REGULATION IN THE AGE OF GLOBALIZATION:
The Diffusion of Regulatory Agencies across Europe and Latin America

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REGULATION IN THE AGE OF GLOBALIZATION:
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Abstract: One of the most notable characteristics of the change in governance of the past two decades has been the restructuring of the state, most notably the delegation of authority from politicians and ministries to technocrats and regulatory agencies. Our unique dataset on the extent of these reforms in seven sectors in 36 countries reveals the widespread diffusion of these reforms in recent decades. In 1986 there were only 23 agencies across these sectors and countries (less than one agency per country); by 2002 this number had increased more than seven-fold, to 169. On average these 36 countries each have more than four agencies in the seven sectors studied. Yet the widespread diffusion of these reforms is characterized by cross-regional and cross-sectoral variations. Our data reveal two major variations: first, reforms are more widespread in economic regulation that in social spheres; second, regulatory agencies in the social spheres are more widespread in Europe than in Latin America. Why these variations in the spread of the reforms? In this paper we present for the first time the regulatory gaps across regions and sectors and then move on to offer some explanations for these gaps in a way that sheds some light on the nature of these reforms and on their limits. Our explanatory framework combines diffusion and structural explanations and in doing so sheds new light on the global diffusion of public policy ideas.

Key words: Policy diffusion, regulatory agencies, regulatory competition, professional networks, regional integration

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The era of privatization is also the era of regulation. This seems paradoxical since privatization and the family of policies that were associated with it was supposed to lead to deregulation and the promotion of freer markets. Yet, with the advance of privatization, it became clear that freer markets often imply more rules, regulatory agencies and regulators (Vogel, 1996; Levi-Faur, Jordana and Gilardi, 2005). A quarter of century after the launch of the Thatcherite revolution, it is possible to conclude that the new economic order involves everything but deregulation. On the contrary, it may be better captured by the notion of 'regulatory capitalism'. The modern capitalist state, rather than hollowing out, is restructuring itself in a way that allows it to exert administrative controls over the economy. The major evidence of such a capacity is the mushrooming since the mid-1980s of new regulatory institutions worldwide. Surveying 36 countries in Europe and Latin America and 7 economic and social sectors, we were able to document the establishment of 174 agencies in the period up to 2002. Most of these agencies (107) were established in the 1990s. While specialized regulatory agencies were always important institutions in some sectors (largely finance) and countries (notably the United States), since the late 1980s they have become common across a broad range of sectors worldwide. Early work on regulatory capitalism concentrated either on broad changes that forced state structures to adapt (for example, Müller and Wright, 1994; Majone, 1997a) or on national and sectoral institutions and path dependencies that mediated reforms (for example, Eberlein, 1999). This chapter offers a new perspective by examining interdependencies in the diffusion of regulatory reforms among countries and sectors (for example, Levi-Faur, 2002; Jordana and Levi-Faur, 2005b; Gilardi, 2005a).

We have two aims. The first is to shed some light on the puzzle of a regulatory explosion amid privatization and other neoliberal reforms. The second is to examine three broad theories on the diffusion of regulatory agencies. In both cases we are taking the first steps in a discussion of these issues rather than providing conclusive answers. Instead of treating the process of the establishment of regulatory authorities across countries and sectors as an aggregation of discrete events, we examine the cases of the establishment of such authorities as interdependent events. We suggest that these regulatory reforms across countries and sectors are unlikely to be independent events. Thus, we aim to bridge the gap between 'structural' approaches to regulatory reforms and a diffusion perspective,[1] and to demonstrate that our perspective sheds some new light on the nature of the reforms and the meaning of the new order.

Our analysis draws on three broad theories. The first focuses on the dynamics of regulatory competition between countries and suggests that the major force behind the reforms is the state's dependency on capital and its consequent need to appease capital by committing itself to providing an attractive market environment and a stable regime for investment. The more privatized the economy is, the greater its dependency on private capital (Lindblom, 1977; Poulantzas, 1969) and consequently the greater is the need to create a stable institutional design that is technocratic rather than political in its orientation. By way of exploring these relations, we examine the process of regulatory reforms both in economic sectors that are most likely to reflect the dependency on capital and in social sectors that are most likely to reflect social demands. The second theory focuses on regional integration processes and suggests that regulatory agencies and regulations in general are part of a new political, social and economic order that is characterized by processes of integration. The extensive pro-

[1] On the distinction between structural and diffusion perspectives, see Elkins and Simmons (2005); Levi-Faur (2005).

cesses of regionalization in Europe make it an interesting case whereby to examine these theories, while the weaker case of regionalization in Latin America extends the variations in our cases and thus provides some inferential leverage. The third theory highlights the role of policy learning and 'knowledge' actors in the diffusion of policy reforms. It suggests that the major agents of reforms are professionals who both enjoy the authority of expertise and participate in transnational networks and communities. Variations in the diffusion of the reforms across these spheres and regions reflect less the effects of regulatory competition and regionalism than the gaps in the power of the professional groups that dominate these spheres. Strong professional groups, mainly economists, promote the creation of autonomous regulatory agencies as an institutional resource that consolidates their position in the policy process. In this process they consolidate the power of a new group of professionals, the regulocrats (Levi-Faur, Jordana and Gilardi, 2005).

Our discussion proceeds as follows. We start with the explanandum and present a comprehensive picture of the diffusion of the reforms, presenting some indications of the strong association between privatization and the emergence of regulatory agencies. Each of the following three sections examines the process of regulatory change in light of our broad theories about the driving forces of regulatory diffusion – regulatory competition, regional integration and knowledge actors. We conclude by assessing the explanatory power of the three approaches and we offer some suggestions as to direction of future research.

1. The Explanandum: Regions and Spheres of Regulation

The empirical basis for our observations is expressed in a database that includes information on the creation of regulatory institutions in 36 countries across seven economic and social sectors. The data cover four economic sectors (telecoms, electricity, competition and securities and exchange) and three social sectors[2] (food safety, pharmaceutical and environment). What we have identified, counted and classified are administrative agencies that have been separated from ministerial hierarchies. The agencies' degrees of separation vary widely across sectors and countries (Gilardi, 2002; 2005b), but their status as distinct entities and the central focus on regulation in their mission statement serve as criteria for inclusion in the database.[3] Looking at both social and economic sectors provides a more general view of the relations between regulation and privatization and allows us to test the three theories of regulatory diffusion across a broad set of sectors. For the same reason we also focus on Europe and Latin America, two large regions that were engaged during the 1990s in a frantic process of regulatory reform. We cover developments in 19 Latin American countries and 17 European countries (EU 15 before the latest enlargement plus Norway and Switzerland).

2 Conventionally, regulation is termed 'economic' when it deals with the price, entry, exit and service of an industry, and 'social' when it concerns non-economic issues such as public health or environmental protection (Meier, 1985: 3).
3 The date of establishment is the date of the creation of the agency, or of its reform in the event that autonomy was granted subsequently. Data on the establishment of agencies are taken from Jordana and Levi-Faur's database on regulatory agencies.

Figure 1.1. The diffusion of regulatory agencies in 36 countries and 7 sectors

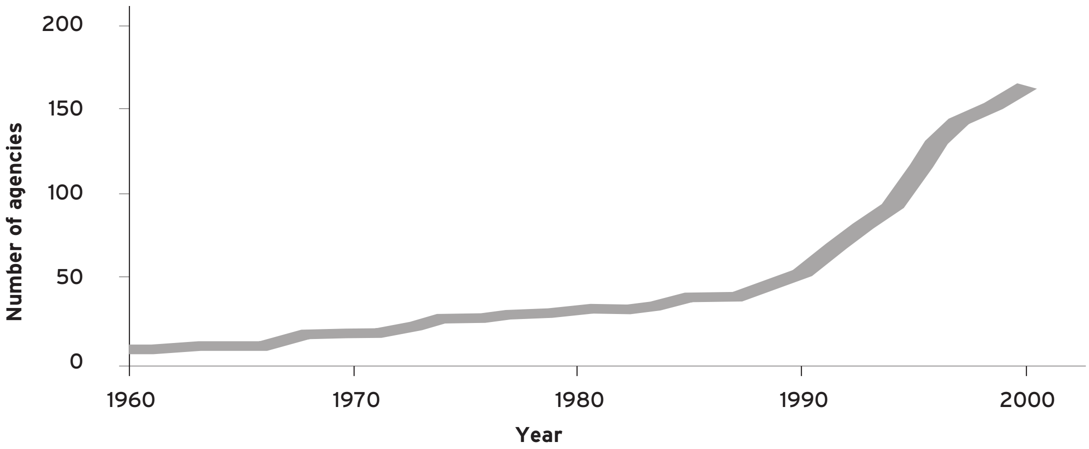

Figure 1.2. The diffusion of regulatory agencies: the general trend in Latin America and Europe

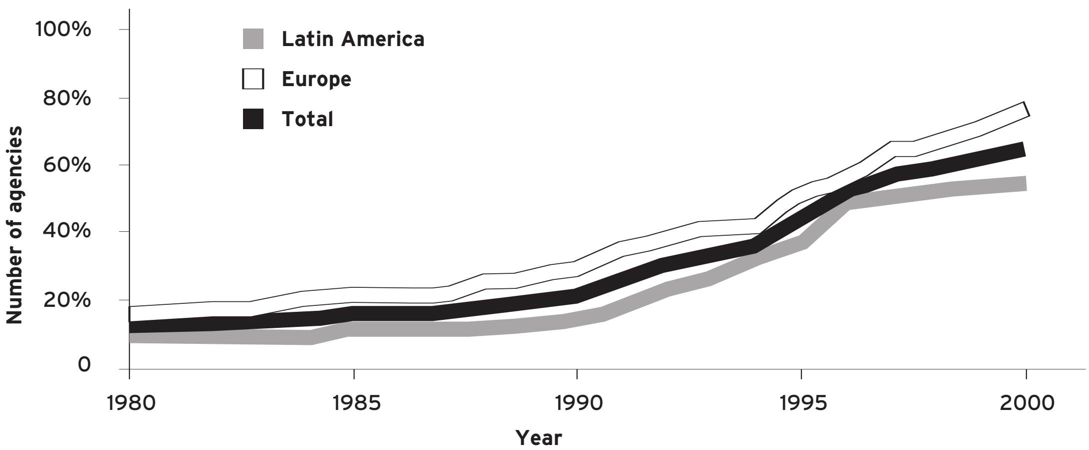

Figure 1.3. The diffusion of regulatory agencies: Latin America vs Europe, economic vs social regulation

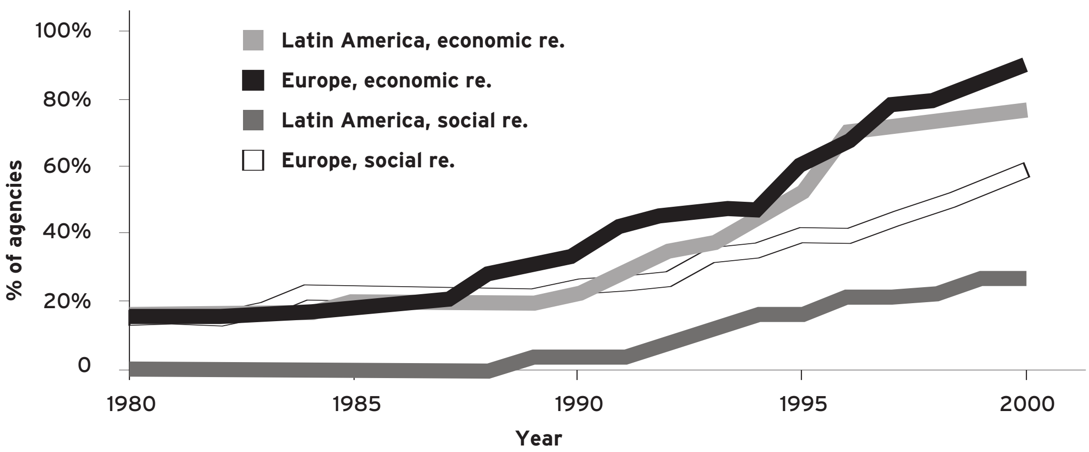

Figure 1.1 presents the growth of regulatory institutions across our data-set since the 1920. It suggests immediately that, while not new, the phenomenon of the 'agencification' of regulatory agencies is gaining momentum in the 1970s and is booming in the 1990s. Figure 1.2 presents the growth of regulatory agencies since 1980 in each of the two regions. As can be seen, most of the new agencies (98 in total) are found in Europe, where the penetration rate is 82% compared with 57% for Latin America and of 69% for the data-set as a whole. Patterns of growth are similar between the regions but Europe seems to move forward much faster. Figure 1.3 adds information as it presents the growth of regulatory agencies across Europe and Latin America in the social and economic areas. Two points should be noted. First, the tendency to establish regulatory agencies is stronger in economic sectors than in social sectors. The 174 agencies identified in 2002 include 35 in telecommunications, 34 in securities and exchange, 32 in electricity and 25 in competition. The rest, with a significantly lower penetration rate, are in social regulation, including 18 in pharmaceutical, 16 in environmental and 14 in food safety. Second, most of the variation between the rates of penetration of regulatory agencies in Europe and Latin America seems to be due to a significantly lower rate of penetration in the social sectors (26% for Latin America compared with 64% in Europe). While regulatory agencies are also more popular in Europe than in Latin America in the economic arenas (with a penetration rate of 98% in Europe compared with 80% in Latin America), the difference is much smaller and is mainly due to the weaker tendency to establish regulatory authorities in the area of competition in Latin America (there is almost parity in the two utilities sectors and finance).

Table 1.1:
The spread of regulatory agencies in Europe and Latin America:
variations and similarities across regions and spheres of regulation

	Similarities across social and economic regulation	Variations across social and economic regulation
Similarities across Europe and Latin America	**I Observation:** new regulatory agencies are established across both areas and across both regions (i.e., they spread in all cases).	**II Observation:** the spread of economic regulatory agencies is faster than that of social regulation.
Variations across Europe and Latin America	**III Observation:** The spread of both social and economic regulatory agencies is greater in Europe than in Latin America across all spheres of regulation (largely due to competition agencies).	**IV Observation:** While there are variations between the spread of economic regulation agencies and that of social agencies in both regions, the gaps are larger in Latin America.

In an effort to capture comprehensively the similarities and variations, Table 1.1 presents four different aspects of the process of change, comparing the growth of social and economic regulation in the two regions. First, our data unambiguously show a clear tendency to create more regulatory agencies across both regions and both spheres of regulation (cell I). Second, and at the same time, the diffusion of this institutional innovation is stronger in the field of economic regulation than social regulation (cell II). Most countries have established autonomous authorities in economic regulatory domains such as utilities, whereas autonomous regulators are less common in social regulatory domains such as food safety and pharmaceuticals. Third, the spread of regulatory agencies in Europe is greater than in Latin America (cell III). This is true for both economic and social regulations. As mentioned above, in economic regulation the variations are mainly due to the gap in the number of competition agencies, and the gap is narrower in economic than in social regulations. Finally, while there are variations between the spread of economic regulation agencies and that of social regulation agencies in both regions, the gaps are larger in Latin America (Cell IV). These variations in the spread of the regulatory agencies are useful sources of evidence about the factors that made these widespread changes possible (Levi-Faur, 2004).

2. Does Regulatory Competition Matter?

Can the theory of regulatory competition deal adequately with the patterns of variations and similarities that we found in the diffusion of regulatory agencies? The theory of regulatory competition suggests that the major force behind the reforms is the state's dependency on capital and its consequent need to appease capital through a commitment to an attractive market environment and a stable regime for investment (Tiebout, 1956; Geradin and McCahery, 2004; Radaelli, 2004). Good institutions are said to be causally linked to better economic performances (North, 1990; Williamson, 2000). In our context, institutions that reinforce delegation are expected to enhance the credibility of elected politicians and to improve the likelihood of private investment (Henisz, 2000; 2002; Carruth, Dickerson and Henley, 2000).

The establishment of autonomous regulatory authorities is interpreted as a signal to investors. This signal conveys the following message: we are serious about private investment and we assure you that we are committed to a stable institutional design that separates technocratic decision-making from political decision-making, and puts constraints on any reversal of policies. Delegating regulatory competencies to an agency that is independent from political pressure is a possible solution in that it is meant to enhance the credibility of commitment after market decisions were made (Spiller, 1993; Levy and Spiller, 1994; Majone, 1996, 1997b, 2001). The dynamics of institutional design in the context of regulatory competition is therefore a sequential game between investors and governments. Both sides are interested in investment at time t, but then, after more or less irreversible investment decisions have been taken, investors incur the risk that the government will renege on its commitment at time t +1. If investors anticipate this, they may decide not to invest, so as to avoid expropriation. This outcome is suboptimal for both governments and investors. Governments may thus try to make their regulatory commitments more credible, and one of the major instruments in this credibility game is the autonomous regulatory agency. Very important from a diffusion perspective is not only the game between government and investors but also the game between governments who compete for investment. As soon as a government gains credibility by adopting a certain institutional design, other governments might want to narrow the credibility gap by adopting the same institutional design. This does not imply that the institutional design itself is efficient or otherwise; it may or may not have significant regulatory effects.[4] All that matters is that other governments have adopted it and that it has come to be perceived as a mechanism to enhance credibility. Thus, to explain the rapid diffusion of the institution itself we need to consider only the signal that it conveys to potential investors.

The theory of regulatory competition makes a lot of sense when examined against some of our observations. First, the theory expects a strong correlation in certain sectors between privatization and the likelihood of the establishment of regulatory authorities. This expectation is clearly documented in a study of the diffusion of privatization and regulatory agencies in telecoms and electricity worldwide (Levi-Faur, 2005) as well as on the diffusion of regulatory institutions in Europe (Gilardi, 2005a). Second, the notion of regulatory competition speaks directly to the interdependency of decisions taken in different countries as they compete for capital, either with all other governments or perhaps especially with their peers (Elkins and Simmons, 2005). Third, the notion of regulatory competition seems to be compatible with the variations in the diffusion of regulatory institutions across economic the social arenas. Since regulatory competition is tailored to private investment, we can expect regulatory agencies to be more likely to appear in economic than in social domains (Gilardi, 2002; 2005b). In this respect the theory of regulatory competition seems to fit quite nicely with observation II (see Table 1.1).

Yet the theory of regulatory competition makes less sense when examined against some other aspects of our data. Take privatization, for example. We have referred to the strong correlation between privatization and the establishment of regulatory agencies. Yet, when this relationship is examined across two sectors where data are available worldwide (Levi-Faur, 2003), we find that the likelihood of the establishment of regulatory agencies is stronger for telecoms than for electricity. This is a counter-intuitive finding, as the problem of policy credibility and policy reversal is more acute in electricity than in telecoms. In telecoms, a rapid technological cycle makes the financial returns on telecoms investment relatively short (in some cases around five years), and thus the risks for investors are less acute. By contrast, electricity investment locks the investor into a commitment of a decade or more. If countries are establishing regulatory agencies in order to attract investors, they should have done so more in electricity than in telecoms. Moreover, the supply of money for telecoms investment in the 1990s seemed to transform relations between investors and governments: it was telecoms investors that were competing for permission to invest, rather than governments competing for investors. The theory of regulatory competition, while elegant and while certainly supplying a good explanation for certain aspects of the establishment of regulatory agencies, seems to fall short of accounting for some of the puzzles of the new order.

The shortcomings of the theory of regulatory competition are evident also with regard to three of the patterns of diffusion that we have observed. First, we observe that new regulatory agencies are established around both areas and across both regions (cell 1, Table 1.1). Yet regulatory competition

[4] It is interesting to note that very little is known about the extent to which the establishment of regulatory agencies actually increases the credibility of regulatory policy.

cannot deal with the diffusion of regulatory agencies in social arenas, where regulatory competition is only indirect. True, the establishment of regulatory agencies in social arenas is a weaker trend than that in the economic arena; but it is still a meaningful one, and why should investors be more attentive to the effects of economic regulation when social regulation is increasingly costly? In addition, the theory of regulatory competition is not compatible with our expectation about the establishment of regulatory agencies in the two regions when one considers the credibility gap between them. Since long-term investment in Latin America is more risky than in Europe, one might reasonably expect that the signals that Latin American governments would convey would be stronger than those conveyed by European governments. Yet the propensity of governments in the two regions to establish regulatory agencies in economic arenas was found to be similar (cells II and IV).

It could be suggested at this stage that the theory of regulatory competition does well when applied to the diffusion of regulatory agencies in economic sectors, but fails to account for patterns of variations when social sectors and regional variations are taken into account. On balance, it explains some of the most important observations well but falls short of explaining others. Overall assessment should, however, await comparison with other theories.

3. Does Regionalization (Europeanization) Matter?

A second theoretical perspective focuses on theories of regionalization in general and of Europeanization in particular. The link between regulation and regional integration has been made most explicitly by Giandomenico Majone, who argues forcefully that the European Union is a 'Regulatory State' mainly because the EU has limited fiscal powers and human resources and thus finds it necessary to rely on regulation as a major tool of governance (Majone, 1994). Much of its budget is committed to specific policy goals (such as subsidies to farmers); and the 'Brussels bureaucracy' is, despite its image, very small in comparison with national bureaucracies. Under these constraints it makes sense to put special emphasis on the regulatory dimensions of policy-making. Causality, according to Majone, runs from the EU to the member states: 'in order to take an active part in the formulation of all these new rules in Brussels, and then to implement them at national level, member states have been forced to develop regulatory capacities on an unprecedented scale' (Majone, 1997a: 146). A broader application of Majone's thesis links regional organization in general to the development of regulatory institutions at the national level, and variations in the diffusion of regulatory reforms to the degree of depth of regionalization across Europe and Latin American and the scope of their interest (social vs. economic). By Majone's own account, legal prohibitions (the Meroni Doctrine and Article 7 of the EC Treaty) constrain the ability of the EU to create fully independent regulatory institutions at the European level (Majone, 2002b); but the author portrays this situation as anachronistic, and forecasts that functional pressures will lead to the creation of an elaborate structure of regulatory institutions at the European level in the not too distant future (Majone, 2002c: 303).

Certain aspects of the advance of regional integration are of particular interest for our discussion. The first is that the process of integration is stronger in Europe than in Latin America. This gap is evident at both the political and economic levels. The European Union is moving towards the creation of political structures that are in some respects federalist or at least aim to become so. Mercosur, the closest equivalent in Latin America, is much more limited in its scope (four core countries), newer

(1991), and devoted mainly to trade issues.[5] While different in terms of institutionalization, in both regions economic reasoning is a major tool of legitimization. Regional integration is often directed towards the coordination of production (such as the Coal and Steel Community), industrial policy (large projects such as the Airbus) and trade liberalization (the major issue since the 1980s). Social issues are secondary on the agenda of both the European Union (on the European social deficit, see Leibfried and Pierson, 1995) and Mercosur. Finally, it is important to note that regional regulatory powers are mainly entrenched in laws while administrative powers (and much room of maneuver) are left to the national level. More specifically, the administrative muscle of the European Regulatory State (and this is all the more true for Latin America) resides at the level of the member states and not at the regional level. To the extent that regulatory agencies were established at the EU level they were mainly established with limited competencies and (with the notable exception of the European Central Bank) in the social sectors.

Several dimensions of regional integration are intensively discussed in Europe. One dimension of the discussion deals with the continuum of coercion versus voluntarism: to what extent is the establishment of regulatory authorities at the national level a result of the coercive power of the EU? Another partly complementary view examines the effects of Europeanization in terms of a continuum of learning versus imitation: to what extent was the establishment of regulatory authorities at the national level the result of a process of policy learning within the EU as opposed to mimetic behavior propelled by group pressures? Of these two conceptual dimensions, the latter seems the more useful as the 'coercive' powers of the European Union are limited in several respects. First, the EU is an agent rather than a principal, and hence its powers are largely derived from the delegation of authority from the member state to EU institutions. Second, the dominant decision-making procedures are consensual and, while a dissenting country may have to acquiesce in certain policies even under consensual procedures, it is unlikely that many would find themselves in this position on any given issue. Third, the EU's powers do not touch on issues of ownership (so public versus private ownership is a matter for national discretion). Fourth, in all the relevant directives that deal with regulatory issues, member states are not required to establish regulatory authorities. While there is a requirement to separate ownership from regulatory functions in order to ensure that the regulator will treat all market actors fairly, the particular institutional design that is chosen need not include delegation, and is essentially a matter of national choice. This notwithstanding, the Commission has closely scrutinized the regulatory structures in place, and has repeatedly stressed that lack of independence is a strong market disincentive. Even though the Commission has been careful to note that the organization of a regulatory authority is a matter of national choice, its preference for independent regulatory agencies is quite clear (see, for example, for telecoms, European Commission, 1999: 9-10; 2000, 12-14; 2002: 18). In some cases, such as Belgium, the Commission has explicitly pressed for greater independence for the regulatory authority (European Commission, 1999:10; 2000: 12).

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[5] Historically, in Latin America economic and political integration initiatives have been quite common since the nineteenth century, starting during the wars of independence. But most failed at a very early stage and none achieved a solid basis. More recently, during the second half of the twentieth century, many integration initiates emerged, of very different kinds. Many were of a subregional nature, such as Mercosur (Argentina, Brazil, Uruguay and Paraguay) or the various attempts to create the Centro-American Union. Others were limited to trade issues, as for example the 1994 NAFTA (a free trade agreement between Mexico, the US and Canada). Yet perhaps the more active institutions for integration are in fact the development banks, such as the Inter-American Development Bank, which is now creating regional networks and promoting the diffusion of new governmental technologies.

The limits of hierarchical models of EU policy-making and politics are evident when the regulatory structures at the EU level are examined. Efforts to create European regulatory agencies either ended in failure (for telecoms, see Levi-Faur, 1999; Michalis, 2003) or did not eventuate at all (for electricity, see Jakobsen, 2004). The only case of a powerful regulatory agency at the European level, though hardly a marginal exception, is the European Central Bank (Jabko, 2004; McNamara, 2001). As an alternative to influential regulatory agencies at the regional level, which have proved so difficult to establish, the European Commission is promoting networks of national regulators and a coherent European identity in each sector through the exchange of information (Dehousse, 1997). A group of European telecommunications regulators was established in Paris in 1997 to coordinate on issues of market liberalization, as well as acting as an advisory body to the European Commission. For electricity, the Florence Forum of European regulators was established in 1998 and its existence formalized in 2003. [6] In the regulation of securities and exchange, a Federation of European Securities Commissions (FESCO) was set up in 1997 (Muegge, 2004). The common denominator of all these arrangements is their low level of institutionalization.

Developments in social regulation are somewhat more institutionalized, but are still soft in their nature. The European Environmental Agency was established in 1990, the European Agency for the Evaluation of Medicinal Products in 1995 and the European Food Safety Agency in 2002. However, the creation of European agencies could have stimulated the creation of national agencies in these sectors. It would be a mistake to examine the work of these agencies with the hierarchical models of domestic politics. They have no compulsory regulatory powers. The function of the environmental agency is to provide 'timely, targeted, relevant and reliable information to policy making agents and the public'. The mission of the pharmaceutical agency is to provide high-quality evaluation of medicinal products, to advise on research and development programmes and to provide useful and clear information to users and health professionals. Finally, the food agency focuses on the provision of 'independent scientific advice and clear communication on existing and emerging risks'. The emphasis of all three is on voluntarism in implementation and influence through the provision of information and the creation of networks of regulators across the member states (Dehousse, 1997).[7] The importance of these networks stems from the fact that regulators interacting in networks care about their professional reputation and thus attempt to preserve their autonomy (Majone, 2002a: 387). In addition, a common professional identity can develop, thus favoring similar changes across countries. Thus, European agencies have contributed as coordinators of European networks to the creation of transnational professional and epistemic communities. As we will see in section IV, these have been important drivers of the diffusion of regulatory agencies.

Are these theories of regional integration consistent with the empirical evidence on the relations between privatization and regulatory reform? And how fit are they to deal with the various patterns of the diffusion of regulatory reforms? Our analysis indicates that they do so poorly. This is not to suggest that Europeanization and, by proxy, regionalization do not matter, but they matter perhaps to different issues and through different channels.

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[6] Decision 2003/796/EC of 11 November 2003.

[7] However, the pharmaceutical regulatory agency, probably an exception in the whole social sphere, has de facto obtained important regulatory capabilities in some areas (Feick, 2002).

Let us first test what we know about regional integration processes in our two regions against our observations. Regional integration explanations are unconvincing when one examines the general patterns of the diffusion of regulatory agencies. They do somewhat better, however, in relation to variations in the diffusion of regulatory agencies in social arenas. First, they fare better in respect of the deficit in regulatory agencies in social arenas when compared with economic arenas, since the regional integration schemes of the 1980s and 1990s were oriented to economic issues. If regional integration is a relevant factor in the creation of regulatory agencies, it might well be that the social regulatory deficit at the national level is really a reflection of the same deficit at the regional level. Second, regional integration might account for the deficit in social regulation in Latin America when compared with Europe. The political ambitions of proponents of integrated Europe rest to a large extent on the democratic legitimacy of the European project. Responsiveness to social demands is one tool that may serve to enhance that legitimacy, a product of the political dimension of the EU that is missing in Latin America. Thus, European policies for social regulation may be considered a consequence of the much greater integration of Europe than of Latin America. The weakness of political ambitions of this sort in Latin America makes such considerations redundant and in consequence, so this line of reasoning suggests, there are fewer social regulatory agencies in that region.

4. Do Transnational Networks of Professionals Matter?

A third perspective on the diffusion of regulatory agencies suggests that regulatory change, captured here through the diffusion of new regulatory institutions, is too widespread and too intimately driven by knowledge actors to be explained exclusively by power and institutional configurations. Instead, it suggests that 'transnational networks of professionals' are major agents of change in general and regulatory change in particular. The argument fits well with the world-society literature that suggests that convergence on new institutions and policy is driven by 'Western rationality' (Meyer and Rowan, 1977; Meyer et al., 1997). The professionals and, more narrowly, the scientists are the transnational agents, who spread this rationality through interaction in professional networks (Keck and Sikkink, 1998; Stone, 2003; 2004).

Five major suggestions of the world society approach (WSA) are of special importance here. First, the WSA suggests that there are startling degrees of global cultural, social and organizational convergence across the world. Second, diffusion of cultural, social and organizational forms of governance from the center to the periphery is increasing. Third, these processes of social, organizational and cultural convergence are driven by 'a world society' of international organizations and related transnational networks that share Western liberal norms and preferences. Fourth, in the making of these changes, science, scientific experts and the educational system constitute the central framework, agents and channels of change (Drori et al., 2003). As will soon be clear, this insight that connects 'norm diffusion' to 'science and rationalization' is critical to our understanding of the diffusion of regulatory agencies. Fifth, the high level of social, cultural and organizational isomorphism that exists today is far too great to be explicable solely in functionalist terms. Scientific knowledge 'constitute[s] the religion of the modern world' (Meyer et al., 1997: 166). Consequently, some of what is usually portrayed as regulatory learning is sometimes mere regulatory emulation.

The emphasis of the WSA on the diffusion of norms may be more strongly entrenched by explicit reference to knowledge actors, namely, transnational networks of professionals and experts. Thus, our explanation here stands on a second pillar: transnational networks of professionals are the backbone of what might be labeled 'Global Civil Society' (Kaldor, 2003). These transnational networks of experts include both 'non-state actors' in the global system (Higgott, Underhill and Bieler, 2000) and intergovernmental networks of experts (Slaughter, 2004). Their importance is suggested to be increasing and following growing interaction across borders and the celebrated authority of scientific knowledge. The decline of trust in social institutions may well affect also the sciences, though apparently less than other forms of authority. The rise of science and of professionalism is also enhanced by the 'end of ideology', as ideologies used to place some important constraints on scientific autonomy. Some of these transnational networks are civil in the sense that their members are autonomous from the state; but others — including (most importantly for our purpose) networks of regulators — are not (Slaughter, 2004). Regulators are increasingly professionals and this professionalism entails some autonomy. A simple dichotomy between intergovernmentalist and supranationalist networks might be misleading in our case. Networks of regulators are acting under two masters, their epistemic community and the particular sovereign of each of their states. As noted above, participation in networks makes regulators sensitive to their reputation among their peers; in addition, regulatory networks can develop common professional norms, which, as with most other groups, tend to value autonomy. The epistemic authority tends to be transnational, yet the political masters are usually national governments and follow their domestic logic of policy-making. Institutional autonomy (following delegation to independent regulatory agencies) makes it easier for regulators to follow the policy preferences that are driven from their epistemic community and makes it more difficult for politicians to control regulators. Transnationalization therefore increases the power of some experts and some agents of the state and decreases the power of others. As noted above, the creation of networks of agencies at the EU level coordinated by European agencies might also be a sign of this trend.

We suggest that the authority of science as a force of convergence on 'Western rationality' as suggested by the WSA, the diffusion of new information through transnational networks, and the interest of knowledge actors in enhancing their autonomy may add up to a powerful explanation for the co-diffusion of privatization and regulatory agencies and its framing as policy learning. At the center of such an explanation would stand the economics profession and its advocacy of the market for the efficient use of resources under the assumption of scarcity, while the formation of core ideas and high priests of knowledge rests with the universities, especially American ones (Dezalay and Garth, 2002; Bockman and Eyal, 2002; Kogut and Macpherson, 2003). Their advocacy of market instruments and of the work of global markets is essential for the advance of privatization policies, while their growing recognition of the importance of institutions explains the transformation of the independent regulatory agency from a peculiar institution of limited diffusion into global best practice. The knowledge-orientation nature of these networks creates authority patterns that are celebrated as policy learning. Yet policy learning is not divorced from power, and power comes into play in our account in two forms. First, the institutional platform for the authority of knowledge, the agency, is guaranteed through the delegation of authority and legal provisions that protect it from certain political controls (for instance, ministers and their staff). Second, expertise and knowledge are segmented into various branches of knowledge and in consequence 'professional competition' is one of the characteristics of the new order. In some cases, when market issues prevail, professions such as lawyers or engineers find themselves less influential than economists.

The spread of privatization has many causes, but an important and probably necessary one was the widespread endorsement of it by the economics profession. At the same time we find that economists have been much more dominant in the new agencies regulating the utilities, supplanting, to some extent, the traditional role of engineers in these areas; moreover, the new regulators typically enjoy high academic qualifications. It is not uncommon to find that entry into the higher echelons of a regulatory agency requires a second or a third degree. What economists gained others lost, and the measure of their success is expressed not only in their dominance in the economic regulatory agencies but also in the failure of natural scientists and engineers to achieve similar autonomy in social arenas. The modest diffusion of the institution of the independent regulatory agency in the social arenas is therefore mainly due to the gap in professional prestige and the uneven resources of different experts, but also to the limited introduction of market mechanisms in such cases. Note that this theoretical perspective can also deal with the gaps in the diffusion of social regulatory institutions between Latin America and Europe, in so far as other professional communities, for example physicians and biologists, also gained strong scientific recognition in the European context, and were able to push for their own regulatory governance institutions.

5. Conclusions

We are now in a position to conclude the study of the diffusion of regulatory agencies in the context of the rise of the new global order of what we called ‘regulatory capitalism’. We documented the diffusion of these agencies as they spread across regions and regulatory arenas. We then examined our four main patterns of variations and similarities in the diffusion of regulatory agencies, testing regional and sectoral variations against three theories of political and economic change. We first observed that new regulatory agencies have been established across both areas (economic and social regulation) and across both regions (Europe and Latin America) and suggest that this pattern best explained by the professionalization of the world’s elites and their growing interactions in transnational forums. By contrast, the regulatory competition argument, which emphasizes credibility, while it accords with the diffusion of regulatory agencies in the economic arena, cannot explain why agencies also spread in social regulation. Similarly, privatization is likely to be linked to agencies in utilities, but is surely unrelated to the establishment of social agencies. Europeanization, finally, has obviously little to say with respect to the diffusion of regulatory agencies in Latin America.

Second, we found that the spread of regulatory agencies in economic regulation has been faster than in social regulation. This observation is one of the main predictions of the regulatory competition argument: as countries compete for capital, they are more likely to create regulatory agencies to improve their credibility in domains where attracting private investment is important, that is, in economic regulation in general, but especially when markets in utilities are opened. In this context, privatization is an important predictor of agency creations. The ‘transnational network of professionals’ argument can in principle account for this trend if those networks are more powerful in economic than in social regulation, but we could not demonstrate this point empirically. Our evaluation is therefore undetermined, as further empirical work would be needed. As for Europeanization, the very limited development of European agencies in the economic domain (with the notable exception of the ECB) indicates that this thesis performs poorly as an explanation of the observed difference between economic and social regulation.

Third, we showed that the spread of regulatory agencies is greater in Europe than in Latin America. It should be noted that cross-regional differences arise with social regulation, since economic agencies have spread equally in both Europe and Latin America. Therefore, explaining differences between the two regions amounts to explaining why more social agencies have been established in Europe than in Latin America, which is our fourth observation. We thus discuss our third and fourth observations together. The regulatory competition thesis can explain the similarity between the regions, namely, that economic agencies have diffused everywhere. By contrast, it cannot explain the difference in social regulation. The regulatory competition thesis, which emphasizes credibility, simply cannot explain why agencies exist in social domains. Thus, from this perspective the puzzle is not why so few social agencies exist in Latin America, but why so many have been established in Europe. The regulatory competition thesis has no answer for this. The 'network of experts' hypothesis does better. As we have shown, such networks are more developed in Europe, notably thanks to the EU-level agencies that coordinate national authorities in the fields of pharmaceuticals, the environment and food safety. It thus appears that Europeanization also matters here, though not in its strong, hierarchical form. As a result, the 'network of experts' and Europeanization arguments appear embedded and cannot easily be separated empirically. However, taken together these two mechanisms seem capable of explaining why there are fewer social agencies in Latin America and, as a result (given that the number of economic agencies in the two regions is very similar), the spread of regulatory agencies is overall greater in Europe. There are reasons to believe that this difference is due to the gaps in the power of professionals in the two regions, which can in part be linked to the more developed institutional framework of social regulation at the EU level.

All in all, how well do the three theories fit the observations? From the regulatory competition perspective the diffusion of agencies in social regulation is highly puzzling, yet the theory explains quite well the spread of economic agencies in the two regions, as well as the fact that economic agencies are much more widespread than social ones. However, it does less well if one expects that the pressures for economic and institutional reform will be greater in Latin America, since European countries can shield themselves better from the pressures of globalization (fortress Europe). The approach thus has both considerable strengths and some important limitations. The 'networks of expertise' approach fills in the gaps left by regulatory competition, and can account for the wider spread of social agencies in Europe. In addition, it is the only theory that can account for our first observation, namely, that despite the existing variations regulatory authorities have spread in all the sectors and countries examined here. The regional integration approach, finally, is clearly the weakest. At best, integration promoted a differential in the spread of regulatory agencies in a very soft way, through the establishment of regulatory networks at the EU level. This channel of diffusion, however, can to a large extent be understood as policy learning in networks of expertise within the specific institutional milieu of regional integration; as a consequence, we find that the regionalization thesis cannot be completely disentangled from the WSA. In order to supply more robust answers to the questions that we have raised here, more research is required. We hope that future research will find this chapter useful.

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