharing of costs of reforms (the introduction of rules) are likely to be too high to justify waiting a long time for consent. Furthermore, long waiting favors the efforts of interest groups to water down the proposed rules to inefficient levels.[34]

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[32] See also Rodrik (2005), pp.199ff.

[33] Different countries usually not only have different rules and different technologies but also different preferences. Even if the rules and the technologies are themselves nonrival ideas that can be copied from abroad, it is still true that for rules and for technologies, incentives and preferences matter. Preferences, however, are not nonrival goods. On the one hand, some legal rules on property rights are more likely to lead to the implementation of new technologies, and, on the other hand, some political rules may more likely lead to Pareto improvement in other rules. See Romer (2010).

[34] A topical example for attempts to water down proposals for rule reforms is the struggle of the banking industry in its lobbying against the introduction of proposed higher equity capital standards and other financial regulations. The reasoning is: to meet some of the new requirements, banks would need to raise large amounts of capital. Heightened global demand for capital would cause the costs of that capital to rise, so that, in order to compensate for those higher costs, banks would have to charge more to borrow money. This, however, would supposedly have a significant negative impact on lending, businesses and ultimately growth and employment. These objections have successfully been brought forward for watering down the original proposals, although recent studies (see, e.g., BIS, 2010) suggest that the relationship between capital levels and the costs of loans is not nearly as straightforward as the banking industry often contends.

In addition, it has to be taken into account that not everything has to be ruled globally. For example, in the new financial reform, common equity capital standards are relevant, whereas most of the other envisaged regulations might well be implemented differently on regional levels (and possibly even better).

(g) Under ambiguity we should target medium regulation and partial harmonization

It may be efficient/better in "normal" situations to have low regulation/harmonization; however, in "rare/extreme" situations it would be important to have high regulation/harmonization.

But since we face **Knightian uncertainty** regarding the temporal distribution of both situations, we should follow the advice of robust control theory for such a case and install some type of medium regulation/partial legal harmonization as a kind of optimal strategy.

(h) Need for transparency and independence of supervisory authorities

Transparency and independence of supervisory authorities is a precondition for "efficient" rules because this favors behavior that is compliant to rules. That is, there will be fewer interest conflicts and less corruption if supervisory authorities are independent, and fewer violations of rules if such behavior is more "transparent" so that it is more likely to be sanctioned.[35]

(i) Need for differing between individual costs and systemic costs

The view on individual costs (with regard to individual agents, groups or sectors) is what I meant above with "partial view" and "micro bias" (of regulation authorities). This only looks at how individuals are affected by reforms, such as the introduction of new rules, whereas the macro-view also tries in addition to capture the network and spillover effects running from one individual/group/sector to others, and thus takes a holistic view. Only a broader macro-view that contrasts costs and benefits of legal harmonization for the overall economy can detect the most important systemic costs of regulatory failures.

(j) More important than new or uniform rules is the execution of current rules

Governments tend to treat rules as a panacea. They imagine that all they need to do is introduce them. But, as we have seen, there are limitations or hindrances: Having the right

[35] Transparency can also be strengthened by good communication policy (see Knütter and Wagner, 2010, for the example of central bank policy).

rules (uniform rules in particular) in place is no guarantee that they will be used effectively. Effective application of rules requires a strengthening of the ability and accountability of regulatory and supervisory agencies to undertake timely and credible action. But in many jurisdictions, supervisors face impediments to enforcing fully all supervisory regulations.[36] The recent financial crisis showed how ineffective the regulation of the financial sector was in achieving this aim of preventing financial crises.

A major lesson can be drawn here: In many cases, we need fewer new rules and less harmonization of legal rules, but more efforts or incentives for the forces of law and order (meta-rules)[37] to have the current rules enforced, i.e. to stop abuse.[38]

Because intelligent people will always find opportunities to circumvent rules, since not all areas can be monitored completely without excessive costs, we need better incentive mechanisms and to spend more resources in order to raise the extractive capacity (with regard to tax and other rules) and the productive capacity (with regard to the enforcement of contracts and property rights in the individual countries).

(k) Need to introduce uniform rules simultaneously

Each government has the incentive to delay the introduction of uniform rules in its own country because it is often ensured a temporary regulatory arbitrage gain (competitive advantage) if others go first.[39] This could be seen in many cases of uniform rules, in some cases with disastrous consequences. The most obvious recent example of this is the still delayed introduction of the "Basel II" uniform rules in the U.S. that contributed to the outbreak of the financial crisis in the U.S. in 2007, which then spread all over the world.

To sum up in general we can state that a cross-border flow or harmonization of legal rules can occur either via competition (deliberately) or it can be enforced (harmonization via international policy coordination). The latter procedure can make sense (be welfare-optimal)

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[36] See, e.g, Vinals (2010), who emphasizes that "having the right rules and tools in place is no guarantee that they will be used effectively (…) in many jurisdictions, supervisors faced impediments to enforcing fully all supervisory regulations." (Vinals, 2010, p. 10)

[37] Meta-rules are rules that are intended to serve to survey and force individuals to implement existing rules (better) or to abide by them (better): searches for such meta-rules are likely to be more important than the harmonization of rules (meta-rules must be national because of cultural diversity of attitudes, habits, etc.).

[38] A topical example is again Greece with its very low tax take ratio. Greece has rules of taxation, but relatively weak extractive capacities. A lot of evasion is down to "tax rebellion": people simply do not feel that the services the state offers are worth paying taxes for. This, however, significantly depends on culture and past experiences.

[39] Another reason is the activities of lobbying groups in individual countries.

if a social economy faces some negative externalities, based on coordination conflicts of groups organizing partial distribution interests,[40] that cannot be internalized by the market. Nevertheless, we have to take into account that efficient implementation of legal harmonization cannot be ordered from above but has to come by conviction and socialization, which takes some time. Therefore, enforcement of harmonization of legal rules (via international policy coordination) will likely first come with minor success (so that costs may outweigh benefits in the early transition period of implementation). Only similarly-minded countries, such as in the EU, may be willing to take these extra transition costs in the expectation of a medium to long term net benefit. Against the background of the fact derived above that international policy coordination tends to lead to weak (compromise) rules as a harmonization result, the stability of such harmonization attempts is likely to be limited. However, the more similarly-minded and the more structurally similar the countries are that try to harmonize legal rules amongst themselves, the more optimistically one can look at such harmonization efforts. Referring to the EU efforts we could conclude that the smaller and more structurally-similar an acting core group of the EU is, the more successful harmonization of legal rules is likely to be, and the more diverse and larger the group of EU countries is, the more unlikely their attempt at harmonizing rules will be to be effective and stable.

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7 References

Alesina, A. and Drazen, A. (1991). Why are stabilizations delayed? American Economic Review, 81(5), 1170-1180.

Archibugi, D. and Filippetti, A. (2010). The globalisation of intellectual property rights: four learned lessons and four theses. Global Policy, 1(2), 137-149.

Axelrod, R. (1984). The evolution of cooperation. New York: Basic Book Publishers.

Axelrod, R. (1997). The complexity of cooperation. Agent-based models of competition and collaboration. Princeton: Princeton University Press.

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[40] This means that particular interest groups prevent a transition towards superior rules (what is typical for necessary reform processes often prevented or delayed after structural changes such as globalization); see, e.g., Wagner (2001)and Wagner (2006).

Balling, M., Berk, J. M. and Strauss-Kahn, M.-O. (Eds.). The quest for stability: the macro view. SUERF-Studies 2010/2. Société Universitaire Europénne de Recherches Financières (SUERF), Vienna.

BIS (2010). 80th Annual Report. Bank for International Settlement, Basel.

Berg, H., Cassel, D. and Hartwig, K.-H. (1999). Theorie der Wirtschaftspolitik. In: Bender, D., Berg, H., Cassel, D., Gabisch, G., Hartwig, K.-H., Hübl, L., Kath, D., Grossekettler, H., Siebke, J., Thieme, H.J., Willms, M. (Eds.). Vahlens Kompendium der Wirtschaftstheorie und Wirtschaftspolitik. Band 2. 7. ed. Munich: Verlag Vahlen, 171-298.

Brennan, G. and Buchanan, J.M. (1985). The reasons of rules: constitutional political economy. Cambridge: Cambridge University Press.

Carbonara, E. and Parisi, F. (2007). The paradox of legal harmonization. Public Choice, 132, 367-400.

Chen, N. and Novy, D. (2009). International trade integration: a disaggregated approach. CESifo Working Paper No. 2595. CESifo, Munich.

Chu, A.C. (2009). Macroeconomic effects of intellectual property rights: a survey. MPRA Paper 17342. Munich Personal RePEc Archive, Munich.

Del Gatto, M., Mion, G. and Ottaviano, G.I.P. (2006). Trade integration, firm selection and the costs of Non-Europe. CEPR Discussion Paper No. 5730. Centre for Economic Policy Research, London.

Den Butter, F.A.G. and Mosch, R.H.J. (2003). Trade, trust and transaction costs. Tinbergen Institute Discussion Paper No. TI 2003-082/3. Tinbergen Institute, Amsterdam / Rotterdam.

Deutsche Bank Research (2010). A European private company. Is Europe's single legal form for SMEs close to approval?. Economics & politics. Research Briefing, July 19th 2010. Deutsche Bank AG, Frankfurt/Main.

Dinopoulos, E. and Kottaridi, C. (2008). The growth effects of national patent policies. Review of International Economics, 16(3), 499-515.

Drazen, A. (2000). Political economy in macroeconomics. Princeton: Princeton University Press.

European Union (1999). Directive 1999/44/EC of the European Parliament and of the Council of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees. (Official Journal of the European Communities L 171/12). European Union, Luxemburg.

Freyhold, H., Gessner, V., Vial, E.L. and Wagner, H. (Eds.) (1995). Cost of judicial barriers for consumers in the Single Market. A report for the European Commission, Brussels: DG XXIV; AO-2600/94/00103.

Hayek, F.A. (1968). Der Wettbewerb als Entdeckungsverfahren. Kiel: Institut für Weltwirtschaft.

Hayek, F.A. (1971). Die Verfassung der Freiheit. Tübingen: Mohr.

Holmes S. and Sunstein, C.R. (1999). The cost of rights: why liberty depends on taxes. New York: W.W. Norton & Company.

IMF (2009). World economic and financial surveys: crisis and recovery (04/09). International Monetary Fund: World Economic Outlook.

IMF (2010). A fair and substantial contribution by the financial Sector. Final report for the G-20. International Monetary Fund, Washington D.C.

Kemp, M.C. (1964): The pure theory of international trade. Englewood Cliffs: Prentice Hall.

Kneller, R., Morgan, C.W. and Kanchanahatakij, S. (2008). The trade liberalisation and economic growth. The World Economy, 31(6), 701-719.

Knütter, R. and Wagner, H. (2010). Monetary policy and boom-bust cycles: the role of communication. Discussion Paper No. 453. Department of Economics, University of Hagen, Hagen.

Kydland, F.E. and Prescott, E.C. (1977): Rules rather than discretion: The inconsistency of optimal plans. Journal of Political Economy, 85(3), 473-491.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (1997). Legal determinants of external finance. Journal of Finance, 52(3), 1131–50.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (1998). Law and finance. Journal of Political Economy, 106(6), 1113–55.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. (2008). The economic consequences of legal origins. Journal of Economic Literature, 46(2), 285–332.

Locke, J. (1689) [1924 / 1978]. Two treaties of government. London et al.: Dent.

MacDougall, G.D.A. (1960). The benefits and costs of private investment from abroad: a theoretical approach. The Economic Record, 36, 13-35.

McMillan, J. (2008). Market Institutions. In: Durlauf, S. N. and Blume, L. E. (Eds.). The New Palgrave Dictionary of Economics Online. Basingstoke: Palgrave Macmillan. July 6th 2010. <http://www.dictionaryofeconomics.com/article?id=pde2008_M000347> doi:10.1057/9780230226203.1030

Mueller, D.C. (1993). The public choice approach to politics. Aldershot, Hants: Elgar.

North, D.C. (1990). Institutions, institutional change and economic performance. Cambridge: Cambridge University Press.

North, D.C. (1991). Institutions. Journal of Economic Perspectives, 5(1), 97-112.

Pelkmans, J. (1997). European integration. Methods and economic analysis. Harlow: Longman

Rodrik, D. (2005). Feasible globalization. In: Weinstein, M. M. (ed.). Globalization: What's New. New York, Columbia University Press, 196-213.

Rodrik, D. (2009). A Plan B for global finance. The Economist, Mar 14th 2009, 72.

Rodrik, D. (2010). The case against international financial coordination. http://www.project-syndicate.org/commentary/rodrik40/English, 23.09.2010.

Romer, P.M. (2010). What parts of globalization matter for catch-up growth?. American Economic Review, Papers & Proceedings, 100(2), 94-98.

Schotter, A.R. (1981). The economic theory of social institutions. Cambridge: Cambridge University Press.

Siebert, H. (1996). On the concept of local competition. Kieler Arbeitspapiere 731. Institut für Weltwirtschaft, Kiel.

Stiglitz, J.E. (2010). Risk and global economic architecture: why full financial integration may be undesirable. American Economic Review, Papers & Proceedings, 100(2), 388-392.

Tanaka, H., Iwaisako, T. and Futagami, K. (2009). A welfare analysis of global patent protection in a model with endogenous innovation and foreign direct investment. Discussion Papers in Economics and Business 09-24, Osaka University, Graduate School of Economics and Osaka School of International Public Policy (OSIPP), Osaka.

Tiebout, C.M. (1956). A pure theory of local expenditures. Chicago: University Press.

Turrini, A. and van Ypersele, T. (2006). Legal costs as barriers to trade. CEPR Discussion Paper No. 5751. Centre for Economic Policy Research, London.

Vinals, J. (2010). On monetary and financial stability – past, present and future. In: Balling, M., Berk, J. M. and Strauss-Kahn, M.-O. (Eds.). The quest for stability: the macro view. SUERF-Studies 2010/2. Société Universitaire Europénne de Recherches Financières (SUERF), Vienna.

Wagner, H. (1995). Macroeconomic analysis of the cost of judicial barriers in the Single Market. In: Freyhold, H., Gessner, V., Vial, E.L. and Wagner, H. (Eds.). Cost of judicial barriers for consumers in the Single Market. A report for the European Commission, Brussels: DG XXIV; AO-2600/94/00103, 237-391.

Wagner, H. (1995) (Ed.). Supplement volume „Bericht zur ökonomischen Analyse der Kosten rechtlicher Hemmnisse für die Verbraucher des Binnenmarktes – Globalanalyse (makroökonomischer Ansatz)". Hamburg, obtainable at the European Commission, DG XXIV.

Wagner, H. (1997). Rechtsunsicherheit und Wirtschaftswachstum. In: Behrends, S. (Ed.). Ordnungskonforme Wirtschaftspolitik in der Marktwirtschaft. Berlin: Duncker & Humblot, 227-253.

Wagner, H. (2001). Implications of globalization for monetary policy. IMF Working Paper 01/184. International Monetary Fund, Washington D.C.

Wagner, H. (2005). Economic analysis of cross-border legal uncertainty: the example of the European Union. In: Smits, J. (Ed.). The need for a European contract law. Empirical and legal perspectives. Groningen: Europa Law Publishing, 25-51.

Wagner, H. (2006). Fiscal issues in the new EU member countries – prospects and challenges. SUERF Studies 2006/1. Société Universitaire Europénne de Recherches Financières (SUERF), Vienna.

Wagner, H. (2007). Costs of legal uncertainty: is harmonization of law a good solution? In: United Nations Commission on International Trade Law (Ed.). Modern law for global governance. Congress to celebrate the 40th annual session of UNCITRAL (Vienna, 9-12 July 2007). Studies, proposals and background papers, 29-36.

Wagner, H. (2009). Einführung in die Weltwirtschaftpolitik. Internationale Wirtschaftsbeziehungen – Internationale Organisation – Internationale Politikkoordinierung. 6. ed. Munich and Vienna: Oldenbourg Verlag.

Wagner, H. (2010). The causes of the recent financial crises and the role of central banks in avoiding the next one. International Economics and Economic Policy, 7(1), 63-82.

Wagner, H. and Berger; W. (2004). Globalization, financial stability and monetary policy. Empirica, 31(2-3), 163-184.