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Of law and numbers: the challenges of quantification for transnational law and European private law

Luisa Antoniolli*

Full Professor
Faculty of Law and School of International Studies, University of Trento (Italy)

SUMMARY

* Faculty of Law and School of International Studies, University of Trento (Italy).

1. Introduction

This article analyses the increased use of instruments of quantitative analysis in law, such as indicators, rankings and benchmarking. Paragraph two starts by setting this development within the broader framework of globalization and its challenge to the authority of States, which changes the traditional mechanisms of law-making and implementation. This phenomenon modifies the characteristics of rules, blurring the boundaries between law and other means of social control, the actors involved and the mechanisms of implementation and accountability. As a consequence, new forms of law are created which come under the general notion of transnational law, and new kinds of relations, both co-operative and conflicting, are established between law and other forms of social control, which are related to governance. The third paragraph focuses on the shift that globalization and governance entail in the mechanisms of rules production, particularly through the increased use of instruments of measurement and quantification, such as indicators and rankings, which increasingly displace law and traditional legal and political processes. These mechanisms can ease decision-making and accountability in contexts where political legitimacy is weak or disputed, as in transnational contexts. Yet, the aura of simplicity, neutrality and scientific nature that they display hides important political stakes and has important consequences, both legal and political. Paragraph four analyses the challenges of these new instruments for the epistemological bases of law, particularly comparative law. It focuses on the different methods of analysis, as well as the different concepts and categories, of law and other social sciences, and the consequences that these elements have in the use of quantitative analysis and measurement. It claims that the use of quantification implies a radical shift from the traditional methods, aims and concepts of law, and requires a comprehensive discussion of them in relation to other sciences. In the fifth paragraph the article shifts its focus onto the recent developments of European private law, starting from the harmonization efforts related to the internal market, and their relation to the wider constitutional debate in the EU. After a long period where harmonization was fragmentary and selective, in the 1990s a new phase of comprehensive harmonization efforts of private law has started, related to the boost of the internal market programme. These efforts were based on traditional national models, in particular Civil codes, and finally failed because of the impossibility of solving in this way the fundamental conflict between the selective scope of the internal market-related harmonization at the EU level, and the comprehensive nature of private law at the national level, which embodies the fundamental legal values and principles of horizontal legal relations. Differently, private law is rapidly developing at the EU level in a variety

of selected areas, with completely different characteristics, a topic which is the object of paragraph six. New instances of what has been termed European "regulatory private law" (Micklitz) are expanding through new modes of governance, of which quantification and measurement are important elements. These fields display different actors, rule-making procedures, mechanisms of implementation and control, which show important similarities with the features analysed in the first part of the work. The article concludes highlighting some important elements, both practical and theoretical, on which future research in this area should focus, having important implications for the legal analysis of globalization and the rise of transnational law, particularly in the area of European integration.

2. Globalization and the rise of transnational law

Globalization is a complex and multifarious phenomenon[1]. While in the 1990's there was a long period of enthusiasm for the advances and benefits that globalization could produce, nowadays it increasingly receives critical scrutiny, underlining its dangers and drawbacks, and its drive towards growing tensions and inequalities in all fields (economic, legal, social, cultural), that need to be addressed. Yet, in spite of all criticism, globalization is far from fading away, and its impact remains unabated.

The general trend of globalisation has increasingly blurred the geographical and physical boundaries of States, with a compression of time and space that enlarges the scope of interactions and increases their speed[2]. This phenomenon calls into question the traditional Western core notion of State sovereignty as a model of isolated, independent and exclusive national orders, a "black box model" where the identification of an exclusive territory is crucial in order to define the jurisdiction of the State, i.e., its role in the production and enforcement of rules, which now increasingly take place outside national borders[3].

In the legal sphere, this is the core tenet of legal positivism, where law is firmly structured around the fundamental basis of the State[4], and is hierarchically

1 Globalization is not a completely new phenomenon: there have been several waves of globalization (starting with the great empires of antiquity), but the current globalization phase has very specific characteristics. See Weinstein (2005); Ritzer (2007).

2 See Cassese (2005), p. 973.

3 Twining (2000); Michaels (2005) 1209; Ferrarese (2000).

4 A fundamental change took place in the international context in the 20th century: the number of States approximately tripled after the collapse of Western empires, the movement towards the self-determination of peoples gained momentum, and regional and international organisations established for the purposes of cooperation in a wide range of fields (political, economic, cultural, etc.) proliferated, thereby creating a dense network of relations which clearly cannot be accomodated in a binary model. See Glenn (2014). On

organised inside the State, and horizontally among States at the international level.[5] Globalization and its related legal dynamic have radically altered this legal landscape, and have highlighted the need to rethink legal concepts and categories, although revision and innovation can be made difficult by the existing categories and intellectual patterns, which are deeply entrenched and profoundly affect the attitudes and practice of lawyers. In particular, a binary conception of law has characterized Western law since Roman law established the *summa divisio* between *ius civile* and *ius gentium*. Later, Western legal thinking rejected the possibility of recognising the existence and validity of law that is situated in a middle ground between national and international law, since this contradicts the fundamental principles on which law has been based since the birth of the Westphalian State in the sixteenth century, with its absolute conception of sovereignty and territoriality[6]. Nevertheless, the development of law over and across national boundaries worldwide, linked to globalization, has fostered a new kind of "transnational law" (a term originally coined in the 1950s)[7], in which the boundaries between international, supranational and transnational law are increasingly blurred[8]. In spite of its fuzzy nature, transnational law is a useful category, because it applies a different perspective to the analysis of legal phenomena that cannot be comprehensively grasped by applying national/international legal categories[9]. It is characterized by legal pluralism[10], not only of the sources of legal rules, but also of enforcement mechanisms, which fosters the growth of

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the significant impact that the binary relationship between law and state has had on law as an academic subject, and its crisis due to the pressure of globalization, see Dedek (2015).

5 E.g., in the idea of Grundnorm in Kelsen (1989) and Hart (1961).

6 Glenn (2014), p. 61, underlines that this binary legal world is related to binary logic as a defining feature the entire Western philosophical and scientific *Weltanschauung*, starting from the philosophies of Plato and Aristotle.

7 The term transnational law was first employed by Jessup, professor of international law at Columbia University, in relation to complex legal situations in which governments, international organisations and private parties are involved, requiring analytical tools that combine instruments used in various areas of the law (public international law, conflict of laws, private law, procedural law, etc). He did not refer to transnational law as an independent branch of law, but rather as a flexible approach to issues that could not be easily dealt with through the dichotomies of private/public law and international/national law, focusing on concrete cases, rather than on new taxonomies and classifications. See P.C. Jessup (1956).

8 Tuori (2014) considers transnational law "the true El Dorado of legal hybrids" (p. 17), which cuts across all disciplinary boundaries and blurs them, making it increasingly difficult to achieve a general, systematic and coherent organisation of the different branches of law.

9 See Glenn (2003), p. 839; special issue of the *Revue Internationale de Droit Economique* on "Les grandes théories du droit transnational", 2013/1; Micklitz, (2014a), p. 273: "Transnational law is a playground for curious researchers interested in combining legal practice with all sorts of legal and non-legal theories".

10 See P.S. Berman (2014); Id., (2007) 1155; Griffiths (1986) 1; Graziadei (2015), 485.

"legal hybrids"[11], composite legal materials produced by a dynamic process of interaction.

Transnational legal spaces, where different legal orders and systems compete for authority, are increasingly dense and complex[12]. In such a framework, the need to find new mechanisms for solving conflicts among different systems and actors becomes crucial.[13] In some cases the outcome of this confrontation is a pure "power" solution, where different systems compete and the most powerful (economically, socially, or politically) becomes hegemonic. But there is also evidence of increasing interconnectedness and cooperation among systems[14], which implies a certain degree of acceptance of diversity within a legal space, where rules and institutions regulate the co-existence of the different systems. This situation, defined by de Sousa Santos as "interlegality", is characterised by overlap, interpenetration and dialogue.[15] It requires a substantial effort in order to devise new solutions beyond a merely confrontational and conflicting logic, and a search for compatibility and adjustment, moving away from a purely State-centric idea of law, through new concepts and categories, both substantial and procedural[16].

In this setting, the features of regulation change as well: since State law is no longer able to fully control and discipline these transnational phenomena, the gap is filled by a variety of actors producing a variety of norms[17]. Law is increasingly produced outside the State, either by international organisations or by private entities, and rules that have legal effects are created outside traditional legal mechanisms, through a process of multiple hybridisation that makes it difficult

11 See Tuori (2014) p. 11, who writes about "legal phenomena that our inherited conceptual framework is unable to capture and imprison in a determinate conceptual box" (p. 14). See also Tuori, On Legal Hybrids, in Micklitz, Svetiev (2012).

12 This phenomenon is analysed also in the framework of "polycentricity": see, e.g., Petersen, Zahle (1995).

13 In the area of EU law, a new model has been proposed by Christian Joerges: his conflicts-law theory aims at co-ordinating EU and national laws by constructing EU law as a tool compensating for the failings of national laws (which are due to the gradual erosion of national competences linked to the Europeanisation and globalisation process): see Joerges (2012) 644; Joerges (2010).

14 Many works focus on the similarities between the new trans-systemic laws and those existing before the consolidation of the Westphalian State in Europe, at the time of the *ius commune*, when a number of overlapping and sometimes clashing legal systems co-existed in the same geographical area and generated a body of rules connecting them. See H. Berman (1983); Glenn (2007); Zimmermann (2001).

15 de Sousa Santos (2002): "we live in a time of porous legality or of legal porosity, multiple networks of legal orders forcing us to constant transitions and trespassing. Our legal life is constituted by an intersection of different legal orders, that is by interlegality". See also Teubner (1996); Teubner (2012).

16 P. Berman (2014) proposes a list of the mechanisms through which interaction between legal systems takes place: dialectical legal interactions, margins of appreciation, subsidiarity schemes, limited autonomy regimes, mutual recognition, safe harbour agreements, pluralist approaches to conflict of laws.

17 Slaughter (2004); Delmas-Marty (2004-2007).

to draw sharp dividing lines between legal norms and other social norms, which can interact or compete[18].

EU law is part of this worldwide phenomenon of transnational law and legal hybridisation. In fact, it is one of the most significant and interesting instances of them, given the intensity of the erosion of member States' sovereignty, the density of the regulatory framework due to its peculiar institutional setting, and the establishment of new mechanisms for the coordination of different systems and resolution of conflicts among them.[19] The intensity and pervasiveness of integration within the European Union are such that it is often compared to federalist models (which are intrinsically tied to the existence of a State, albeit with a high level of decentralisation), but there is no general agreement as to its nature: the EU is no longer a purely international organisation, but it is neither a State[20]; it is a kind of "no-man's land", where the traditional dichotomy of national law and international law does not fully grasp the evolving reality and which produces a specific and new kind of law[21].

3. Globalization, governance and the trend to measurement of law

The paradigmatic shift related to globalization is evident also in an important terminological mutation, from "government" to "governance", a change which implies something essentially different from regulation by the States through traditional legal means: "governance" is a looser and fuzzier term than "government",

18 Cafaggi (2011) 1; Wielsch (2012) 1075; Hale, Held (2011).

19 Within Europe an important case of co-ordination and interference is the regime of human rights protection as established by the European Convention on Human Rights of 1950 (and the related body of case law developed by the European Court of Human Rights), and the corresponding regime of EU law, based on the case law of the ECJ and, since the entry into force of the Lisbon Treaty, by the EU Charter of fundamental rights. According to Art. 6(2) TEU of the Lisbon Treaty, the EU is to accede to the ECHR, a process that is complex and controversial, due to the difficulty in devising mechanisms of coordination and resolution of possible conflicts between the two related but different orders of rules and between the ECtHR and the ECJ. The accession process is still under discussion.

20 See Weiler (1999); Van Gerven (2005).

21 Under classic international law, the solution of conflicts among States is based on territorial criteria. On the contrary, the EU (and previously the EC) has from the very outset regulated its relationship with the member States according to functional criteria, where sovereignty is apportioned in order to achieve the objectives established by the founding Treaties, which have gradually acquired constitutional status. The system is based on a complex partition of competences, where the principle of conferral is bent to serve new purposes, and is increasingly open-ended and flexible. Clashes are consequently inevitable, since the EU and national legal systems are in competition for authority over the same space. Political scientists have analysed this phenomenon under the theories of multi-level governance. See Piattoni (2010).

and encompasses different players and different types of rules[22]. It is the realm of soft law, where individuals, groups and countries, rather than being compelled by binding rules, perform self-assessment exercises, based on reporting and evaluation[23]. Yet, the pressure to align in these forms of governance is often as compelling as in the case of hard law, although the fact that in reality there is often not much discretion or leeway is usually not acknowledged. The actors also change: instead of institutions bearing political responsibility, the rules of the game are defined by experts shielded from immediate political accountability, due to their apparently neutral and scientific position.

Emphasis on governance, conceived as the web of institutions and rules that regulate a specific system, often of a transnational character, has been particularly strong since the 1990s, in a global context where it is increasingly difficult to establish the legitimacy of rule-making and to guarantee rule implementation. Starting from this period, law is increasingly conceived as a kind of engineering instrument, competing in the "market for regulation" with other non-legal instruments[24], and it is in this moment that the global boom of indicators and rankings started.

Indicators, in the definition given by Davis, Kingsbury and Engle Merry, are collections of "rank-ordered data that purport to present the past or projected performance of different units. The data are generated through a process that simplifies raw data about a complex social phenomenon. The data, in this simplified and processed form, are capable of being used to compare particular units of analysis (such as countries or institutions or corporations), synchronically or over time, and to evaluate their performance by reference to one or more standards"[25]. They embody a theory of social change, which nevertheless is rarely fully spelled out, and works as an implicit and self-explaining assumption. There is a large variety of indicators, which can have a different scope of the analysis (economic, social, political), geographical reach (national, regional or international), aims (information, monitoring, financing, decision-making, reform, etc.), kinds of data and sources (surveys, counts, ratios, aggregation of pre-existing databases, mix of quantitative and qualitative information, etc.), the methodologies

22 The concept of governance has been employed by the World Bank in the 1990s to allow it to plan and introduce institutional reforms in Africa. The World Bank's Statute does not allow it to interfere with States' internal prerogatives, but the loose and generic character of the notion of governance has allowed it to partly bypass this limitation, masking the political and ideological character of the interventions (as in the "rule of law" projects). The results are mixed, and have often been criticized for a lack of transparency and control. See Santos (2006), pp. 253-300. On the general features of governance, see Ferrarese (2010).

23 The model of self-assessment and self-regulation was first developed and applied in corporate business models and audit systems.

24 See Davis, Kingsbury, Engle Merry (2012(a)), pp. 3-28.

25 Davis, Kingsbury, Engle Merry (2012(b)), pp. 73-74.

employed to process them. Over time, their use has moved from areas with strong economic relevance (development, efficiency, poverty, etc.) to a variety of broad social and political issues, stretching from corruption, transparency, to justice, human rights and the rule of law[26].

There are several drivers of the explosion of indicators[27]: the need to gather suitable comparable information for a variety of contexts[28], the possibility to use them to shape and ease decision-making processes where power is dispersed or weak, and the suitability to apply them to hold a variety of actors accountable[29]. In the words of anthropologist Sally Engle Merry, "Indicators are appealing because they claim to stand above politics, offering rational, technical knowledge that is disinterested and the product of expertise. (…) They address the desire for unambiguous knowledge, free of political bias."[30] This is particularly important in cases where traditional political institutions and procedures are weak, because decisions are taken outside the area of control of traditional political institutions, as in the case of phenomena related to globalization, where both States and international organizations are often unable to provide comprehensive regulations. Alternatively, it can be because traditional political institutions are perceived to be weak, ineffective, irresponsive, a problem that in recent times has become critical in many States, and is also increasingly affecting the status of the European Union. In these cases, the possibility to base decisions on objective, neutral elements can strengthen their legitimacy and minimize criticism

26 Versteeg, Ginsburg (2016), pp. 100-137.

27 Among the rankings that have gained the widest attention in the last decade, both in positive and critical terms, particular prominence has been achieved by the Doing Business, published yearly since 2004 by the World Bank, which analyses a series of elements related to the procedures involved in setting up, manage and winding up business in hundreds of States. All the data (which are based on questionnaires answered by various kinds of professionals) are processed so as to produce a number that allows the ranking of all systems: the higher the position in the ranking, the better the environment for doing business. The reports, which have a clear bias in favour of legal reform as an instrument to foster development, have gained wide political resonance, and are often taken into account by national governments in deciding reform programmes, as well as by private institutions in deciding investment strategies. See Davis, Kruse (2007); Antoniolli (2012), pp. 459-466. Another ranking that has been very influential is the World Justice Project, an international civil society organization established in 2006 in the US (originally sponsored by the American Bar Association), which measures the rule of law in 113 countries around the world through a composite indicator based on 44 specific indicators, covering issues such as open government, fundamental rights, corruption, justice, order and security.

28 In the 20th century a fundamental role in fostering the development and use of global statistics and indicators has been played by the United Nations, through the development of internationally homogeneous criteria and methods for data gathering and processing, helping States to develop the required skills and infrastructures, for instance through the establishment of national governmental statistical offices. The UN Statistical Commission (UNSC) has adopted the Fundamental Principles of Official Statistics in 1994 (reviewed in 2013), which are based on criteria of impartiality, professionalism, scientific principles and standards, statistical relevance and utility, reliability, quality and transparency.

29 See Espeland, Vannebo (2007).

30 Engle Merry (2016), pp. 3-4.

and opposition, by-passing the traditional command-and-control methods and focusing on problem-solving through consensus-building. This complex combination of ideological, pragmatic and instrumental reasons determines the success of indicators, and more generally of instruments of measurement and quantification, for policy-making and implementation[31].

Indicators are the result of a collective process led by networks of actors[32], and it is very important to take into account the social aspects of the production of this kind of scientific knowledge[33]. The most successful indicators in this world-wide network are those merging together different counts and ratios, combining different sets of data into a single measure, which can be a score or a rank (as for instance Doing Business, Human Development Index, Governance Indicator, Freedom in the World, World Justice Project, etc.). What is important here is not only which sources of data are aggregated (how homogeneous, extensive and reliable), but also the way in which these sources are weighted; behind the surface of simplicity, they have a high level of complexity, and also of discretion and manipulation in defining the mix and balance of their components[34]. They are sponsored by powerful institutions (international or national), are apparently simple (i.e., they are expressed in sharp and clear scores or rank, allowing comparison of large and complex datasets), framed and backed by influential and recognized experts (academics or professionals)[35], and politically and ideologically uncontested. Also, in order to be successful, it is vital for any indicator to gain the attention of the media and the public, which means that often their sponsors employ significant effort and resources to disseminate information,

31 The use of measurement and statistics for governance is not new: modern States employed them extensively since the 18th and 19th centuries, particularly to govern colonies abroad and establish the first forms of national census. Poovey (1998). This led in the 19th century to the establishment of statistics as an autonomous discipline, and to the creation of a class of experts specializing in the gathering and processing of data. See Porter (1986); Desrosières (2000).

32 For a thoughtful and comprehensive analysis of quantification as a sociological phenomenon, see Espeland, Stevens (2007).

33 Also, the "aesthetics of presentation" is highly relevant: formal and graphical elements, in fact, are important in developing and spreading knowledge through graphs, maps, boxes, grids, sequences, etc.

34 Depending on the methods employed for quantification, there are three types of indicators: first--order indicators, which are counts of various kinds of elements (people, income, laws, etc.); second-order indicators, which are ratios comparing numbers (e.g., unemployment rates), providing a further, and very significant, kind of information by connecting different elements; third-order indicators, which merge different counts and ratios. See Engle-Merry (2016), p. 14. For a critical evaluation of composite indicators, see Saisana, Saltelli (2011).

35 A very prominent example is the Human Development Index, which was developed and sponsored by the UN Development Programme (UNDP) in the 1990s as a simple but more reliable and comprehensive measure (in comparison to GNP, gross national product) of development, based on a new idea of development related to the capabilities approach of Nobel prize economist Amartya Sen, which takes into consideration elements, such as education and health, that allow individuals to achieve their personal aspirations. See Sen (1999).

consolidate their prestige and foster their use. This process can be quite long, and if the quantification exercise is successful, it finally acquires a settled and static character, which makes it difficult it to challenge its validity and use[36].

Because of the extensive use of indicators, and their practical and theoretical salience, it is important to ensure that they are not misleading or distorting the reality that they aim to portray. This requires transparency in all their components: the sources of the data, the methodologies applied to process them, the cultural premises and the aims to be achieved[37]. Also, they need to be backed by qualitative analysis, in order to avoid the risk of over-simplification and homogenization and be able to take into account the specificities of each context analysed[38].

4. The magic of numbers and the impact of quantification on law

The apparent neutrality and simplicity of indicators hide a deeply political process of selection, processing and application, and requires close critical scrutiny[39]. In order to understand what is at stake when quantification is adopted as a strategy for analysis and decision-making, one has to debunk its components, deconstructing the "black box", in order to critically analyse its elements, in terms both of input and output[40]. In order to understand the aim and impact of indicators, it is also important to analyse who sponsors their elaboration, who produces them, which elements are taken into consideration and which are left out, and to whom they are applied[41]. This is no small task, but it is one that is

36 See Davis, Kingsbury, Engle Merry (2015), pp. 1-24. Indicators allow "uncertainty absorption": raw information is manipulated and transformed, in order to make it accessible and straightforward for decision-making, eliminating "noises", ambiguities and gaps.

37 Other relevant elements are: openness and democratization of the creation and production of indicators, through public discussion at the initial stages of the making; enhanced use of qualitative research in order to produce global categories that take into consideration local characteristics in the encoding process; greater use of counts and ratios, instead of composite indicators; avoidance of speculative or weak data; clear warnings about the limits of these instruments and possibility to challenge their validity. See Engle Merry (2016), p. 217.

38 Engle Merry (2016), p. 3: "despite the value of numbers for exposing problems and tracking their distribution, they provide knowledge that is decontextualized, homogenized, and remote from local systems of meaning. Indicators risk producing knowledge that is partial, distorted, and misleading".

39 For a critical assessment of the impact of the use of numbers on governance and individual rights, see Supiot (2017); see also Vatin (2013).

40 See Davis (2014).

41 An essential role is played by experts that are part of a global élite, and by countries that have a well-established tradition of surveys. Once models become established, they tend to be replicated in sub-

essential in order to be able to understand the policy issues at stake, and the limits and compromises that are invariably made in order to produce a comprehensive quantifying synthesis.

Lawyers in many parts of the world are ill-equipped to work with the sophisticated mathematical and statistical tools that are applied to produce indicators and rankings, because their education and training is traditionally based on qualitative methods. As a consequence, the issue of measurement of law has received until now only marginal attention by lawyers, possibly with the exceptions of the U.S., where a significant part of legal academia has a background in quantitative sciences. Yet, this field is of the utmost importance for all lawyers, both from a practical and theoretical point of view. The explosion of empirical research measuring various social phenomena, among which also law, has radically changed the types of analysis and consequently the use of these inputs in the last decades[42]. These features explain why the spread of quantitative measurement of law through indicators and rankings has been rightly termed as an "electroshock"[43], calling into question all basic elements of the discipline, although until now reactions have been rather modest and selective.

These instruments have been initially developed mainly by social scientists (often economists), together with statisticians, a group of people that in ironic terms have been termed "wannabe lawyers"[44]: they work with legal rules, but are often not legal experts, using methods foreign to law and straining the legal concepts and categories employed[45]. The different epistemological stance of the disciplines that are involved in the drafting and application of these instruments has important implications for the premises (both explicit and implicit), the content and the results of the analysis that are performed[46]. The way in which law is

sequent quantification exercises, generating both "expertise inertia" and "data inertia", or, as economists would say, they establish path-dependent patterns.

42 For a general overview of the impact of quantitative analysis in law, see the contributions in Cane, Kritzer (2010). New promising fields of research relate to the study of legal complexity (Ruhl, Katz (2015)), the relationship of machine learning and the law, (Surden (2014)), and of artificial intellingence (AI) and the law (Conrad, Branting (2018)).

43 Association Henry Capitant (2006), p. 126, referring to the Doing Business Report.

44 Gambaro (2011), pp. 49-69.

45 Davis, Kruse (2007), p. 1096: "One of the remarkable ironies of contemporary legal scholarship is that some of the most ambitious and influential research on the relationship between law, on the one hand, and economic outcomes, on the other, is being produced outside the legal academy".

46 For example, the cultural model underlying the Doing Business is that of the new institutional economics, which, starting from the work of Nobel laureate Douglas North, analyses the role of institutions on economic development. A prominent group of scholars working at the Universities of Chicago and Harvard (the so-called LLVS: La Porta, Lopez-de-Silanes, Schleifer, Vishny) considers that there is a direct causal link between legal reform and economic development: Djankov, Glaeser, La Porta, Lopez-de-Silanes, Shleifer (2003), p. 595. This stance has been widely criticized by other scholars, challenging the existence of a causal link (which should rather be considered a correlation), and emphasizing the relevance of other fac-

defined and applied in this kind of analysis calls into question the fundamental epistemological and methodological basis of law, forcing it to review and update them, taking up the challenge of the relationship between law and the other sciences, particularly social sciences, but also statistics and informatics. In order to do that, one needs to answer questions such as: Is it possible to develop legal analysis, particularly comparative ones, using quantitative data and methods? If yes, what are the limits, and which methodologies should be employed? Taking this challenge seriously could help law, particularly comparative law, to critically review its taxonomies, methods and aims (such as the role of functionalism, the categories of legal families and the working of legal transplants) in light of the fundamental changes that over time have substantially changed the framework of this discipline, both in theoretical and practical terms[47].

The cultural matrix in which indicators and rankings have been developed and applied relates to the modern irresistible lure of quantitative analysis, "the magic of numbers"[48]: "Quantification is seductive. It offers concrete, numerical information that allows for easy comparison and ranking (…) It organizes and simplifies knowledge, facilitating decision making in the absence of more detailed, contextual information (…) Numbers convey an aura of objective truth and scientific authority despite the extensive interpretative work that goes into their construction."[49] These twofold characteristics explain the success of quantification, particularly at times, as today, when objectivity and "hard" scientific characters are highly valued.

Quantification requires universal categories that apply across a variety of different situations and phenomena, allowing them to be bundled together, in this way providing simple and accessible knowledge of complex social phenomena. These classifications must be mutually exclusive and encompassing, in order to allow the encodement of all data, thereby establishing boundaries. The

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tors (cultural, social, geographical, etc.); see for instance Berkowitz, Pistor, Richard (2003), 310-323; Siems (2007), p. 52. The new comparative economics is at the basis also of the theory of "legal origins", according to which the efficiency of legal rules depends on the kind of system that generated them, either common law or civil law. According to the analysis, common law systems invariable display more efficient legal solutions: La Porta, Lopez-de-Silanes, Shleifer (2008), p. 285. Both lines of research point to the possibility (and desirability) of a general model applicable in all contexts the (in)famous "one size fits all". This has aroused a number of strong critical reactions, in particular by France, considered as the paradigmatic civil law system: in 2007, the *Fondation pour le droit continental* was established, with the aim to foster knowledge and use of the French/civil law model; unfortunately, the same apologetic and tautological kinds of arguments are used here. See Association Henry Capitant (2006). See Antoniolli (2012), pp. 467-478.

47 See *American Journal of Comparative Law*, Symposium on Legal Origins, 2009, 57, particularly the contributions by R. Michaels, V. Grosswald Curran, J. Reitz.

48 See Antoniolli (2017), pp. 37-50. For a broad analysis of the modern impact of quantification in science and public life, see Porter (1995).

49 Engle Merry (2016), p. 1, who defines quantification as "the use of numbers to describe social phenomena in countable and commensurable terms".

building of these universal categories is a most sensitive and relevant element of the process of quantification: classifying social phenomena into neat categories implies important choices on how to define taxonomies, and consequently what to leave out. This is not a neutral selection, since it implies taking out many relevant contextual aspects, and forces simplification over complexity, and homogeneity over variety. While this can be a useful and necessary operation, one should never forget that it requires choices, selection and interpretation, which are value-ridden activities. The aura of objectivity and simplicity is constructed, not intrinsic. Also, the fact that these universal categories are sufficiently general to be applicable to different contexts makes it possible to commensurate and compare, i.e., to create equivalence across different units by finding common elements, ruling out differences among situations that can be very different[50].

In evaluating the role of measurement in law, a fundamental issue to be discussed is the possibility to use quantitative concept in law, particularly comparative law. In a series of seminal works[51], Antonio Gambaro has applied to this field the classical classification of concepts into classificatory, comparative and quantitative[52]. He notes the irresistible appeal of quantitative data, due to the fact that they are more specific than qualitative data, and they are not prone to idiosyncratic evaluations. Yet, without a comparative context, quantitative data often lack a meaningful content: the datum that Mount Everest is 8.848 m high is far less meaningful than the comparison that Mount Everest is 8.848 m, while Mount Kilimanjaro is 5.895 m high, i.e., the first is higher than the latter. So, what is really important is the synergy between quantitative and comparative data[53], and in fact this is exactly what the most popular indicators do, offering rankings based on quantitative measurements (whether the measurement is accurate and meaningful is a different matter)[54].

50 For a very thoughtful analysis of commensuration, see Espeland, Stevens (1998), according to whom "commensuration is no mere technical process but a fundamental feature of social life. (…) It is symbolic, inherently interpretative, deeply political, and too important to be left implicit" (p. 315).

51 Gambaro (2011), pp. 49-69; A. Gambaro, Misurare il diritto, Annuario di diritto comparato e di studi legislativi, 2012, p. 17-47; A. Gambaro, Misurare il diritto – Misurare il diritto – Parte seconda, in L. Antoniolli, G. Benacchio, R. Toniatti (eds), Le nuove frontiere della comparazione – Atti del primo congresso nazionale SIRD, Trento, 2012.

52 Hempel (1967).

53 See Gambaro (2012(b)), p. 3: "qualunque funzione dei dati quantitativi non è dissociabile dalla dimensione comparative, perché senza il contesto comparativo i dati quantitativi riferiti a qualunque aspetto della realtà sociale, ma finalizzati ad agevolare scelte di tipo giuridico, perdono significato".

54 This truth is told in the streetlight story, where a drunkard, questioned by a policeman staring at him and asking about what is he looking for on all fours in the night, replies that he is looking for his housekeys; at the following question on whether he is sure that he has lost his keys in that spot, he candidly replies that no, he has lost them somewhere else, but in that spot under the streetlight there is much more light. Transposed in our context, this means that quantitative analysis may convey a much "brighter" picture of the data, but if the data do not cover all relevant elements of the phenomenon under analysis, they may be

Nevertheless, the synergy between quantification and comparative law is problematic: applying quantitative methodologies in the field of comparative law implies a fundamental challenge to existing concepts and methods: comparative law traditionally applies structural models[55], which analyze the connections among the elements of a system (legal formants), both hidden (cryptotypes) and explicit, focusing on the law in action. This kind of analysis does not lend itself to quantitative measurement, although it is capable of providing an exhaustive and reliable description of a system. Focusing only on measurable elements is a fundamental choice, and one that comes at a price. As a famous saying usually credited to Albert Einstein states, "Not everything that counts can be counted, and not everything that can be counted counts".

Moreover, there is a fundamental problem that concerns law, not only comparative law: as we have seen before, quantitative analysis requires data to be ascribed to predefined classes, which imply a system of classification that is defined a priori in a coherent and rigid way: each datum must correspond to one and only one class. If a class is not clearly defined, it becomes impossible to unilaterally define a correspondence of all elements, and this will lead to unreliable results[56]. This method has never been applied in law, and for good reasons: law has always developed and applied concepts and categories of a flexible nature, which allow the classification of facts and data, but at the same time can be adapted to changing social phenomena. As a consequence, the choice between quantitative analysis and traditional legal analysis poses a dilemma: in order to perform a sound quantitative analysis, categories must be rigid and absolutely precise; at the same time, rigid classifications invariably lead to leaving out elements which are relevant for a comprehensive and fine-tuned analysis of complex social phenomena[57].

less useful than a "shadier" analysis. It does not rule out the possibility of quantitative analysis, but requires awareness about the possibilities and limits of different methods of analysis. A related problem is that of the availability of comprehensive and reliable data, which is crucial for all kinds of empirical analysis. Missing, incomplete or heterogeneous data, as well as unsuitable statistical processing techniques may invalidate the results of the analysis. The gathering, selection and classification of data is an expensive and time-consuming activity; therefore, it can be considered as a public good, whose production requires public intervention and control. See Ulen (2012), p. 49 ss.

55 Gambaro, Sacco (2018); Sacco, Rossi (2015). For a thoughtful analysis of the methods applied in comparative law (and a plea for methodological pluralism), see Resta (2017).

56 The paradigmatic example of the transforming power of classification and taxonomies is Linnaeus' binomial nomenclature, a classification system that is at the basis of modern systems of classification of organisms: Linneaus (2003).

57 The conflicting nature of legal methods and quantifying methods is emphasized also by Espeland, Vannebo (2007), p. 39.

Behind this methodological choice lurks a much more fundamental question about the kind of knowledge that any science aims to produce[58]. Some sciences focus on specific, individual phenomena, aiming at analysis that are as accurate and detailed as possible. The other pole to these "individualizing" sciences are "generalizing" sciences, whose main aim is to produce general knowledge and models that apply to a variety of phenomena[59]. This distinction is often ascribed respectively to humanities and natural sciences, but this is a simplistic and not fully accurate classification; social sciences are scattered all along this spectrum, with innumerable variations over time: while economics has from the very beginning made a clear choice for generalizing models and quantitative analysis, other disciplines, such as sociology and political science, have swung between generalizing and individualizing models, and between quantitative and qualitative methodologies. Others, among which law, anthropology and history, have predominantly (although not exclusively) focused on individualizing models and qualitative methods[60]. From a theoretical point of view, finding a working balance and trade-off between quantitative and qualitative analysis in the production of knowledge is a crucial epistemological problem of all social sciences.

This fundamental epistemological element is reflected in the methodologies that are applied by sciences. In a seminal essay of the 1940s on the role of social sciences, Karl Polanyi emphasized that while all sciences have a fundamental element in common, i.e., the human interest to know man's surrounding environment, they irreversibly diverge in the methods they use to investigate reality[61], and this feature implies that they cannot be aggregated into a unity. Therefore, aims, scope and methods of sciences are issues that cannot be severed, being inextricably intertwined.

The choice of methods, quantitative or qualitative (or a mix thereof), therefore depends on the fundamental aims of each science[62]: if the core aim is the

58 See Latour (1987).

59 Ginzburg (2000), 158-209. The Galilean model is at the core of this kind of science, based on measurement and replicability of phenomena.

60 Nevertheless, it is possible to conceive law as a science that works on general models that are applicable across time and space, similarly to what has been done in other social sciences. This is for example the choice underlying the studies on legal transplants based on the so-called "one size fits all" model: once a well-working model (concerning rules, institutions, or both) is defined, it is claimed that it is possible to apply it in different contexts, and this should lead to similar results. For the first path-breaking work on legal transplants, see Watson (1974).

61 Polanyi (2013), pp. 147-157, according to whom "Il metodo è la chiave per comprendere ciò che la scienza può fare e non può fare (…). E' il metodo che differenzia ciò che viene selezionato come tema proprio di una scienza e ciò che viene eliminato da essa, in quanto oggetto 'non scientifico'" (p. 148).

62 Quantitative analysis of social phenomena can work *ex post*, in order to evaluate existing situations, or be structured to work *ex ante*, in order to generate decisional models. Moreover, any analysis may be purely descriptive, or instead it may be normative, aiming at modifying the phenomenon it portrays. While these kinds of analysis are clearly different at the theoretical level, in practice they are often blurred and mixed.

analysis and classification of the specific features of an individual phenomenon, the accuracy of the description is much more important than the ability to generate general models and predictions. If, on the contrary, the fundamental aim of a science is to establish a framework of features generating models that apply to categories of phenomena, able to apply to situations across space and time (and also to generate a falsifiable forecast), then the gathering of fine-grained details is a hindrance, rather than an asset. In the case of law, the choice that has traditionally been made for an individualizing epistemology is first and foremost axiological, and only as a consequence methodological: Western law has historically been considered a discipline concerned with the rules and institutions of specific societies, rather than with universal general models (although of course similarities and recurrent patterns have been detected and classified). Yet law and all individualistic sciences face a dilemma: their epistemological status is considered weak, but is able to reach accurate and relevant results; turning to generalizing (and also quantitative) analyses would strengthen their scientific standing, making them more rigorous, but could produce analyses that are less significant. Finding a suitable balance between detail and generalization is crucial[63], and goes at the root of a science's premises, scope and aims.

Finally, another element of crucial importance is that law, and social sciences in general, faces a fundamental problem that is not of immediate concern for natural sciences, namely the issue of the prescriptive dimension of the analysis. In all social sciences knowledge cannot be separated from their aims, which are in turn related to the underlying values shaping human conduct (among which also scientific research)[64]. This issue has nothing to do with the accuracy or precision of methodologies, but rather with the fundamental features of social sciences themselves: in order to be objective, i.e., scientific, social sciences should expunge values, which are intrinsically subjective; yet, if they do, they lose their very *raison d'être*, because the aims of knowledge of social sciences is exactly related to the kind of societies that we live in (or would want to live in)[65]. Consequently, scientific analysis in social sciences cannot be severed from

Yet, it is important to keep these distinct, since they have different premises and different implications: descriptive, predictive or prescriptive analysis are very different exercises.

63 Ginzburg describes this dilemma with an oxymoron, "flexible rigour" (p. 192). This feature is typical of mute forms of knowledge, characterized by uniqueness of data: see Sacco (1995), pp. 455-467; Sacco (2015).

64 Values are of course relevant also for natural sciences, but only when scientific discoveries have to be transposed in a specific course of action; they do not define the research questions and the way in which these are addressed.

65 Polanyi (2013), p. 157: "L'uso delle scienze sociali non è un problema tecnico della scienza. E' il problema di attribuire alla società umana un significato, che permetta di preservare la sovranità dell'uomo sugli strumenti della vita, ivi inclusa la scienza".

axiological considerations: values are part of the analysis; if they are removed, the analysis is simply maimed. This dilemma between objectivity and subjectivity cannot be overcome, but should be openly acknowledged as an unavoidable element of social sciences: rather than removing values, scientists should be candid about how they define and apply values in their analyses, making them open to scrutiny and criticism. Normativity is an unavoidable element, whether this is disclosed or undisclosed.

This issue is relevant to the problem that we are investigating here. Forms of governance that are based on measurement, such as indicators, produce both a knowledge effect, i.e., a specific kind of information, and a governance effect, i.e., the possibility to use them for regulation, control and accountability. They are the product of a specific "indicator culture", i.e., "a set of techniques and practices applied within specific situations (…), a set of cultural practices, techniques, and assumptions about knowledge production embedded in particular institutional and bureaucratic settings"[66]. This kind of culture emphasizes the value of numerical data as a superior form of knowledge, one that not only provides more significant information, because it allows measurement and comparison, but which is also objective and neutral. The relationship and possible clash between quantification as a neutral exercise and the role of values in social sciences analysis is a fundamental element, one that is increasingly important in today's world.

5. The pitfall and failure of comprehensive harmonization of European private law

In the previous parts of this work we have analysed both the context and the drivers of the explosion of indicators and other forms of governance through measurement, and their link to the process of globalization and the development of transnational law. We have then analysed some of the crucial implications of this phenomenon for law, both in its theoretical and practical dimension. In the last part of this work, we will try to apply this framework of analysis to the European Union context. We will first analyse the development and failure of some major efforts for comprehensive harmonization of private law at the EU level. Finally, in the last paragraph we will focus on the new developments in the area of EU private regulatory law, and try to carve out some relevant elements for a research agenda in relation to the use of quantification instruments[67].

66 Engle Merry (2016), p. 9.

67 For a general view of European private law, see Bussani, Werro (2009); Brownsword, Niglia, Micklitz, *et al.* (2011); Schulze, Schulte-Nölke (2011); Twigg-Flesner (2010).

The European integration process is a particularly relevant example of transnational law[68], and is consequently a good testing ground of the impact and transformative role of quantification and measurement. Its focus was from the start on economic integration, revolving around the core of the common/internal market based on the four fundamental freedoms, which in the mind of the founding fathers should in the long run lead to political integration, through a spill-over mechanism[69]. Due to this fundamental choice, the EU economic constitution has always been heavily oriented towards market values, and while it is certainly true that, over time, social concerns have increasingly made their way into the constitutional fabric of the EU legal system, the predominance of market values seems to be part of the DNA of the EU, with a strong emphasis on functionalism[70].

EU law has been originally influenced by a traditional vision of the economic constitution in which the role of the State was meant to guarantee a level playing field for market forces and the individual freedom of private actors, which implied that private and public/constitutional law were to be strictly separated, and private law (with its central pillars, private autonomy and freedom of contract) had to be shielded from political influence[71]. While at the national level this was gradually eroded in the 20th century, it had lasting consequences in EU law, strengthening the technocratic features of law-making in the crucial area of the internal market, isolating it to a large extent from open public "constitutional" debate, confining what does not fit into this picture in isolated specialized fields.

This narrow European focus on the internal market as the fundamental building-block of the European economic constitution is not in line with national private law, which in the member States is fundamentally linked with its social, cultural and economic identity. As a consequence, the different conceptions that social justice embodied in national legal systems cannot be merged into the embryonic and partial notion of justice related to the internal market that is developing within

68 For a comprehensive discussion of the meaning of private law, privatization and globalization both in a historical and comparative dimension, see Michaels, Jansen (2006), p. 873, according to whom it is "clear that private law requires rethinking, especially with regard to its connection to the state". See also Joerges (2005); Jansen, Michaels (2008); Caruso (2006) 1.

69 The so-called "Europe des petits pas". In the words of Schumann, one of the fathers of the European Community, "Europe will not be made all at once, or according to a single plan. It will be built through concrete achievements which first create a de facto solidarity. (…) The pooling [of coal and steel production] should immediately provide for the setting up of common foundations for economic development as a first step in the federation of Europe": Schuman declaration, 9 May 1950 (http://europa.eu/about-eu/basic-information/symbols/europe-day/schuman-declaration/index_en.htm).

70 See Study Group on Social Justice in European Private Law (2004) 653; Poiares Maduro (1998); Poiares Maduro (1999).

71 This is the model of German ordo-liberalism. See Boehm (1989).

the EU[72]. Here, as in other areas, the EU works as a multi-level system, where the European level should complement but not pre-empt the national ones[73] (as the motto "united in diversity" symbolizes).

The uneasy relationship between European and national private law is epitomized in the thorny question of the legal competences of the EU, an apparently technical issue which hides crucial political stakes. In fact, while the apparently unavoidable link between EU private law and the internal market has been very often criticized as being too one-sided[74], it has very strong structural policy reasons, because the internal market remains the most solid basis for comprehensive legal harmonization in the area of private law[75].

As long as EU legal interventions are limited to rules related to specific areas of private law, this tension is felt to a limited extent, since the general legal framework is still provided by national laws. Yet, since the 1980s, in the wake of the Single European Act and its renewed emphasis on the central role of the internal market programme, the process of Europeanisation has increasingly affected private law and expanded significantly in the subsequent decades, raising a comprehensive discussion on the aims, scope and content of European private law[76].

The high point of this process was the debate on the need and feasibility of a European civil code, an idea developed by the EU institutions in a rather opaque and non-linear way since the late 1980s and 1990s[77]. After the first political

72 For a comprehensive analysis of the characteristics of the different social justice conceptions in European private law, see Micklitz (2011); Wilhelmsson (2004) 712; Nogler, Reifner (2014).

73 See, e.g., Joerges (2007), 311-327.

74 Niglia, (2006) 401, who criticizes the focus on formal rules and systematisation, and the lack of analysis of the relevance of the context and the actors involved. See also Niglia (2013).

75 The EU institutions consider that the right legal basis for private law harmonization is art. 114 TFEU, i.e., the internal market, on the basis of the standard argument that harmonization of private law in the EU is linked to the need to overcome the obstacles to the working of the internal market. This raises several problems: first of all, reference to the internal market as a legal basis requires proof of the existence of obstacles that are actual and not merely potential (as the Court of Justice has forcefully stated), but this is problematic for an intervention which covers such a broad area as private law. Some claim that the right legal basis should be article 352 TFEU, which grants the EU the power to regulate areas where there is no specific competence, if this is required in order to attain a EU objective. Yet, the issue of the relationship between EU and national private law (and whether EU law should or not pre-empt national law) requires an open discussion of the aim of harmonization. According to many economic and legal scholars, it is impossible to calculate with reasonable accuracy the costs of harmonizing or unifying private law in comparison to the costs of legal diversity, because of the complexity of the calculus, and also because, in fact, uniformity of law does not necessarily lead to legal certainty. Smits (2011), p. 153 *et seq*.; Smits (2005).

76 An aspect that is increasingly debated is the link between the proposed private law instruments and fundamental rights, an issue which has an important constitutional dimension. See Brueggemeir, Colombi Ciacchi, Comandè (2010); Kosta (2010) 409 ff.

77 Collins (2004), p. 649, criticizes the opaqueness of the Commission position (e.g., in using the term "non-sector-specific measures" when "in truth, once stripped of its distracting multiple hyphenation, is code for nothing less than a European Code" (p. 649). While favouring the adoption of a European Civil Code, he

statements by the European Parliament, the task was taken up by the Commission, which at the beginning of the 2000s entrusted a large network of scholars with the task of drafting a Draft Common Frame of Reference (DCFR), out of which a political Common Frame of Reference (CFR) should be then adopted[78]. The DCFR, published in 2009, was a code-like instrument containing 'best solutions' (i.e., common rules), as well as coherent core definitions of legal concepts and terminology, which covered most of private patrimonial law[79]. It met with strong opposition from several member States, stakeholders and lawyers, and was finally dropped. The EU consequently scaled down its ambition, and in 2011 the Commission proposed a Common European Sales Law, CESL[80], which had a similarly negative fate. Finally, at the end of 2014, the Commission decided to move back to the traditional model of piecemeal intervention on specific aspects of contract law related to the Digital Single Market[81]. Ten years after, it seems that the whole process is back to the start.

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considers that "a European civil code will represent a statement of the political values that will govern the basic principles of social justice in the market economy. Such a statement of the ideals of a social market economy requires both democratic endorsement and regulatory legitimacy. The institutions of the European Union (…) are not designed, and were not intended to be competent, to engage in the construction of such a political settlement" (p. 650). Rather than being unbalanced, the European economic constitution is incomplete, and this implies a risk of "a structural tilt towards an insufficiently regulated order": Collins (2009), p. 82. See also Hesselink (2006); Caruso (2004) 751.

78 The focus of the Commission was on general contract law, considered as the core of private law related to the internal market. On the contrary, both the EP Resolutions and the DCFR had a broader scope, referring to the whole of private patrimonial law. This frequent swing between contract law and private law is a sign of the tension concerning the optimal scope of harmonization at the EU level.

79 Study Group on a European Civil Code, Research Group on the Existing EC Private Law (2009); http://ec.europa.eu/justice/policies/civil/docs/dcfr_outline_edition_en.pdf. A preliminary version was published in 2007. For an analysis of the general impact of the DCFR, see Micklitz, Cafaggi (2010). For a critical assessment, see Zimmermann, Jansen (2010) 98; Antoniolli, Fiorentini, (2011); Antoniolli, Fiorentini, Gordley (2010) 343. There has been an important discussion about what kind of fundamental principles are embodied in the DCFR: only in the final version a list of principles was added, a long and fuzzy list, without any critera for solving possible conflicts among different principles. See Fauvarque-Cosson, Mazeaud (2008). For a critical evaluation, see Hesselink (2011), p. 59.

80 Commission proposal of October 2011 for a Regulation on a Common European Sales law, COM(2011)635 final (11/10/2011). For a general analysis of the proposal, see R. Schulze (2012). The CESL would have introduced in the national contract laws of the member States a second voluntary (opt-in) regime for transborder sales and related services in both business-to-consumer (B2C) contracts and business-to-business (B2B) contracts. The proposal was a clear retrenchment from the previous plan to harmonize private law, or at least general contract law, of the DCFR. See Antoniolli (2015), p. 205.

81 After having decided to withdraw the CESL proposal in December 2014, the Commission focused on e-commerce contracts in the Digital Single Market, significantly downgrading its harmonization plans. In 2015, it presented two proposals of Directives covering e-contracts, respectively digital sales contracts and contracts for the supply of digital content: Proposal for a Directive on certain aspects concerning contracts for the online and other distance sales of goods, COM (2015) 635 final, December 9th, 2015, modified in October 2017, COM(2017) 637 final, October 31st, 2017; Proposal for a Directive on certain aspects concerning contracts for the supply of digital content, COM (2015) 634 final, December 9th, 2015.

Why did this happen? All in all, it comes as no surprise that the great expectations placed in the drafting of a Common Frame of Reference as a milestone towards a European civil code have led to utterly disappointing results in terms of legislative achievements, because the tension between European private law and national private laws cannot be solved by proposing a brand-new, comprehensive European Civil Code modelled on the national ones[82].

The events in the last decades have proved that the idea of building a unitary European identity through highly symbolic and comprehensive instruments is unsuited to the pluralist and multi-level structure of the EU. This is plastically evidenced by the similar unfortunate fate of the two "grand projects" of the 21st century[83], the European Constitution of 2004 (which was meant to mark a brand new phase in the European integration process, openly merging political and economic integration[84], and failed to be ratified due to the negative results of the referenda held in France and The Netherlands) and the European Civil code, the twin to a constitution in the sphere of private law, defining the fundamental legal values and principles for horizontal relations in a society[85].

6. Law and measurement in European private regulatory law – Sketches for a research agenda

While comprehensive models of harmonization of private law in Europe are in crisis, another form of European private law is developing in different quarters,

82 While a codification process necessarily requires the work of a solid legal doctrine in order to define common concepts, categories and rules, the premises of a codification process pertain to the political realm. The failed saga of the European Civil code has weakened simultaneously the political legitimacy of the EU institutions and the technical legitimacy of legal doctrine, because no one was doing what it was pretending to do, and no one was doing the job they should have been doing. As Hesselink writes, "After decades of 'permissive consensus' vis-à-vis the technocratic construction of a European Community by an élite, the identity of Europe has finally become a highly political subject": Hesselink (2004) 675. See also Kennedy (2001) 7. In spite of this, the impressive comparative work involved in the drafting of the DCFR has two lasting effects: the establishment of a large network of scholars that share methods and views, and its future impact on legal education.

83 See Micklitz (2010), pp. 109-142; Antoniolli (2014), p. 75.

84 In fact, the content of the Treaty was not completely in line with the highly symbolic move towards a "Constitution", a term which clearly refers to the notion of a state. This is clear when comparing the rules contained in the Constitution and the Lisbon Treaty, which entered into force in 2009: in spite of the completely different form, the content is virtually the same. See Ziller (2007).

85 Although the failure of the European Constitution was hardly perceived as a relevant event as far as private law harmonization was concerned, on the contrary it deeply affected the whole European integration process, marking an entrenchment of member States, and growing skepticism against further expansion of EU competences and powers, which deeply affected the debate about the necessity and viability of a Civil code.

a new embryonic system defined by Micklitz as "regulatory private law"[86]. It has a mixed character between private autonomy and public regulatory intervention, and covers important areas such as consumer law, discrimination law, regulated services (financial and insurance services, services related to networks, etc.), unfair commercial practices, public procurement, competition, State aid, standardisation[87]. This body of rules has a vertical and horizontal component: vertically, it consists of a series of specific bodies of sectoral rules (e.g., energy law, financial services, etc.) that are considered as generally self-sufficient, both from the point of view of law-making and law enforcement[88], and tends to displace national regimes. Horizontally, it fosters harmonization of national rules through mechanisms such as mutual recognition, country of origin principle and maximum harmonization of selected aspects of general private law, which have to be fitted into national systems of private law, often generating frictions and inconsistencies[89].

European private regulatory law transforms the traditional autonomy of private law, re-orienting it towards a functional relation to the market, based on a self-sufficient body of rules isolated from national private laws and centred on the fundamental tenets of market freedoms and competition[90]. In this setting, private autonomy is heavily regulated, in order to dismantle barriers impeding access to the market. Protective mechanisms for weaker parties (right to information, duty of transparency), coupled with specific remedies (such as right of withdrawal, collective redress mechanisms and ADR[91]) are also instrumental to guaranteeing the working of internal market.

This body of laws is underpinned by a peculiar notion of justice, defined by Micklitz as "access justice"[92], that does not aim at social protection through

86 See Micklitz (2009) 3. See also Purhagen, Rott (2014).

87 Micklitz, Svetiev, Comparato (2014), p. 81: "the piecemeal and fragmentary intervention of EU law in the domain of private law has had 'unforeseen and unforeseeable ripple effects, producing various experiments of a hybrid nature in both dispute resolution mechanisms and procedures and in the embedding of private regime rule-making into alternative (in the sense of non-legislative) but still publicly-minded structures or processes. (…). Codification efforts may only further obscure this profound diversity and on-going experimentation. It seems that there is little need for *ex ante* coherence in the form of further codifications and a burning need for *ex post* coherence by way of monitoring.'"

88 Co-regulation and self-regulation are forms in which not only public, but also private entities can establish rules. Similarly, regulatory agencies and self-regulatory bodies also involve both public and private actors.

89 This is the case for consumer law, unfair commercial practices, anti-discrimination law.

90 See Micklitz (2014), pp. 251-274. According to Micklitz, the interaction of ERPL and national law can have four different forms: intrusion and substitution, conflict and resistance, hybridization, convergence (pp. 272-274).

91 Both collective redress and ADR tend to move away from traditional judicial enforcement, towards administrative and private enforcement.

92 Micklitz (2011(a)); *Id.*, (2011(b)).

redistributive mechanisms, as the traditional notions of distributive justice of national legal systems, but rather guarantees the right to access goods and services, and the right to protection against discrimination, a hybrid combination between distributive justice and libertarian allocative justice.

European private regulatory law often employs new modes of governance[93], a development that is linked to several factors, such as: the need to regulate complex problems under conditions of uncertainty; the need to adjust irreducible diversity among national systems; the will of the EU to take action in areas where it has limited or non-existing competence (also in relation to the subsidiarity requirement); the desire to increase legitimacy of EU action through social dialogue. It applies a variety of instruments (like co-regulation, standard setting, etc.), related to the specific features of the sectors involved[94], that move along a continuum between uniformity and flexibility, allowing variable degrees of deviation in the national systems. Their features and effects have to be assessed against the benchmark of the Community method, which defines the traditional law-making procedure, balancing the role of the EU institutions and the member States. In fact, the interaction of the Community method and these new forms of governance – and their differences in rule-making, rule implementation, control, and the different actors and procedures involved – often causes friction[95].

These new models of EU governance are linked to the internal market and its economization drive[96]; they set new methods of control and validity, and imply an important political shift in the production and implementation of rules[97]. This is particularly clear in those areas related to economic and social integration where the competences of the EU do not allow for harmonization, or limit its scope. In these areas a variety of soft law instruments has been developed to foster convergence, based on knowledge-sharing, mutual learning, and exchange of

93 Commission, European Governance: A White Paper, 25th July 2001, COM (2001) 428 fin.: "The Union must renew the Community method by following a less top-down approach and complementing the EU's policy tools more effectively with non-legislative instruments" (p. 4). Nevertheless, the Commission points out that these instruments "must not dilute the achievement of common objectives or the political responsibility of the Institutions", and "should not be used when legislative action under the Community method is possible" (p. 22). See Scharpf (2001).

94 See Scott, Trubek, (2002), pp. 1-18, who list several of them: participation and power-sharing; multi-level integration (which requires dialogue and coordination of public and private actors); diversity and decentralisation; extended deliberation among stakeholders; flexibility and revisability through soft law instruments; experimentation and knowledge creation, often combined with multilateral surveillance.

95 This friction can be expressed in binary terms: hierarchy v. network, hard law v. soft law, public institutions v. private actors, judicial review v. accountability, rules v. standards.

96 The link between economic integration and commensuration is emphasized also by Espeland, Stevens (1998), p. 325: "Commensuration makes possible precise comparisons across vast cultural and geographical distances that allow transactions fundamental to global markets".

97 New forms of governance are essentially related to procedural controls, such as transparency, participation and accountability. See Cafaggi, Muir-Watt (2009); Cafaggi (2006).

good practices. Behind the rhetoric of neutrality, these mechanisms of cognitive convergence through knowledge production and diffusion have important political implications[98]. For example, benchmarking is increasingly used in the EU as a method for comparing, assessing and influencing specific sectors[99], and essentially allows to force convergence even in situations where member States retain competence, by setting common targets and providing evaluation tools. Moreover, quantification of political objectives and translation of statistical data into action-oriented indicators, which is characteristic of these forms of soft governance, change the forms of accountability and control, moving it away from the traditional political arena[100] and deepening the technocratic features of the European Union.

The paradigmatic changes that we have shortly described are not only gradually changing some fundamental features of European private law, but of the very role of law in the European integration process. "Integration through law"[101], the hallmark of European integration for many decades, envisaged law as a powerful instrument to achieve harmonization, first of all economic harmonization. Political choices were lurking in the background, but were rarely fully spelled out. In some sense, law was pulling itself by its bootstraps. Yet, in the current epoch, marked by growing resistance towards further sweeping harmonization and a retrenchment towards State control, there is an urgent need to reinstate the missing link between law and political choices in the European Union. Law, using Polanyi's, terminology, must be re-embedded in the European social fabric[102], and should no longer be considered as merely a technocratic instrument of governance. Law embodies the fundamental set of values and principles that govern any society, and the lack of a vision and direction that characterizes the European

98 See Bruno, Jacquot, Mandin (2006) 519-536 (analysing the evolution of mechanisms of new governance in three fields, gender equality mainstreaming, open method of coordination (OMC) in pension reform, and benchmarking in the European research Area). See also Eberlein, Kerwer (2002).

99 Bruno, Jacquot, Mandin (2006) employ the term "co-opetition" in relation to benchmarking, referring to the fact that "benchmarking prescribes the necessity of competitiveness by embedding the managerial rationality into co-operation among member states" (p. 523). A particularly important example is the so-called Lisbon strategy, i.e., the programme of action related to the establishment of the EU as "the most competitive and dynamic knowledge-based economy in the world", a process which according to them has caused a "paroxysm of a 'government by numbers'" (p. 528). See European Council, Presidency Conclusions, Lisbon European Summit, 23-24th March 2000, no. 100/1/00.

100 See Bruno, Jacquot, Mandin (2006), p. 533: "Benchmarks are conceptual tools which shape the Europeanization process (…). Rather than acting by law and through coercive means, they operate on the basis of a management-by-objectives device (…). A process of Europeanization by figures seems to replace Community integration through law, which has until now implied that sovereign power should be assigned to supranational institutions" (p. 530). Therefore, they are a "comprehensive political technology".

101 See the groundbreaking work of the Integration through law project, developed at the European University Institute of Florence under the direction of Mauro Cappelletti. Cappelletti, Seccombe, Weiler (1986).

102 Polanyi (1944). See also Joerges, Falke (2011).

Union today cannot be solved by using the plethora of instruments of new governance as a shortcut: "EU law has emerged as instrumental to a degree that goes beyond the specific objectives pursued by particular norms. It has been instrumental in promoting the transformation of Europe from international, to supranational, or even constitutional, order. Thus, the premises underpinning EU law have a symbolic value, and their 'tainting' with the values of new governance might be seen to threaten not merely the integrity of 'law' as such, but the broader dynamics of integration"[103].

From the point of view of legal scholars working in the area of European private law, these developments open up an important and interesting field of research, one that has both high theoretical and practical relevance. From a practical point of view, the large body of rules that the EU is producing, also in relation to other transnational sources, needs to be studied in terms of its scope, aims and impact. From the theoretical point of view, there is an urgent need to develop research concerning the essential features of the new instruments of governance and their link with the private law of national legal systems. This implies the need to critically scrutinize existing legal concepts and categories, and develop a new analytical framework suited to this new context[104], which takes into consideration the actors involved, and the methods and procedures applied. Compared to other contexts, particularly at the international level, it can be claimed that the use of measurement in the area of private law in the European Union has been more limited. This may be due to several reasons: first of all, the EU has an institutional system that is very densely regulated, with a complex system of checks and balances among the institutions, and between the institutions and the member States, that gives rise to a quasi-national framework that is very different from traditional international settings. Moreover, European legal culture is still largely based on qualitative methods, and therefore less open to apply measurement on a large scale. Yet, as we have seen, measurement and new modes of governance are making important inroads into the EU system, in line with the global trend, and they are having important consequences in shaping the evolving features of the European integration process in general, and of European law in particular. The study of instruments of quantification, such as indicators, rankings and benchmarking, fits into this wider setting, and requires lawyers to develop the ability and skills needed to establish a dialogue with other social scientists, and a comprehensive critical scrutiny of their traditional methods, concepts and categories, as well as those employed in the new

103 Scott, Trubek (2002), p. 9.

104 Tuori (2014), p. 57 considers that "Probably 'transnational law', 'legal pluralism', 'interlegality', 'legal perspectivism' and, perhaps, 'legal hybrid' will belong to the lexis of the new legal Esperanto" (p. 55).

forms of governance[105]. This new stance is also bound to have important practical policy implications. While measurement can be a very helpful instrument for analysis and decision-making, it should not become a fetish[106]. Quantification is complementary, not alternative, to law, just as governance is not a substitute for government, i.e., for the establishment of rules that regulate a society, which is an intrinsically political process: "Quantification has a great deal to contribute to global knowledge and governance, but it is important to resist its seductive claim to truth and to recognize it as only one form of knowledge with its own distinctive limitations. (…) We rely on numbers alone at our peril"[107].

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105 "symptoms of cognitive dissonance show that there is an urgent need to understand how new governance works, what are the principles guiding their use, and if necessary revise categories and models so as to guarantee a 'more open and flexible architecture for democracy' within the European Union ": Scott, Trubek (2002), p. 18.

106 Espeland, Stevens (2007) call for an "ethics of numbers": "An ethics of quantification should investigate how the world is made by measures, but should strongly reject any conceit, scientific or otherwise, that measurement provides privileged or exclusive access to the real" (p. 432).

107 Engle-Merry (2016), p. 222. She considers that, "Given the power of quantitative knowledge, it is important to increase indicator literacy both to understand the strengths and limitations of quantitative knowledge and to compare and assess different indicators. (…) Understanding what numbers do and do not say and the politics underlying their creation challenges the seduction of quantification: the idea that numerical data offer a particularly reliable form of truth" (p. 26).

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