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THE RISE OF THE REGULATORY STATE IN LATIN AMERICA: A STUDY OF THE DIFFUSION OF REGULATORY REFORMS ACROSS COUNTRIES AND SECTORS

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Abstract

This paper presents and analyzes the sweeping restructuring of the state in Latin America, using the notion of the rise of the Regulatory State. We present for the first time a database on the creation of regulatory agencies and their reform in 19 countries and 12 sectors over a period of 24 years (1979-2002). We aim to explain the rise of the Regulatory State in Latin America by reference to a distinction between sectoral and national patterns in the diffusion of autonomous regulatory authorities. While national patterns of diffusion imply that the number of prior regulatory authorities within a country will determine the probability of the establishment of new authorities in that country. Sectoral patterns predict that the establishment of new authorities will be determined by the number of regulatory authorities in the same sector in other countries. In order to test these conflicting predictions, we consider the effects of the establishment of regulatory authorities in (a) all sectors in all countries, (b) the same sector by other countries, and (c) other sectors in the relevant country. Thus, the results of the statistical analysis provide a direct measure of contagious patterns of diffusion, namely the effect of prior adoption on current adoption. This distinction is then used to shed light on the two important mechanisms that propel the process of diffusion: policy learning and policy emulation. While international organizations and actors that support and promote the new order usually highlight the first mechanism, critics of the current order usually underline the second mechanism. Our results provide some support for the importance of sectoral diffusion and for the role of emulation in the rise of the Regulatory State. These results coincide with a growing body of literature that emphasizes the role of contagious diffusion in the spread of policy reforms.

A STUDY OF THE DIFFUSION OF REGULATORY REFORMS ACROSS COUNTRIES AND SECTORS

The notion of the rise of the Regulatory State is highly popular among scholars of the change in the capitalist economy since the late 1970s (Moran, 2002, 391).[1] Scholarly interest in the Regulatory State – and in autonomous regulatory authorities as its most characteristic feature – increased substantially especially in the last decade (Loughlin and Scott 1997; Majone, 1994; 1997; McGowan and Wallace 1996). One of the most important driving forces of this interest is the global wave of regulatory reforms and the establishment of autonomous regulatory institutions. Governance through autonomous regulatory authorities is no longer a peculiarity of the American administrative state but a central feature of reforms in the European Union (Majone, 1994; 1997), East Asia (Jayasuriya, 2001) and developing countries (Cook et al., 2004). Latin America is one of the most receptive regions of the world for rise of regulatory reforms in general and for the creation of autonomous regulatory authorities in particular. This paper distinguishes between sectoral and national patterns in order to explain the rise of the Regulatory State in Latin America using as a proxy the establishment of autonomous regulatory authorities or the increase in their autonomy and their regulatory functions where they were already been established prior to the period of research. This distinction is then used to shed light on the two important mechanisms that propel the process of diffusion: policy learning and policy emulation. While international organizations and actors that support and promote the new order usually highlight the first mechanism, critics of the current order usually underline the second mechanism.

It is now widely believed that the ’appropriate’[2] way to govern certain economic sectors and social risks is through the creation of so-called independent regulatory authorities (RAs).[3] The new convention takes the form of a delegation of power from ministers and ministerial departments to arms-length bureaucracies that are staffed and governed by technocrats. Figure 1 portrays the growth of autonomous regulatory authorities in 19 Latin American countries and 12 economic and social sectors, thus enabling us to trace the gradual creation of this practice and thus hint on the consolidation of new convention. As can be seen from the graph, slow growth for most of the 1980s was followed by an increase in the rate of establishment of new RAs since 1992. From a meager 15 regulatory authorities in 1988 (mostly in the financial sectors), the overall number grew nine fold to 134 by 2002. While this number represents only about 60% of the total potential adoptions in these countries and sectors, it is still a sweeping success for an idea that for a long time was confined to the United States (at the country level) and to central banking (at the sectoral level). In fact, not one sector studied here and not one country in the region, including Cuba, remained untouched by the process. Yet countries and sectors vary in their reception of the reforms, and we aim to use these variations to shed some light on the herding aspects of the diffusion of reforms.[4]

A major distinction that we draw is between sectoral and national patterns of diffusion. Indeed, it is a common practice in the study of politics in general and of diffusion processes in particular to treat the nation as the major or even the exclusive unit of analysis.[5] Thus, many diffusion studies focus on the extent to which the adopter (conceived as national policy-makers) responds to the decisions of a regional leader, a global trendsetter, cultural peers, or neighboring countries (Brooks, 2003; Brune and Garrett, 2000; Castro and

McNamara, 2003; Gilardi, 2003a; Guisinger, 2003; Levi-Faur, 2001; Orenstein, 2003; Meseguer, 2003; Milner, 2003; Simmons and Elkins, 2000; 2003; Way, 2003). The majority of these studies focuses on decisions relating to a single sector (or issue) and are oblivious to the presence of significant sectoral variations. This paper emphasizes sectoral variations in the creation of regulatory agencies and therefore allow for a more refined account of the process of regulatory reform. With a battery of other variables controlled for, sectoral diffusion was found to be as strong as, or stronger than, country-level diffusion. This provides empirical support for the use of compound research designs in general and for combining the analysis of *sectoral* and *national* variations and similarities in particular (Levi-Faur, 2003a; 2004b).

What are the possible explanations for the dramatic growth in the number of regulatory authorities in this region? In order to answer this question, we distinguish between three major explanatory strategies: top-down, bottom-up and horizontal. Top-down explanations discuss the advance of regulatory reforms as a response of national policy-makers to exogenous (and often common) pressures from various international sources on national policy communities. International organizations and governments that exert influence and pressure from a position of power are 'institutional tutors' (Majone, 1991; Jacoby, 2001), makers of the rules of the game (Byers and Nolte, 2003), 'benevolent hegemons' (Kindleberger, 1981) or 'coercive hegemons' (Krasner, 1976). Bottom-up explanations focus on the role of domestic institutions in the diffusion of reforms. National structures, characteristics and policy styles are supposed to determine the decision to reform, as well as its timing. This is the dominant approach taken by scholars in the fields of comparative political economy and comparative public policy when issues of industrial policy and policy styles are discussed.

The third explanatory strategy, the horizontal, treats the spread of reforms as a 'contagion process' of diffusion across interdependent groups of actors. Globalization is produced and conditioned by formal and informal networks of actors who closely monitor each other's behavior. These actors are part of 'world societies' of epistemic communities that are organized around specific sectors and policy issues. In some formulations of this approach, actors 'learn' from each other. In other formulations, the actors are less interested in, or capable of, 'learning' and thus merely 'emulate' their peers.[6] Advocates of horizontal explanations do not deny that the domestic setting (bottom-up considerations) and international organizations (top-down considerations) are important, but suggest that they should be complemented. Our claims in this paper are derived from the horizontal approach. Specifically, we stress the role of herding and policy emulation rather than learning in the rise of the Regulatory State in Latin America.

The analysis is based on our data set which includes 19 Latin American countries: all South American countries, all Central American countries (except Belize) and two Caribbean countries (Cuba and the Dominican Republic). The data for each country covers the establishment of regulatory authorities in 12 sectors covering economic and social regulation. The nine economic regulation sectors cover three sub-areas: finance (central banking, financial services and securities and exchange), competition (competition authorities) and utilities (telecoms, electricity, gas, water and post). The three social regulation sectors are pharmaceuticals, environment and food safety. Methodologically, we combine a comparative perspective with Event History Analysis (EHA), a statistical technique that is increasingly popular in the discipline. The analysis is based on the duration data on the establishment of regulatory authorities or their reform (in cases such as central banks, where they were established well before the 1980s) and examines how the probability of establishing regulatory authorities in any of these countries and sectors is shaped by prior decisions to establish regulatory authorities in the same sectors in other countries (sectoral diffusion), by prior decisions to establish regulatory authorities in other sectors in the same country (country-based or within-country diffusion), by all prior decisions to establish regulatory authorities (general diffusion) as well as by a set of other independent variables that are meant to capture the top-down and the bottom-up explanations for the rise of the Regulatory State. The results of the EHA pointed to the significant effects of all three diffusion variables (sectoral, country and general) but particularly of sectoral diffusion. At the same time, however, we suggest that countries matters, and therefore so do cross-national studies.

We present our argument and empirical analysis in four sections. In the first section, the rise of the Regulatory State in Latin American is discussed in the context of diffusion studies and distinctions between sectoral patterns and national patterns approaches for diffusion and between mechanisms of policy learning and policy emulation. The second section discusses the political-economic context of the rise of the Regulatory State in Latin America. It presents data on the diffusion of regulatory reforms across countries and sectors, clarifies the notion of the Regulatory State and place the discussion of the Latin American case in an historical and comparative perspectives of the Latin American state formation and the neoliberal reforms of the 1980s. The third section presents the empirical analysis and the research design, and the final section presents the results and analyzes them. We conclude with a summary of the results and their implications for future research on the transformation of the state in Latin America as well as on issues of diffusion, policy learning and policy emulation.

THEORETICAL AND ANALYTICAL FRAMEWORK: SECTOR AND COUNTRY-CENTERED PERSPECTIVES

The widespread liberalization in trade, finance and ownership has rendered many of the studies of change obsolete since they were focused on the coercive aspects of change (e.g., the ability of autocracies to promote painful reforms) or on the obstacles to change (e.g., domestic opposition).[7] Indeed, there is little evidence of either coercion or obstacles.[8] Liberalization and privatization are so popular that coercion is almost irrelevant, even if a would-be coercer were willing and able to extend its power to all corners of the earth.[9] At the same time, the large and unprecedented changes that we observe rule out obstacle-centered analysis of the reforms and require an agenda change from problems of undersupply of cooperation to those of the oversupply of cooperation.[10] It is change rather than stagnation that has become *the* theoretical challenge for scholars.

The diffusion perspective on systematic change in the governance of the capitalist economy has two important advantages. The first advantage is that it does not require ad hoc revisions following the failure of other theories to deal with change. Indeed, the common solution for this theoretical challenge is to move away from an obstacles-centered analysis and to emphasize the benefits of the new order for societal groups. Shortsighted politicians and potent labor unions, cooperating in distributional coalitions that opposed change, are no longer the dominant actor in the scholarly analysis. Instead, they are replaced by politicians who are conceived as heroes (Harberger, 1993; Wallis, 1999) or by winning coalitions observable only indirectly and ex post (Schamis, 1999, Murillo, 2002). The common characteristic of this approach is the introduction of ad hoc changes in major assumptions about the distribution of power between societal and state actors, while keeping intact the traditional framework of comparative politics, namely, the assumption of the independence of observations. The diffusion framework suggests a somewhat newer and refresh approach, at least in the context of the political economy literature.

A second major advantage of the diffusion perspective is its ability to deal with the compression of space and time that turns countries, sectors and continents that were isolated islands into interconnected and interdependent entities. Unlike comparativists who select their cases on the assumption that they are independent and perceive globalization as an exogenous force that exerts constraints and pressure on otherwise independent political units, diffusion theories suggest that the events are highly interdependent and that decisions in one country are highly dependent on decisions in others. Whereas diffusion theorists treat globalization as a characteristic of the system (or the country) itself, and thus perceive it as an endogenous force, comparativists tend to place it in an external space. The more global the world, the more vulnerable comparativists are to the Galton problem and the more we can expect diffusion studies to complement traditional research designs in comparative politics and policy.

In order to bridge the gaps between the rich literature of comparative politics and the relatively modest literature of the diffusion of political innovations let us distinguish between two popular comparative approaches: the National Patterns Approach [NPA] and the Policy Sector Approach [PSA].[11] The NPA suggests that national-level characteristics exert a major impact on policy, politics, economics, and society. Cross-national comparative designs are expected, therefore, to show significant diversity across the countries studied and to explain major variations in policy processes and outcomes. Specifically, the NPA suggests that political processes and outcomes are shaped by a country's unique national and historically determined characteristics embedded in specific state traditions, and that the nation-level community of policy-makers has effective control over domestic political processes. The PSA emphasizes the autonomous political characteristics of distinct policy sectors, and hence the multiplicity of political patterns in any one country. The major point might be summarized in two major propositions: '[First] that the style of policy making and the nature of political conflicts in a country will vary significantly from sector to sector. ...[And second] that policy making in a particular sector will exhibit strong similarities, whatever its national context' (Freeman, 1986, 486). These claims clearly challenge the notion of 'national patterns', which suggests significant similarities in the modes of political process across different sectors in any given country.[12] As we will demonstrate shortly these two approach that shape much of the research agenda of the disciplines of comparative politics and public policy have important implications on our conceptions of how diffusion occurs and what are the role of learning and emulation shape this process.

Applied to the contexts of diffusion analysis the two approached yield different predictions as to the process of diffusion and the creation of regulatory authorities. The NPA expects the diffusion process to be shaped by national factors and therefore predicts that the number of other regulatory authorities in a country will determine the probability of the establishment of new authorities. The PSA, by contrast, expects sectors to exert the major influence on the diffusion process and therefore predicts that the establishment of new authorities will be determined by the number of regulatory authorities in the same sector in other countries. In order to test these conflicting predictions, we consider the effects of the establishment of regulatory authorities in (a) all sectors in all countries, (b) the same sector by other countries, and (c) other sectors in the relevant country. Thus, the results of the statistical analysis expect to provide a direct measure of the effect of prior decisions on subsequent ones. As expected from a number of other studies, we have found that the number of other authorities is significantly and positively correlated with the probability of creating new authorities. Does this finding mean that the process of the rise of the Regulatory State is driven by emulation?

Before answering this question, let us first clarify the notions of policy learning and policy emulation. Both are defined here as processes of social learning, that is, the redefinition of one's interest and behaviour on the basis of newly-acquired knowledge and after watching others (cf. Ikenberry, 1990, 88).[13] We are therefore concerned with social learning; individual learning is not discussed here.[14] We treat emulation and learning as types of social learning and as partly complementary terms.[15] We learn also by emulation and we use also emulation when we learn. Yet we think that it is critically important to understand that emulation and learning involve varying degrees of 'transfer of control', a notion that we borrow from Coleman (1990, 200-201). These different degrees of transfer are affected by degrees of relative uncertainty of the different course of the action. These differences in degree in the application of learning and emulation for decision making processes open the door to a critical understanding of the process of change in the governance of the world economy through the contrast between emulation and learning. Whereas learning involves a conditional and limited transfer of control, emulation is less restricted and less conditional.

We define policy emulation as the redefinition of one's interest and behaviour on the basis of newly acquired knowledge and after watching *the actions* of others. Policy learning is defined as the redefinition of one's interest and behaviour on the basis of newly acquired knowledge, after watching *the actions* of others and the *outcomes* of these actions. In essence, we distinguish between learners and the emulators by examining the extent to which the adaptation to new behaviour involves information not only about the actions of others but also about the consequences of those actions.[16] The crucial difference is, therefore, that the learner processes a greater amount of information than the emulator and is therefore less dependent and more autonomous. We treat this notion of learning as a strong one, since it places considerable expectations on policy-makers, namely, that they will be able and willing to process information and discern between policy prescriptions and fashions on the one hand and actual economic results on the other.[17] It is possible to relax this demand and to formulate 'weaker' expectations from the learner by allowing him to follow significant others (e.g., a leader).[18] Here the assumption is that since it is difficult to assess the effect of any specific act of policy innovation, one may better look at the aggregate performances of specific actors who have some track record of success. Accordingly, a strong version of policy emulation would suggest that adoption is driven not by an examination of the performance of others, but by what all others do. The ensuing extent of success or failure is simply out of the reach of the emulator.[19] Thus, whereas learners follow on the condition of apparently successful outcomes (either specific to the measure or reputation of the innovator) emulators follow without these reservations or conditionality. Weaker forms of policy emulation relax the demand for following *all* others and instead significant others that have some admirable capacities but not superior performances are the major source for adaptive behaviour by the followers.

Table 1: Learning and Emulation across Nations and Sectors

	POLICY SECTOR APPROACH (SECTORAL DIFFUSION)	**NATIONAL PATTERNS APPROACH (NATIONAL DIFFUSION)**
Policy Learning	**Strong version:** The performances of the same sector in other countries after reform are the relevant measure for learning. **Weak version:** Specific sectors with some demonstration effects of improved performances should be expected to serve as	**Strong version:** The performances of other sectors within a country are the relevant measure for a diffusion driven learning. **Weak version:** Specific countries with a track record of superior performances should be expected to be the 'significant others'

	the ‘significant others’	
Policy Emulation	**Strong version:** The sheer number of other countries that reformed in the same sector (and not the extent of their success) is expected to be the significant predictors of adoption. **Weak version:** The effects of significant demonstration sectors (where results are obscured) are expected to serve as indicator to emulation driven diffusion process.	**Strong version:** The sheer number of other sectors that were reformed is expected to be the relevant measure for emulation-driven diffusion process. **Weak version:** The effects of actions of significant other countries (without clear track record of success) are expected to be the relevant indicators for a country’s decision to create RA.

The NPA and the PSA have inherent contradictory expectations as to what constitutes learning and what constitutes emulation and as to which are the relevant cases to be observed (see table 1). Both approaches endorse the view that there are no universally valid policy recipes and that, all other factors equal, the optimal policies are contingent on the characteristics and peculiarities of each case (cf. Spiller, Stein and Tommasi, 2003). They differ, however, in their case selection. As the major characteristics and peculiarities of the case are set, according to the NPA, at the national level, it should not be surprising that learning and emulation are considered against observations as to the performances of other sectors within the country. If we relax this strong demand for learning and adopt the weaker version, learning may also be conceived as acting on the behaviour of significant countries with track record of superior prior performances. Policy emulation is expected to occur across countries and without regard to their performances. It is the sheer number of countries that is expected to determine the process of diffusion. Significant others are observed and followed but the track record of these others is not the criteria for adoption. As the major characteristics and peculiarities of the case are set, according to the PSA, at the sectoral level, it should not be surprising that policy learning and policy emulation is considered against observations as to the performances of the same sector in other countries. Policy learning is expected to occur with regards to the performances of the same sector in other countries. With a relaxation of this strong demand for learning, it may occur also through the demonstration effects of some sectors where improved performances can be observed after the adoption of reform (in our case the establishment of RA). Policy emulation is accordingly conceived as adoption of innovation without regards to the performances of the sector in all other countries (strong version) or the performances of significant demonstration sector (weaker version).

All in all, we have now some measures of contagious diffusion (the number of all others, the number of others within a country, the number of other sectors reformed across countries) as well as criteria against which to interpret measures of policy learning and policy emulation from the NPA and the PSA perspectives. The policy emulation hypothesis in its strongest form is supported if the numbers of others are found to have a significant effect on the probability of establishing new regulatory authorities. The policy learning hypotheses in its strongest form will get some support if both the performances of all former regulators and the performances of significant others are found to have a significant effect on the probability of establishing new regulatory authorities. Depending on who the others are we can expect support for the PSA, NPA or both. Before moving on to the empirical analysis, let us first examine the political-economic context of the rise of the Regulatory State.

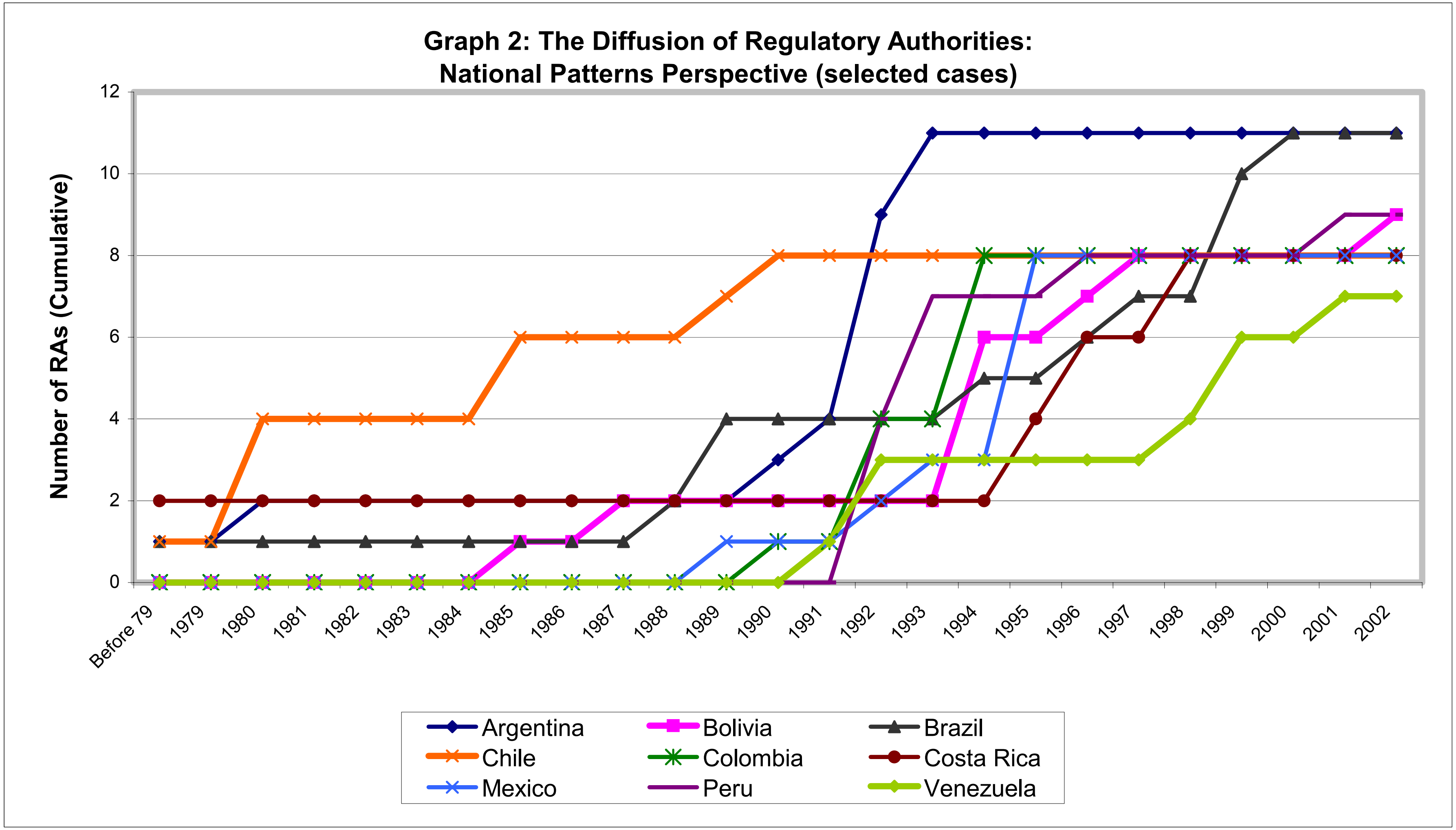
The Political-Economic Context of the Regulatory State in Latin America

The rise of the Regulatory State in Latin America coincides with large-scale economic reforms that were meant to tackle the problems of the import-substitution model—the debt crisis and hyperinflation—via liberalization of the national economies and the integration of the region's economy into the world economy (Edwards, 1995; Stallings and Kaufman, 1989; Haggard and Kaufman, 1992; Staling and Peres, 2000). These reforms should be understood against the background of four related characteristics of the region: the crisis of the old 'developmental' model, the widespread economic reforms, the process of democratization in the region, and the problems of state consolidation. During the post-war period, the Latin American states pursued, in accordance with the norms of the time, intensive state-led industrialization in a quest for rapid industrialization and for the closing of the economic and technological gaps with the richest countries. During this period, the public sector expanded quickly and instruments of coordination were developed through concentration of economic power (Whitehead, 1994; Vellinga, 1998). However, the institutional expansion of the developmental state in Latin America was weak, and the problematic basis of the expansion of the state was revealed with the economic crisis of the 1970s. This model—to the extent that it really was implemented—was deemed an economic and political failure due to a weak civil service, problematic coordination mechanisms, and narrow externalities arising from state-led development.

Economic crisis coincided since the late 1970s with transition from autocracy to democracy (O'Donnel, Schmitter and Whitehead, 1986). Only Colombia, Costa Rica and Venezuela had democratic regimes with competitive electoral processes before 1978, but over a brief period autocracies fell as dominos one after another. The first transition to democracy occurred in the Dominican Republic (1978), followed by Ecuador (1979), Bolivia (1982), Argentina (1983), Nicaragua (1984), Brazil (1985), Uruguay (1985), Guatemala (1986), Chile (1990), El Salvador (1992), Honduras (1994), and Panama (1994).[20] Indeed, the only non-democratic regime in our study is Cuba. Despite episodes of regime crises, the legitimacy of democracy seems uncontested at the moment. Based on previous democratic traditions, all new Latin American democracies adopted presidential democracy and proportional representation for their legislatures (Mainwaring and Shugart, 1997). These led to a significant level of party fragmentation, which was balanced by a strong presidential powers vis-à-vis the legislature, as well as by the capacity of presidents to forge coalitions with other parties (Payne et al, 2002). It is notable however, that neither the transition to democracy nor the political and administrative fragmentation of decision-making hindered the reforms, as was widely assumed in much of the literature of the 1980s (Remmer, 1998, 4).[21] In fact, under newly elected leaders liberalization in Latin America went farther and faster than in any other of the world as has already been noted elsewhere, democracies are more likely to privatize than autocracies (Biglaiser and Danis, 2002, 98) and are more likely to engage in central bank reforms (Castro and McNamara, 2003). The rush to free trade (Milner, 2001), financial liberalization (Quinn and Toyoda, 2002; Way, 2003) and privatization (Brune and Garrett, 2000; Messeguer, 2003) happened simultaneously with democratization process, in which newly elected politicians were expected to deliver on promises for growth and employment that were made during the electoral campaigns. Indeed, public support for liberalization policies was relatively high (Weyland, 1998; Baker, 2001).

Against the background of these large-scale changes, it should not be surprising that the rise Regulatory State in Latin America did not receive much attention from political scientists.[22] Scholars of public administration who dealt with state reforms and restructuring focused on the reforms of the civil service (recruitment, promotion and remuneration), public finance (downsizing), the judiciary (fairness, access, effectiveness), management (performances, autonomy and accountability) as well as issues of responsiveness, transparency and legitimacy (Ross–Schneider and Heredia, 2003; Ramió and Salvador, 2004). Political economists focused on the study of economic adjustment, trade liberalization, privatization, foreign direct investment, financial liberalization and labor strategies (Meseguer, 2003; Milner, 1999; 2001; Murillo, 2002; Haggard and Kaufman, 1992; Tafet and Boniface, 2003; Stalling and Kaufman, 1989; Stalling and Peres, 2000; Weyland, 2002).[23] The first major collection on regulatory reforms in Latin America by Manzetti (2000) remains the only one that is focused on regulatory reforms as a major aspect of the change in the governance of the region's economy. Unlike Manzetti's collection and various studies by institutional economists (Levy and Spiller, 1996; Rufin, 2000), which focused on a small number of cases, we present in this paper, for the first time, a comprehensive picture of the regulatory reforms across countries and sectors. What we have found surprised us, and indeed the diffusion of the reforms across countries and sectors went far beyond our own expectations.

Graphs 2 and 3 accordingly present the diffusion of regulatory reforms across nations and sectors. The variations in the diffusion process are quite clear from a first look at the graphs. Countries and sectors vary in their propensity to create regulatory authorities. Note the acceleration of the diffusion process since the early 1990s, but also the history of the process as regulatory authorities were not foreign to Latin America and a significant number of them existed even before the early 1980s. The rate of diffusion across countries and sectors is not constant over time. Chile, which led the process in the beginning of the 1980s, lagged behind in the 1990s. Similarly, some encouraging signs of rapid diffusion of competition authorities in the early 1990s did not materialize in the mid-1990s. The slow rate of diffusion in Brazil and the water sector coexists with a rapid diffusion in Argentina and in all the three financial sectors.


Graph 2: The Diffusion of Regulatory Authorities:
National Patterns Perspective (selected cases)
Number of RAs (Cumulative)
0
2
4
6
8
10
12
Before 79
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
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1998
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2002
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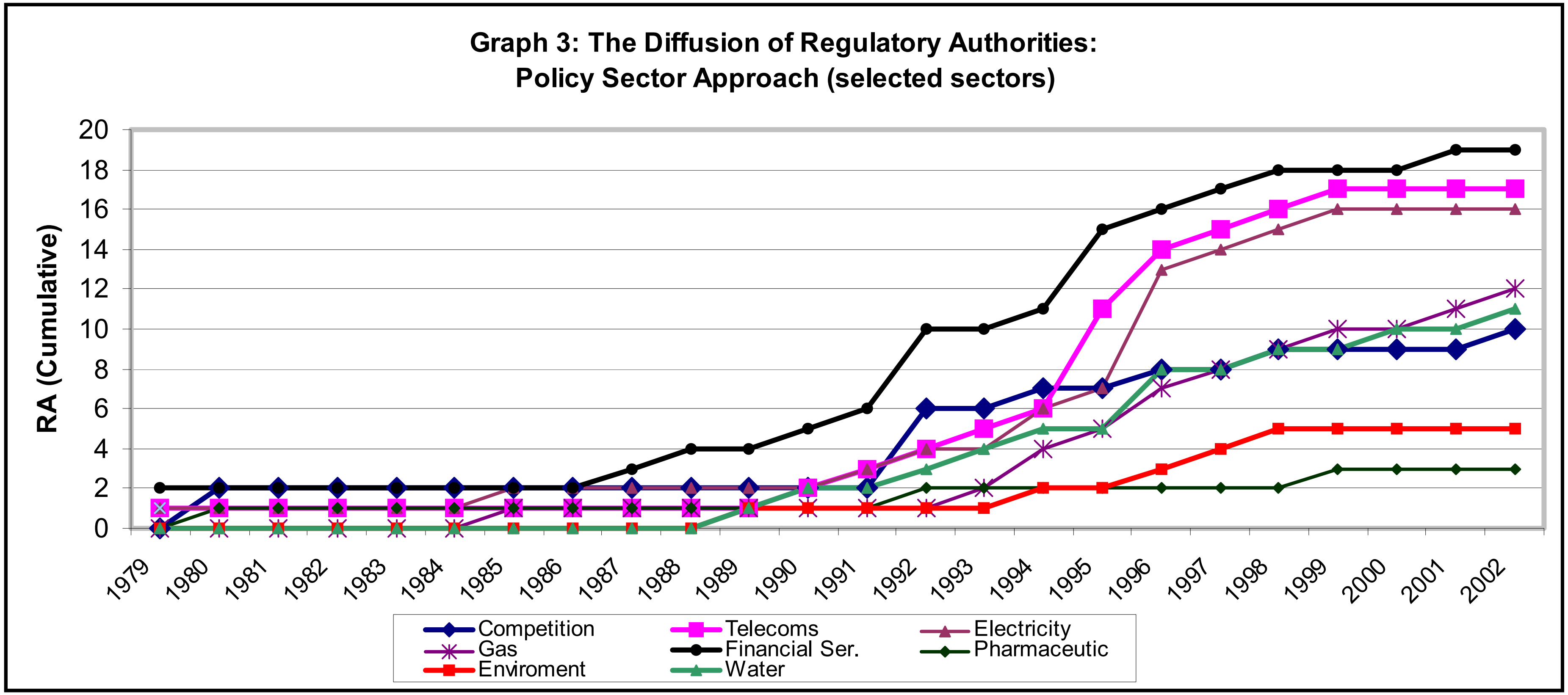
Bolivia
Brazil
Chile
Colombia
Costa Rica
Mexico
Peru
Venezuela


Graph 3: The Diffusion of Regulatory Authorities:
Policy Sector Approach (selected sectors)
RA (Cumulative)
0
2
4
6
8
10
12
14
16
18
20
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Competition
Telecoms
Electricity
Gas
Financial Ser.
Pharmaceutic
Enviroment
Water

Note that graphs 2 and 3 capture only one aspect of the larger process of regulatory reforms (the other aspects comprise privatization, competition rules, transparency, responsiveness and investment rules). Yet, for political scientists who are interested in the restructuring of the state in the context of neoliberal reforms, the proliferation of these regulatory agencies is generally the most important manifestation of the restructuring of Leviathan. What we have identified, counted and classified are agencies of the state that have been separated from ministerial agencies and by this token acquire some form of autonomy. The degree of autonomy varies widely across agencies, sectors and countries, but the formation of agencies and the particular use of regulation as the mission statement of the agency served as criteria for inclusion in our database. In the tradition of the study of regulation in the United States, we see these agencies as the hallmark of the transformation of the Service-Provision state into the Regulatory State (cf. Majone, 1997).[24] In using this term we follow Hood and his colleagues, who have noted that the term 'Regulatory State' 'suggests [that] modern states are placing more emphasis on the use of authority, rules and standard-setting, partially displacing an earlier emphasis on public ownership, public subsidies, and directly provided services' (Hood et al., 1999, 3).

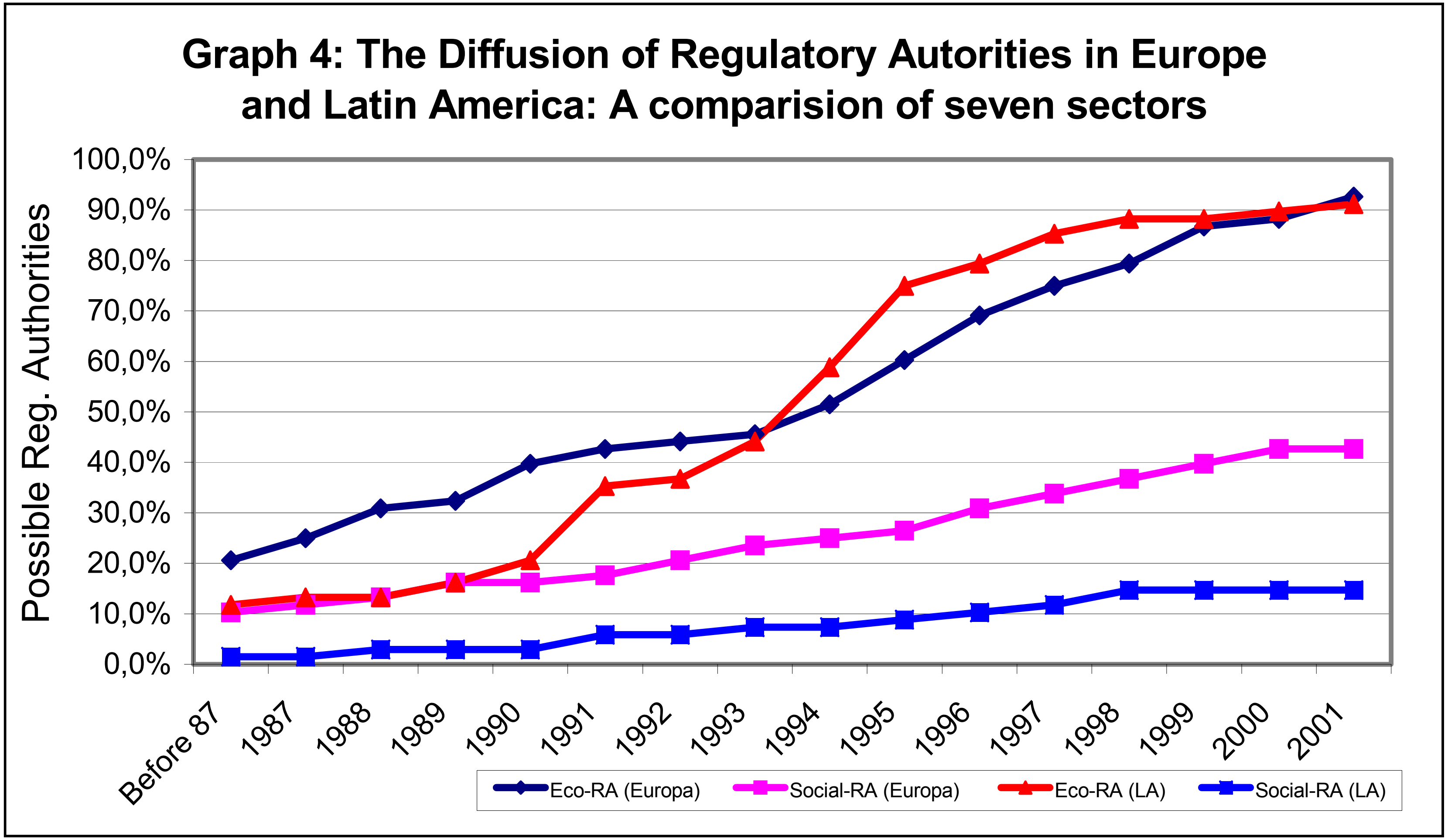
We observe in different contexts the extension of regulatory modes of governance to more and more spheres of life and to more and more political arenas, and suggest that regulation as an *art and craft* of governance, as an *institutional* reality, as a *field* of study, and as a public *discourse* is more salient and celebrated nowadays than ever before (Gilardi, 2003a/b; Jordana and Levi-Faur, Forthcoming; Loughlin and Scott 1997; Majone; 1994; 1997; Moran, 2000; 2002; Muller, 2002). The expansion of regulation, which is often called 'the rise of the Regulatory State', contradicts, at least partly, popular and scholarly assumptions about the decline of the state in the context of globalization. In an era in which regulation has become synonymous with red tape and in which deregulation has become a major electoral platform of the New Right, regulatory authorities have been created in unprecedented numbers and with unprecedented autonomy. The origins of these institutions are still unclear, both in the Latin American context and in other parts of the world.

In a sense they are hardly new. Governance through independent regulatory commissions was consolidated into a distinct system of governance in the United States in three distinct waves: competition-centered in the late 19th century, extension to specific sectors such as finance and utilities in the New Deal era, and to social regulation in the postwar era (Bernstein, 1955;

Eisner, 2000). If one measures the rise of the regulatory state in the region against the US yardstick, governance through regulation is indeed a novelty (as it is in the rest of the world). Similar conclusions might be reached if developments in the region are compared to the 'big bang' in the establishment of regulatory authorities in Britain in the 1980s.[25] Yet regulation by autonomous agencies is not absolutely new to the region. Some authorities were established as early as the 1920s, often following the example of the United States. The Kemmerer missions to different Latin American countries during the 1920s influenced early decisions to establish public central banks and separate authorities to supervise financial activities (Drake, 1989). Also, Costa Rica, for example established a regulatory authority to govern the electricity sector as early as 1928, and one for telecoms in 1963. Many countries had established regulatory authorities during the post-war period to govern their securities and exchange and banking industries. Yet, if from a purely nation- and longitudinal-centered perspectives the Regulatory State in the region is largely a recent phenomenon, a sector-centered perspective suggests that the origin of the Regulatory State lies not in the United States or in any isolated event establishing a regulatory authority in one country or another, but in a specific sector, central banking in particular.[26] As early as the 18th century, central banks achieved a degree of freedom from government and politicians (Kock, 1974). Nationalization of these central banks, which has usually been private institutions acting under strict concessions from the government, retained some of the prerogatives of independence and arms-length relations; and it is in this sector across most countries of the world that the notion of independence is most celebrated. Thus, a more complex picture of the rise of Regulatory State is portrayed if its development is considered from a sectoral perspective.

Today's rise of the Regulatory State differs from regulatory developments in the past in five ways. First, as already mentioned, the regulatory state is developing at the same time across different sectors, albeit with different rates of diffusion. Second, the color or political identity of the Regulatory State is no longer that clear. There were times when the Regulatory State had a clear political affiliation (Vogel, 1989; Rose-Ackerman, 1992) and noted 'prophets' (McCraw, 1984). In the United States, where independent regulatory institutions occupied center stage in the administrative machinery of government, the Regulatory State was a product of popular political struggles against 'big business',[27] and it is widely considered as the hallmark achievement of the American left. Unlike developments in the United States, the political forces that sustain, promote and diffuse the Regulatory State today, and the benefits and costs that it imposes on business, are still unclear. Third, the Regulatory State is a global rather than a country-specific or region-specific phenomenon. Some support for this claim is offered in Graph 4, which compares the diffusion of regulatory agencies in Latin America with European data that is mainly based on Fabrizio Gilardi's database on regulatory authorities in 17 European countries. The graph reveals a similar pattern of diffusion of regulatory authorities across Europe and Latin America in economic regulation (indeed, Latin America moved faster in this direction than Europe) as well as the slower diffusion of autonomous agencies of social regulation in Latin America than in Europe. The similar reform paths across the region, notwithstanding differences in performance, state tradition and international context, provide support for our basic point of departure on the rise of the Regulatory State as a diffusion process.[28] It suggests that future research, depending on the availability of data, should try to capture the global aspects of this process.[29]

Fourth, the development of proactive policies for the promotion of economic competition (regulation-for-competition) represents a departure from the past.[30] If the regulatory agencies that were established in the United States during the New Deal era legitimized monopolies, the new regulatory authorities that are now established all over the world are committed to active promotion of competition (Vogel, 1996, see also Wilks and Bartle, 2002). This might lead to institutional structures and policies that are basically more mercantilist than liberal, and reveals the interdependency of markets and state in the capitalist order (Levi-Faur, 1998). Finally, the American Regulatory State has acquired the procedural and adversarial qualities of the American political and administrative process. Current developments do not necessarily develop in the American mold since they are embedded in different setting (Jayasuriya, 2001, 110-111). It may well be the case, therefore, that regulatory institutions will function radically differently in different countries and sectors (cf.. Vogel's typology of regulatory reforms: 1996, 17)).



Note for Graph 4: Aggregate numbers of economic (telecom, electricity, financial services and competition) and social sectors (food safety, environment, pharmaceutical) for 17 European countries and 19 Latin American countries. Percentage from the maximum possible number of case in each region.

Source: Own database for Latin America and Gilardi (2003) for European regulatory authorities.

SECTORAL AND NATIONAL PATTERNS OF DIFFUSION: EMPIRICAL ANALYSIS

In this and the following sections of the paper we provide empirical support for four claims that touch on the sectoral, national and general peculiarities of the diffusion of regulatory authorities. First, the decision to establish regulatory authority is interdependent on prior decisions. Second, the process of diffusion is shaped by prior decisions in the same sector in other countries as well as prior decisions in other sectors in the same country. In other words, the probability of establishing a new regulatory authority increases with an increase of prior decisions in the same sector by other countries and in other sectors in the same country. Third, the probability of establishing a new regulatory authority increases more significantly with an increase of prior decisions in the same sector in other countries than of decisions in other sectors by the same country. Fourth, the 'horizontal approach' has somewhat stronger predictive power than the bottom-up and top-down explanations of global change. Let us proceed to present the variables in this section of the paper before moving to the presentation of the results in the next.

Our data and research interest shape the choice of statistical tool-kit. We employ methods that are known jointly as Event History Analysis (EHA) (Alison, 1984; Berry and Berry 1999, Box-Steffensmeier and Jones 1997). EHA allows an analysis of the creation of regulatory authorities over time while using time-varying variables and dealing with censored data.[31] It allows us to study the 'hazard rate' of an event (here, the establishment of a regulatory authority) that is measured in discrete units (years) over a research period of 24 year (1979 to 2002). The hazard rate is defined as the conditional probability that an event – in our case the establishment of a regulatory authority – occurs at any time t, given that the event has not yet occurred prior to t in a certain country and sector (Box-Steffensmeier and Jones 1997, 1417).

The core model for our empirical analysis is therefore:

$$\text{Log}\frac{RANOWist}{1-RANOWi_{st}} = \beta_0 + \beta_1\, SRA_{\text{t-1}} + \beta_2\, CRA_{\text{t-1}} + \beta_3\, ARA_{\text{st-1}} + \text{CDY} + \text{SDY} + \beta_4\, \Sigma X_{\text{ist-1}} + \acute{\varepsilon}_{\text{it}}$$

where $\text{RANOW}_{\text{its}}$ is the hazard rate for the creation of a new regulatory authority. It is predicted to be a function of the creation of regulatory authorities in the same sector [$SRA_{\text{t-1}}$]

in all other countries where a regulatory authority was created at time *t-1* (practically the former year), the creation of regulatory authorities in the same country in other sectors [CRA_{t-1}] and by the total number of all prior sectors in all countries [ARA_{t-1}] where regulatory authorities were created. We also added country (CDY) and sector dummy (SDY) in order to explore the effects of a particular country (rather than all countries and sectors) on the decision to create a regulatory authority. We then specify in this model a set of domestic and international factors [ΣX_{ist-1}] that characterize countries at time *t-1* and may have an effect on the process of diffusion. Unlike the first three components of the model that reflect the predictions of the horizontal approach for diffusion, the fourth component reflects the predictions of the alternative hypotheses driven from the bottom-up and top-down approaches.

The dependent variable: Our dependent variable reflects the establishment of a regulatory authority (or, in cases where regulatory authorities already existed before 1979, the strengthening of its autonomy) in all sectors (12) and countries (19) during the research period (1979-2002).[32] We start the analysis in the year 1979, since this is the year of the accession to power of Margaret Thatcher in the United Kingdom, and close enough to the ascendancy of Chicago economics in Chile and the accession to power of Ronald Regan in the United States in 1981. Since the decision to start with 1979 is somewhat arbitrary, we have checked the sensitivity of our data to different starting point and found that it is not sensitive to this decision. Since Cuba was part of the 'socialist' world until the collapse of the Soviet Union, we included it in our risk set only from 1991. The dependent variable ($RANOW_{ist}$) is coded '1'for the year where the event occurs, '0' for all years before and as censored after the year of the event. The total number of observations, taking into account the number of sectors, years and countries, is therefore 5,328[33] but, with 1,048 censored cases, the maximum number of observations is 4,280.

The diffusion variables: In order to assess the effects of prior decision on the establishment of a regulatory authority, we constructed three diffusion variables that aim to capture different potential influences. We first count all other prior decisions to create regulatory authorities in all sectors and all countries [sumall]. Prior decisions as well as current decisions were coded annually, using the calendar year as the unit of analysis.[34] We defined a second diffusion variable that counts over time the number of prior decisions to establish a regulatory authority in each of the twelve sectors as a measure of the effects of sectoral diffusion [sumsector]. In addition, we defined a diffusion variable that counts over time the number of prior decisions to establish a regulatory authority in each of the 19 countries as a measure of the effects of country-level diffusion [sumcountry]. Finally, we introduce countries (19) and sector (12) dummies in order to identify the most important sectors and countries that were influential in the spread of the reforms. The country dummies [CDYXX, where XX stands for country code] and the sector dummies [SDYXX, where XX stands for sector code] are expected to provide a measure of the extent to which particular countries and sectors are more influential than others in all that regards the creation of new regulatory authorities. These variables capture the central hypotheses of this paper, namely, that the diffusion of regulatory authorities has been significantly influenced by prior decisions in other countries and sectors, and that some countries and sectors are more influential than others in determining the course of the process. The null hypothesis is that the process is independent of prior decisions in all or some sectors and countries.

Social learning or social emulation: The next set of variables we introduce aims to capture the extent to which learning from the prior performance of others is part of the diffusion process. We have created three lagged variables that aim to capture the effect of past performance. These variables are interaction terms between the number of regulatory authorities in a country (sumcountry) and (a) the rate of growth of other economies (SOCLEAGRTH); (b) the extent to which they attract foreign direct investment (SOCLEAFDI); and (c) the rate of change of private investment (SOCLEINV). If better performance in terms of growth, attraction of FDI and increase in private investment are related to the creation of these regulatory agencies, we expect the effect of emulation to be weakened and to show some significant effects on the probability of establishing new regulatory authorities. Admittedly, these two performance indicators are measured at the macro level while many of the reforms have more direct sectoral rather than economy-wide effects. We intend to refine these performance measures in future versions of the paper.

Resources and the adoption of regulatory authorities: We examine the effects of economic resources on the probability of the creation of regulatory authorities by the lagged gross domestic product per capita (Gdppc95l) of a country. The literature suggests here two conflicting expectations. We may expect poorer countries to be more vulnerable to pressures to reform their sectors (if adoption is coercive) but also to lag behind because of lack of resources (we know from diffusion research across the American states that rich states innovate faster: Walker 1969; Gray 1973). This situation is usually explained by the fact that richer states have more slack resources, rendering policy experimentation easier and the risk of failure less severe (Orenstein, 2003, 173-4).

Democracy and democratization: Since various studies have shown that liberalization is significantly connected with democratization and that being a democracy positively increases the probability of liberalization, we examined here, using the Polity IV database, the effect of the level of democracy (POLITY). The polity index is composed from an index of 11 points of democratic characteristics and 11 point of autocratic characteristics. Our variable Polity captures the difference between these indices and takes on values ranging from 10 for highly democratic countries to –10 for highly autocratic countries. In addition, we included a three-year-lagged variable of change in the level of democracy (DCHANGE) in order to examine how the dynamics of democratization affect the creation of regulatory authorities.

Political constraints (veto points)**:** In order to capture some of the structural characteristics of countries and to examine how they affect the probability of creating regulatory authorities, we use Witold Henisz's Political Constraints Database that covers all our countries up to 2001. Henisz's database presents a measure of the extent to which political actors at the national level are constrained as to their choice of future policies. The variable POLCON3 indicates the degree of constraint on policy change using data on the number of independent veto points in the political system (executive, legislative, judicial and sub-federal branches of government) and the distribution of political preferences both across and within these branches (Henisz, 2000, 4).

Trade orientation: Openness to international trade is a characteristic measure of a country's economic and political orientation and of its embeddedness in the world economy. Economists and liberals always hailed its benefits, and in essence it was, even in the postwar years, a defining characteristics of the economic order outside the Soviet bloc. Degrees of openness matter, or are supposed to matter, both over time and across nations. Trade policy nowadays is less 'managed' and 'protectionist' than in the postwar period (Guisinger, 2003; Milner, 2001), and some countries and sectors are more open than others. Here we capture the variations in the levels of trade openness and the dynamics of this change in order to examine how a country's propensity for trade liberalization affects its propensity to create regulatory agencies. We use in this paper the most widespread measures for trade liberalization for the years 1979-2000– trade as a ratio of GDP (TradeGDP). This measure is the sum of exports and imports of goods and services as a share of gross domestic product. In later stages we will consider other measures of trade openness in order to strengthen the reliability of the result (for an excellent review of the various measures of trade liberalization see Guisinger, 2003).

***Vulnerability to external political and economic pressures*:** Countries vary in their vulnerability to external pressure from hegemonic countries, that is, the United States, and from international financial institutions. We use two preliminary measures that serve as proxies of a country's vulnerability. The first relates to its dependency on international aid and the second to its ability to finance its debt. We have three measures of international aid: aid per capita (aidpercapita), aid as a percentage of central government expenditures (aidcge) and aid as a percentage of imports of goods and services. The debt measures that we employ are debt service as a percentage of central government current revenues (TDSperGovRev) and covariate of present value of debt as a percentage of exports of goods and services (TDSperExport). If the rise of the regulatory state is a product of international pressures from donors and international financial institutions, we expect these measures to capture those pressures.

The logic of privatization? Regulatory authorities are said to provide some form of public control over private action where other forms of economic control – mainly market competition - fail. We ask to what extent the variations in the probabilities of establishing new regulatory authorities are determined by the decision to privatize. Reading the literature on regulatory reforms, we expect regulatory authorities to be associated positively and strongly with reforms in general and privatization in particular. Our privatization data is derived from two major sources. First is our own database, which includes information about the timing of the first privatization event in three economic sectors (telecoms, electricity, gas). Second is the World Bank's privatization transaction database, which records the privatization transactions for developing countries for the period 1988-99.[35] Using our own database, we constructed a two-year–lagged binary covariate of the first privatization event for the four sectors for which we had data on privatization (electricity, gas, telecoms, water). This variable (privnowl) was coded 1 for the years of privatization in the four sectors on which we had data. We also constructed a two-year-lagged binary covariate (privnowcl) that captures the first time in which a country was 'infected' by privatization in these four sectors.

This variable was coded 1 in the year the first privatization occurred in one of the four sectors of which we had data and therefore indicates a country first jump on the privatization bandwagon. In addition, we constructed two more privatization variables on the basis of the World Bank privatization transactions database. The first variable is a one-year-lagged variable (PrivTranNl), which captures the number of privatization transactions in a country, while the second captures the revenue from these transactions as a percentage of the Gross Domestic Product (PrivRevGDPPer) for the period 1988-99.

RESULTS: EMULATION AND LEARNING IN A CONTAGIOUS DIFFUSION PROCESS

The results of our analysis are presented in Table 2. We present four different models that include the same diffusion variables but progressively examine additional aspects of the diffusion process. Model 1 includes only the diffusion variables and the measure of country economic resources. Model 2 adds three social learning proxies that are based on time-varying variables that capture the interaction between prior decision to establish regulatory authorities and economic performance with regard to growth, FDI and private investment. Model 3 adds measures of political constraints, trade orientation and economic and political vulnerability. Model 4 adds democracy and privatization measures.

What is evident from the table is that the results are very encouraging, though by no means free of difficulties. Not only do we document the process of the diffusion of regulatory authorities and the rise of the Regulatory State in Latin America for the first time (as far as we are aware) but we are also able to demonstrate, in yet another arena, the importance of contagious diffusion. The best predictors of the creation of new regulatory authorities are the numbers of others and significant others who did so (leading countries and sectors). Interestingly enough, the results are stable across three of our four models and the effects of sectoral diffusion are significant and strong throughout all the four models. Figure 1 illustrates the predicted probabilities for the establishment of new regulatory authorities as a function of the number of regulatory authorities in the same country against the number of regulatory authorities in the same sector in other countries (all other variables were kept at their mean). The stronger effects of sectoral diffusion, that is, of what other countries do in the same sector over what the same country did in its own sector, are evident from the rise of the line to the front corner on the left.

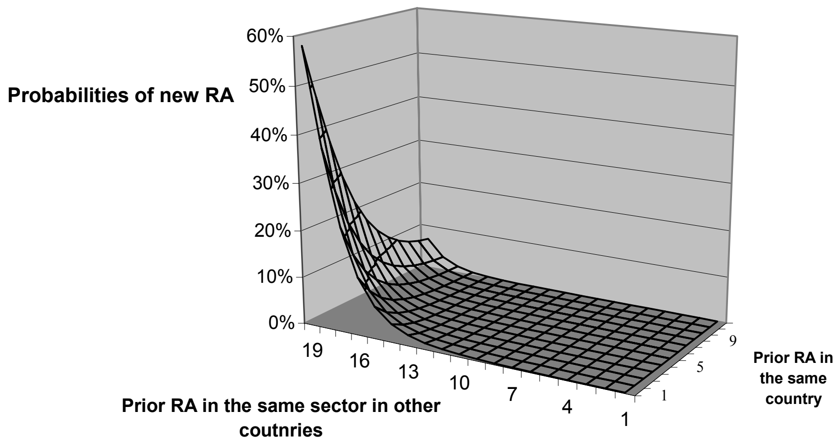
Table 2: The Diffusion of Regulatory Authorities in Latin America 1979-2002

Effects on the Hazard Rate of Creation of Regulatory Authorities (logistic regression)

	Model 1	Model 2	Model 3	Model 4
Diffusion				
sumall	0.045 ***	0.047 ***	0.057 ***	0.016
	(0.013)	(0.017)	(0.02)	(0.025)
sumcountry	0.329 ***	0.735 **	0.748 **	0.354
	(0.12)	(0.25)	(0.3)	(0.311)
sumsector	0.485 ***	0.525 ***	0.617 ***	0.66 ***
	(0.09)	(0.11)	(0.123)	(0.133)
sumall2	-0.0004 ***	-0.0005 ***	-0.0005 ***	-0.0003
	(0.00009)	(0.0001)	(0.0001)	(0.0002)
sumcountry2	-0.03 **	-0.055 **	-0.08 ***	-0.065 **
	(0.014)	(0.021)	(0.027)	(0.02)
sumsector2	-0.017 ***	-0.022 ***	-0.03 ***	-0.03 ***
	(0.006)	(0.007)	(0.008)	(0.008)
cleaderar	1.448 ***	1.33 ***	0.857	1.08
	(0.44)	(0.51)	(0.62)	(0.7)
sleadercb	0.56 *	0.567	0.276	0.252
	(0.32)	(0.37)	(0.43)	(0.47)
<u>Economic Resources</u>				
Gdpc95l	0.359	0.3	-0.58	0.04
	(0.344)	(0.47)	(1.01)	(1.2)
Learning				
SOCLEAINV		-0.003	-0.002	-0.001
		(0.003)	(0.0034)	(0.003)
SOCLEAFDI		0.006 *	0.008 **	0.01 ***
		(0.003)	(0.0037)	(0.004)
SOCLEAGRTH		-0.017 *	-0.022 **	-0.022 *
		(0.01)	(0.01)	(0.012)
PRIINV		0.028 **	0.06 ***	0.04 ***
		(0.011)	(0.015)	(0.015)
FDI		0.005	0.01	-0.07
		(0.013)	(0.018)	(0.02)
GRTH		-0.02	-0.03	-0.043
		(0.032)	(0.036)	(0.042)
<u>Political Constraints</u>				
Polcon3			2.06 **	2.34 *
			(1.009)	(1.22)

Trade Orientation				
TradeGDP			-0.006	0.012
			(0.01)	(00.14)
Economic and Political Vulnerability				
aidcge			-0.014	-0.027
			(0.03)	(0.03)
aidimpt			0.079 *	0.04
			(0.047)	(0.054)
aidercapita			-0.036 *	-0.03
			(0.022)	(0.023)
TDSperGovRev			0.008	0.004
			(0.012)	(0.014)
TDSperExport			0.023 *	0.053 ***
			(0.013)	(0.019
Democracy				
polity				0.04
				(0.074
dchange				-0.08
				(0.127
Privatization				
privnowl				1.28 ***
				(0.39
privnowcl				1.24 ***
				(0.39
PrivTranNl				-0.003
				(0.017)
PrivRevGDPPER				-0.000001
				(0.000002
Constant	-6.905 ***	-8.9 ***	-9.41 **	-11.46 ***
	(1.18)	(1.73)	(3.8)	(4.5)
Chi squared	213.11	184.67	186.8	148.72
Prob > chi squared	0.0000	0.0000	0.0000	0.0000
Log Likelihood	-450.91	-346.5	-268.91	-224.6
Pseudo R-squared	0.19	0.21	0.258	0.25
No of Observations	4151	2825	2350	1276

Figure 1: Predicted Probabilities of Establishing Regulatory Authority
(as function of prior sectoral decision in other countries and in the same country/ Model 1)



Before suggesting some explanations for this interesting result, let us explore the effects of the dummy variables for sectors and countries. While we have checked the effects of 19 country dummies and 12 sectoral dummies, we chose to present the effects of only two: the dummy for Argentina and the dummy for central bank reforms. What is clear from the results is that the establishment of regulatory authorities in Argentina (9 sectors out of the 12 studied were reformed between 1990 and 1992) had a strong positive effect and across two of the four models the results are significant at the 0.01 level. Central bank independence has a significant and positive effect in Model 1, but the reliability of this effect in the other three models is not clear. Note the complexity of these results. While sectoral diffusion in general is greater than within-country diffusion, the most influential country, Argentina, has stronger effects on the probability of establishment of new regulatory authorities in other countries than the effects of reforms of central banks on the creation of regulatory authorities in other sectors. These results confirm our suggestions that sectors and not only countries matter. We know that the effects of diffusion within sectors are positive and strong, and in order for reforms in central bank to affect reforms in other sectors, we need to observe a similar strong effect within countries. Alas, this is not what we have observed. Nonetheless, the establishment of so many regulatory authorities in one big bang during the early 1990s in Argentina confirms the alternative expectations, derived from the NPA, of a distinct national approach to the issue of reforms. We therefore suggest three intermediary conclusions. First that diffusion matter. The behavior of others is an important predictor of the establishment of regulatory authorities. Second, in order to understand the rise of the Regulatory State, one needs to combine the NPA and the PSA in order to get a refined picture of the reforms. Third, the role of significant others was not confirmed. Neither the results for Argentina, nor the result for Central Bank reveal consistent effects on the probability of establishing new regulatory authorities. While we cannot rule out the effect of countries outside the region (e.g., Britain) on the decision to establish new regulatory authorities, our hypothesis on the role of contagious diffusion stand our test.

The second model introduces some proxies of learning. These proxies are meant to capture the instances in which policy-makers are not only looking at what others are doing but also at the effects of those actions. Unlike emulation processes, this situation involves conditional transfer of control and, in the context of collective action, deserves to be described as learning. What we found, however, is that one of these measures is not significant but the two others while being significant have different signs. While the lagged effects of the growth performances and the number of regulatory authorities (SOCLEAGRTH) is affecting negatively the probability of the creation of regulatory authorities. Better growth performance and more regulatory authorities reduce rather than increase the probability of establishing new authorities for those countries and sectors where a regulatory authority was not established. The effects of foreign direct investment are positive and are in accordance with our expectations. Could it be that learning is focused on investment rather than growth?. While this might be possible, we feel that the proxies that we supply are rough and one cannot reject or confirm the possibility of learning processes on the basis of these measures. We can say tentatively that, while we could obtain support for the emulation hypothesis, such support is still lacking for the learning hypothesis.

Let us now move to the 'usual suspects' in comparative political economy and first of all to the measure of political constraints that is taken from Henisz database (polcon3). What we know about veto points and fragmentation of the policy process leads us to expect that countries which are characterized by more political constraints will find it more difficult to change their policies and therefore are expected to be found less likely to establish regulatory authorities than countries that are less 'constrained'. Our results here are puzzling. The covariate Polcon3 has strong and positive effects on the probability of establishing new regulatory authorities. Political environments that limit the feasibility of policy change are positively connected with the creation of regulatory authorities. We do not have at this stage a good explanation for this result and intend to explore the result via the introduction of more measures of constraints. The trade orientation of a country was not found to be a significant predictor of countries' propensity to establish regulatory reforms. Countries that are more embedded in the international economy do not create more regulatory authorities than countries that are not. Again, this measure should be refined in order to capture patterns of trade (for example, does the result hold when trade in industrial goods is examined separately from other goods?).

The group of covariates that serve as a proxy for countries' vulnerability to international economic and political pressures (aid and debt service) do not supply strong support the top-down explanation for of the diffusion of regulatory authorities. Some of the covariates even show a negative sign, that is, the more aid a country receives and the greater the debt as a percentage from government revenue, the less likely it is to create a regulatory authority. The debt indicators have the right sign, meaning, more the debt burden the higher is likelihood of new regulatory authority yet the results hold only as to one of the indicators. The results are not surprising against the background of other studies that found that, on issues that are even more prone to international pressures than the issue of the creation of regulatory authorities, coercion or pressure from the top did not get support. For example, Guisinger found that both member and nonmembers of the World Trade Organization moved in the 1980s and the 1990s towards more trade liberalization (Guisinger, 2003, p.8). Meseguer found that coercion was not positively related to the probability of privatization in Latin America and the OECD (Meseguer, 2003, p. 3). Brune and Garrett found that indebtedness to the IMF is not a good predictor of privatization (Brune and Garrett, 2000). Conditionality terms of the IMF and the World Bank's loan arrangements were not decisive forces in shaping countries' decisions to liberalize (Vreeland, 2003; Edwards, 1997). What we are suggesting here is not that international organizations, donors countries and hegemonic countries like the United States are not important, but that they are only part of the story. Moreover, against the evidences as to the effects of horizontal diffusion, it might be useful to consider the role of international organizations not only from a top-down perspective but also as platforms for ideas dissemination and thus treat them as part of the contagion process. If the world is indeed shrinking and compressed, these international institutions should be more embedded in national and sectoral policy communities.

Nor did we find any support for the view that democracy as a regime and democratization as a process of change affect the process the diffusion of regulatory authorities. If anything, the negative sign of our variables suggests that they might well be less likely to affect positively the diffusion of regulatory authorities. Significant and strong effects on the probability of the creation of regulatory authorities are visible from the data on privatization. Countries' decisions to privatize are positively and significantly associated with the creation of regulatory authorities. The effects were shown to be significant across both Model 3 and Model 4, not only when the effects of sectoral privatization (privnowl) are considered but also when we examined a country's propensity to create regulatory authorities (privnowcl) by coding a country as privatizer when the first privatization occurred in one of the four sectors on which we had data. Thus, a country's propensity to create regulatory reforms is best captured by the privatization and the political constraint measures (although in different directions from what was expected).

CONCLUSIONS

What we have documented in this paper, for the first time, is a new and potentially the most important and long-term feature of the restructuring of the Latin American state. New regulatory agencies serve as new mechanisms of economic governance in the region and thus open a new chapter in business-government relations. This is not a trivial matter; the effect of these authorities may last well beyond the effects of liberalization policies and other state reforms. While the process is stronger in the sphere of economic regulations, we do not have any reason to doubt that its time will come also in the arena of social regulation (not least because of diffusion effects and early evidence of change in these sectors in some countries).

While the primary purpose of this paper has been to present and document the little-known rise of the Regulatory State in Latin America, it has had two more aims as well. We placed the rise of the Regulatory State in the context of a diffusion perspective and have argued that it is only from this perspective that we an explain why, in the short period from 1993 to 1996, 60 autonomous regulatory agencies were established across so many sectors and counties in Latin America. The metaphor of mushrooms burgeoning after the rain is obviously appropriate when one thinks about the explosion in the number and scope of autonomous regulatory authorities; but, unlike with mushrooms and rain, we demonstrated causality that runs, not from any exogenous force to the creation of new regulatory authorities, but from one regulatory authority to another. In other words, we endogenize the process of change. Our findings correspond to those of a growing body of literature that has documented the effects of contagious diffusion in different contexts such as IMF loans (Przeworski and Vreeland, 2000, 394), telecoms and electricity privatization and regulation around the world (Levi-Faur, 2001), central bank independence (Castro and McNamara, 2003), privatization (Brune and Garrett, 2000; Meseguer, 2003), financial liberalization (Simmons and Elkins, 2000; 2003; Way, 2003), constitutional reforms (Elkins, 2001), delegation in Western Europe (Gilardi, 2003a), pensions (Brook, 2003; Orenstein, 2003), international trade (Guisinger, 2003) and even democracies (Gleditsch and Ward, 2003). In harmony with this evolving body of literature, we suggest that the traditional comparative approach, which treats change as exogenous, should examine endogenous sources of change, particularly how the probability of adoption of innovation (idea, norm, organization, preference) depends on prior decisions of others and significant others. We have also suggested that the effects of international organizations and US hegemony are better understood in the context of group processes and the soft power of influential peers and group dynamics, represented by the sheer numbers of others. We also suggest moving the discussion from the sphere of the power of money to the power of ideas, from a 'realist point of view' to a more constructivist and sociological one. In such a setting, ideas about best practice are diffused through networks of policy-makers and epistemic communities. It is the sociology of knowledge rather than interest politics that is most able to explain the diffusion of regulatory authorities in Latin America, and probably elsewhere. We expect interest and power to be more salient and dominant in the implementation process and to be revealed only through a close and case-oriented analysis of the correspondence between the blueprint and the fine print of the adopted innovation.

Our particular analytical contribution to the diffusion literature is the distinction between sectoral and national patterns of diffusion and a particular research design that makes it possible to study them together. Probably our most interesting finding is the importance of sectoral patterns of the spread of reform. The particular flow of diffusion is from a sector in one country to the equivalent sector in another country rather than between sectors within one country. Diffusion in Latin America occurs in the context of sectoral change, and we suggested that this might serve as evidence for the particular role of policy emulation in the spread of the reform and, accordingly, that it discredits the policy-learning perspective. While we have identified a process of 'social learning', the most prominent component of this process was emulation, and we could not confidently point to evidence of 'learning' in the sense that the followers' observations also took into account the effects of change in the structure of the state on growth and foreign and private investment. In short, we are skeptical about the claim that the process of change is essentially about learning. It is not that countries cannot learn but that their capacity to do so, especially under the economic, political and social conditions in Latin America, should be considerably enhanced before a significant improvement in their performance becomes visible. At the moment, even the 'willing pupils', to use the notion of Jacoby (2001, 170), are essentially imitating the rich countries. The rich and powerful countries are at the moment not only telling the poorer ones what are the solutions to their problems; they are also defining and telling them what their problems are.[36]

Finally, we believe that the emulation-driven spread of regulatory reforms across Latin America is only one manifestation of a larger category of collective behavior that is often undervalued by scholars and thus goes largely unnoticed. We label that public policy phenomenon ‘herding’ and suggest that in many political situations one’s choice is determined not only by one’s own preferences and information but also largely by signals of others (Bikhchandani, Hirshleifer and Welch, 1992). These signals shape the behavior and beliefs of individuals, groups, and nations since they supply certainty in an uncertain world, help to distinguish right from wrong, and provide criteria for acceptable social behavior. In effect, these signals carry information that may alter the receiver’s preferences and persuade him to re-evaluate his utility.[37] When these signals lead to a convergence of large groups of agents on common actions or beliefs, it might be useful to apply the notion of ‘herding’ or ‘herd behavior’ to the phenomenon (Levi-Faur, 2001). This process of signaling and decoding creates a wave-like pattern of adoption of the reforms. This wave originates in a bold reform adopted in one nation (the innovator), is legitimized by another nation that serves as trend-setter (often but not necessarily the innovator), and then attracts the attention of other countries, which we identify as the herd. At this stage the behavior of others, and not necessarily local economic, social and political conditions, determines the behavior of the adopter, who in effect is engaged in the ‘transfer of control’ to the group in general and the trend-setters in particular. Post-decision justifications for the adoption of the reforms are brought forward at this stage by the adopter and a new convention is generated to justify group behavior.[38]

List of Graphs, Figures, Tables and Appendixes

Appendix A: Summary of Variables and their sources

Variable	Measure	Source
RANOW (dependent variable)	Establishment of RAs. Dummy variable that takes the value of 1 for each year (1979-2002), sector (12) and country (19) when RA was established.	Authors' LA regulatory database
sumall, sumall2 (diffusion variable)	Covariate of the number of RAs created in each prior year (1979-2001) before the creation of a RA in each country (19) and sector (12) [sumall2 is a squared measure of sumall]	Authors' LA regulatory database
sumcountry, sumcountry2 (diffusion variable)	Covariate of the number of RAs created in each country before the year where a new one was established. [sumcountry2 is a squared measure of sumcountry]	Authors' LA regulatory database
sumsector, sumsector2 (diffusion variable)	Covariate of the number of RAs created in the same sector in other countries before the creation of a new one in that same sector. [sumsector2 is a squared measure of sumsector]	Authors' LA regulatory database
Gdppc95l	Covariate of the a country GDP per Capita, in 1995 dollars, logged	WDI [World Development Indicators, 2002]
clear[country abbreviation]	19 Countries dummies [we presentthe result only for Argentina: cleaderar_	
sleader[sector abbreviation]	12 Sectoral dummies (we present the result only for Central Banking: sleadercb)	
SOCLEAINV	Interaction terms between the number of authorities in a country in each year and the 2 years lagged performances in terms of private fixed investment as percentage of gross domestic fixed investment	Authors' LA regulatory database and WDI
SOCLEAFDI	Interaction terms between the number of authorities in a country in each year and the 2 years lagged performances in terms of foreign direct investment(net inflows) as percentage of gross capital formation.	Authors' LA regulatory database and WDI
SOCLEAGRTH	Interaction terms between the number of authorities in a country in each year and the 2 years lagged performances in terms of annual GDP growth	Authors' LA regulatory database and WDI
PRIVINV	Private fixed investment as percentage of gross domestic fixed investment.	WDI
FDI	Foreign direct investment, net inflows as percentage of gross capital formation	WDI

GRTH	GDP growth (annual %) at market prices based on constant local currency. Aggregates are based on constant 1995 U.S. dollars.	WDI
Polcon3	Covariates of Countries veto points and distribution of preferences across and within the government branches.	Witold Henisz Databas; (Henisz, 2000).
TradeGDP	The sum of exports and imports of goods and services measured as a share of gross domestic product.	WDI
aidpercapita	Official development assistance and net official aid record the actual international transfer by the donor of financial resources or of goods or services valued at the cost to the donor, less any repayments of loan principal during the same period (current US$)	WDI
aidcge	Aid as percentage of central government expenditures. Official development assistance and net official aid record the actual international transfer by the donor of financial resources or of goods or services valued at the cost to the donor, less any repayments of loan principal during the same period.	WDI
aidimpt	Aid as percentage of imports of goods and services. Official development assistance and net official aid record the actual international transfer by the donor of financial resources or of goods or services valued at the cost to the donor, less any repayments of loan principal during the same period. Aid dependency ratios are computed using values in U.S. dollars converted at official exchange rates.	WDI
TDSperGovRev	Covariate total debt service as percentage of central government current revenue. The measure captures the public and publicly guaranteed debt service (the sum of principal repayments and interest actually paid on long-term obligations of public debtors and long-term private obligations guaranteed by a public entity) as percentage of central government current revenue.	WDI
TDSperExport	Covariate of present value of debt as percentage of exports of goods and services	WDI
POLITY	Time covariate of democratic characteristics of a country minus its autocratic characteristics.	POLITYIV Database (Jaggers and Marshall. 2000)
Dchange	Time covariate 2 years lagged variable of the change in the level of democracy	POLITYIV Database
privnowl	Binary covariate that represents privatization in the sector (data only for electricity,	Authors' LA

	telecoms and gas), lagged 2 years	Regulatory Database
privnowcl	Binary covariate that represents the earlier privatization among the above three sector for a country, lagged 2 years	Authors' LA Regulatory Database
PrivRevGDPPer	Privatization Revenues (US$ current mil)/ GDP (%)	World Bank Privatization Transactions Database 1988-1999 (WBPTD)
PrivTranN	Number of privatization transaction per year	(WBPTD)

Appendix on Data

Countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela.

Sectors: Competition, Telecoms, Electricity, Gas, Water, Post, Central Banking, Securities and Exchange, Financial Service, Food Safety, Pharmaceutical, Environment.

Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
sumall	5328	44.6464	44.97642	2	125
sumcountry	5328	2.36036	3.04956	0	11
sumsector	5328	3.720533	4.862341	0	17
sumall2	5328	4015.8	5541.124	4	15625
sumcountry2	5328	14.86937	26.36458	0	121
sumsector2	5328	37.48029	73.00801	0	289
Gdpc95l	5181	3.328234	.3000208	2.611192	3.927504
cleaderar	5328	.0540541	.2261456	0	1
sleadercb	5328	.0833333	.2764113	0	1
SOCLEAINV	4068	207.267	252.8522	0	1056
SOCLEAFDI	4524	35.62833	76.30498	-8.9304	538.136
SOCLEAGRTH	4596	5.797754	15.56188	-62.5072	76.524
PriInv	4068	69.11976	13.28142	0	96.9
FDICapFor	4704	9.373511	12.49805	-14.114	67.267
GDPPCGRTH	4596	1.231066	4.758344	-28.733	15.897
polcon3	5106	.3019409	.1931051	0	.6547363
TradeGDP	4824	49.89826	21.40124	11.5	126
aidcge	5184	11.28957	20.10051	-.45616	175.64

aidimpt	4716	6.797453	10.36522	-.68444	69.914
aidpercapita	4824	24.22423	31.30277	-2.7723	212.5
TDSperGovRev	3744	26.30679	16.54529	1.17	137
TDSperExport	4752	27.87256	17.73688	.284	152
polity	5184	4.75	5.632586	-9	10
dchange	5121	.0732279	.9778344	-11	16
privnowl	5328	.0658784	.2480927	0	1
privnowcl	5328	.3986486	.4896661	0	1
PrivTranNl	2700	5.266667	9.980938	0	58
PrivRevGDP~r	2592	1.11e-10	5.91e-10	0	6.74e-09

Notes

[1] Of course, the notion of the Regulatory State carries distinct implications that at least partly contradict alternative notions such as the Competition State, the Neoliberal State and the Hollowed State.

[2] On the logic of 'appropriateness', see March and Olsen (1989) and, with particular application to the sphere of regulation, Lodge (2002). The consensus about the appropriateness of regulatory regimes is not unique for these sets of agencies and is also observable to other items on the liberalization agenda.

[3] These agencies are often called 'independent', but a more proper label might be 'autonomous' both because the notion of independence is conceptuality problematic but also because only 102 of 134 agencies are nominally independent, and in most of these cases the degree of independence is often doubtful. These authorities are observable because they were established as a result of dedicated legislation and because they have some organizational autonomy from the ministry or the core parts of the executive.

[4] Compare: 'Serious study of Independent Regulatory Authorities must include both cross-sectional and longitudinal dimensions. First, cross-national and cross-sectoral variations must be investigated. Why is delegation more extensive in some countries and some sectors rather than in others' (Gilardi, 2003b, p.2)

[5] We define diffusion as 'the process by which an innovation is communicated through certain channels over time among members of social system. It is a special type of communication in that the messages are concerned with new ideas' (Rogers, 1995, 5). The notion of international diffusion assumes that there is an 'international society' of policy-makers and professionals. Note that not all diffusions are contagious, in the sense of operating via group processes of influence, but only some of them. Note the difference with the non-sociological definition of policy transfer:

"Policy transfer, emulation and lesson drawing all refer to a process in which knowledge about policies, administrative arrangements, institutions, etc. in one time and/or place is used in the development of policies, administrative arrangements and institutions in another time and/or place." (Dolowitz and Marsh, 1996, 344)

[6] It is important to note that in the cases of both learning and emulation we are dealing with a conception of the actor that is rational and to a certain degree irrationality is excluded from the research agenda.

[7] The consensus as to the high costs of the reforms is expressed in the words of Mario Soares in 1983 upon taking office as prime minister of Portugal: 'This Government will be austere, uncompromising, and unpopular if that is what is required to achieve economic recovery' (cited in Rodrik, 1996, 9).

[8] This was observed also by Rodrik: 'What is remarkable about current fashions I economic development policy… is the extent of convergence that has developed on the broad outlines of what constitutes and appropriate economy strategy' (Rodrik, 1996, p.9).

[9] See also Remmer: 'Neoliberal or market oriented reform programs were viewed as inherently unpopular, politically hazardous, and consequently dependent upon the existence of strong and relatively autonomous authoritarian governments. Through time these notions have been revised or at least diluted on the basis of additional evidence. Authoritarianism is no longer viewed as a critical prerequisite for the adoption of market-oriented policies…' (Remmer, 1998, 4), and 'Prior research on the economic policy choice and performance in Latin America has placed significant emphasis upon the tension between economic and political rationality' (Remmer, 2002, 31). One cannot understand the 'ideational turn' and indeed the institutionalist approach in comparative politics (see Blyth, 1997) without the decline in the popularity of coercive explanations.

[10] Oversupply of cooperation is evident in herding situations, as was formalized by the herding literature (Bikhchandani, Hirshleifer and Welch, 1992; Levi-Faur, 2001). The often substantially hollow cooperation frenzy among countries is a major example for the oversupply of cooperation.

[11] Other approaches are the Temporal Patterns Approach (TPA) and the International Regime Approach (IRA) (see Levi-Faur, 2004b).
[12] In the field of comparative public policy, it is the policy networks and meso-corporatism literature that best represent the policy sector approach. They call for a disaggregated view of the state, of the network of policy-making, and of the national level of policy-making (Atkinson and Coleman, 1989).
[13] Learning is difficult to define. See, for example, a typical definition from the psychology of learning: 'the term *learning* generally refers to the effect on behavior of certain types of interactions between the individuals and the environment, which includes all sources of stimulation impinging on the individual's sense receptors within a given period' (Pear Joseph, *The Science of Learning*, Psychology Press,2001, p. 3).[1] We are also not concerned with 'learning by doing', that is, learning from one's own experience, which may be an important part of social learning processes but requires some degree of insulation from external lessons.
[14] Social learning is confusing terms in our context of a distinction between emulation and learning. Yet, since it so popular in the literature we decided to stick to it.
[15] Much of the literature in economics and political science fails to make this important distinction. Gale, for example, defines social learning as 'any situation in which agents learn by observing the behavior of others' (Gale, 1996, 617). Vives (1996, 589), in the same issue of *European Economic Review*, defines social learning as 'the process by which certain mechanisms in society aggregate the information of individuals. People do learn from other people, most particularly from their actions'.
[16] Such a heavy demand on the definition of learning is typical of Bayesian learning process, as formulated and applied to the study of policy by Meseguer (2002). Meseguer's learning process is based on the assumption that governments update their initial beliefs about the expected results of alternative policies in the light of all available information about policy outcomes in the past and elsewhere. After updating their beliefs, they opt for the optimal policy in terms of growth (Meseguer, 2002, 3). For example, positive economic growth after privatisation would signal to potential adopters of privatisation policies that privatisation is desirable, while negative growth would signal the opposite.
[17] Some significant others are not leaders: for example, Portugal may be the significant other for Brazil (or vice versa) but not for Argentina or Spain. These significant others may be selected not on their current performances or expertise in the relevant issue but on their prior achievements or performances.
[18] There is no guarantee that learning will result in success and emulation in failure. Learning may be at best a necessary but not a sufficient condition for success. For example, a Latin American country can be an 'excellent pupil', but regional conditions of dependency or frequent monetary crises can result in failure. By contrast, the simple fact that a country in East Europe is a candidate for membership of the European Union may allow its policy-makers to emulate rather than learn and still do reasonably well.
[17] Recent classification of the region's regimes classified 12 countries as democracies and five as semi-democracies (Mainwaring, Brinks and Perrez-Linann, 2001). The polity mean for the region in 2000 is 6.8 in scale of –10 to 10.
[18] Cf. 'Throughout the literature …there is an underlying concern over the tension between democracy and economic reform…' (Bradford, 1994, 19).
[19] Institutional economists probed much more comprehensively into issues of regulation in Latin America. Notable is the work of Pablo Spiller and his colleagues (Levy and Spiller, 1996; Spiller, Stein and Tommasi, 2003). However, these studies are usually case-oriented, and when comparative they include comparisons across countries with little attention to cross-sectoral analysis. One indication for the relative neglect of the study of regulation in the Latin American context is a recent collection of studies on administrative reforms that focused mainly on Latin America (Ross–Schneider and Heredia, 2003). Regulatory reforms in this otherwise excellent collection receive no attention from the contributors or the editors.

[20] To some extent, the study of regulation and regulatory reforms is the victim of attention on ownership reforms and the somewhat belated recognition of the importance of regulation in the context of privatization.
[21] Majone's terminology refers to the transformation of the positive state into the Regulatory State. We prefer to conceptualize the post-war state not as the positive state but as the Service Provision state (the regulatory state was and can be very positive).
[22] Between 1984 and 1993 Conservative governments in Britain established no fewer than 12 regulatory authorities.
[23] All countries studied (with the notable exception of Panama) had independent central banks (although less independent than many neo-liberals desired) long before the rise of monetarism.
[24] True, as some were only too happy to point out, American business interests supported some forms of regulation (especially at the federal level), but this support hardly contradicts our argument.
[25] The basic point of departure for the rise of the regulatory state is the crisis-driven context of Latin America as against the integration-driven context of Europe. In a context of crisis, introducing reforms is risky; they are seen as a part of the necessary changes to solve the crisis, and need short-term results to be legitimised. The many rapid policy decisions in Latin America, taken under tremendous pressure from profound economic and political problems, are very different from the typically consensual and slow policy-making processes in Europe. In many cases, regulatory reforms in Latin America were established as state reform priorities after the persistent failures of public monopolies, in many cases aiming to inject dynamism into stagnant economies.
[26] Indeed, our research agenda for the near future includes extension of the scope of the database.
[27] On the notion of regulation-for-competition, see Levi-Faur (1999) and, with further elaboration, Jordana and Levi-Faur, 2004).
[28] Time-varying variables are variables that change over time (such as GDP per capita or prior decisions to establish regulatory authorities). Censored data reflect the existence of episodes that were not yet completed or on whose history we have only partial data. We distinguish between left censoring, in which the starting time of an event is not clear, and right censoring, which occurs when the event is still unfolding (for example, the diffusion of regulatory authorities is still going on in Latin America).
[29] Observations on the dependent variable are coded 0 for each year until the year of the establishment of the RA and 1 for the year of establishment and after.
[30] 12 sectors times 18 countries times 24 years plus, for Cuba, 12 sectors time 12 years.
[31] One important limitation of this kind of data is that prior decisions that fall within the calendar year cannot be identified and counted. We believe, however, that, since the legislation process is relatively long and less salient across borders than the final outcome, this does not represent a serious problem for our analysis.
[32] The database provides data on the number of transactions per year and country and the revenue per transaction.
[33] The implication in terms of information theory is that 'the attempt by agents to take advantage of the information of others can lead to the failure to exploit their own information in a socially optimal way' (Gale, 1996, 617). Mukand and Rodrik (2002) emphasize that sometimes the presence of a successful leader generates an informational externality and results in too little 'policy experimentation' and therefore failure of development.
[34] It is important to recognize that in herding processes the final outcome is not necessarily shaped by the average of group preferences but by the dynamic of herding (Schelling 1978. Granovetter, 1978)
[35] By 'convention' we mean stable patterns of behavior that are customary, expected, and self-enforcing (cf. Young, 1996, 105)

References

Allison, Paul D. (1984) *Event History Analysis and Regression for Longitudinal Event Data*. Beverly Hills, CA: Sage.

Atkinson, M. M. and Coleman, D. W. (1989) Strong States and Weak States: Sectorial Policy Networks in Advanced Capitalist Economies, *British Journal of Political Science*, Vol. 19, 47-67.

Baker Andy, (2001) *Why is Trade Reform so Popular in Latin America?*, Prepared for presentation at the 2001 meeting of the American Political Science Association, August 30-September 2, San Francisco, California.

Bernstein, Marver H. (1955) *Regulating Business by Independent Commission*, Princeton: Princeton University Press.

Berry Frances and Berry William (1999) Innovation and Diffusion Models in Policy Research In Sabstier Paul (Ed). *Theories of the Policy Process*, Boulder, CO: Westview Press, pp. 169-200.

Biglaiser Glen and Danis Michaelle (2002) Privatization Under Democracy Versus Authoritarian Rule *Comparative Political Studies*, 25(1). pp. 83-102.

Bikhchandani Sushil, Hirshleifer David and Welch Ivo, (1992). A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades, *Journal of Political Economy*, Vol. 100, pp. 992-1026.

Blyth Mark (1997) Any More Bright Ideas?: The Ideational Turn of Comparative Political Economy, *Comparative Politics*, Vol. 29(1). pp. 229-250.

Box-Steffensmeier Janet M. and Bradford S. Jones (1997) Time Is of the Essence: Event History Models in Political Science, *American Journal of Political Science*, Vol. 41(4), pp. 1414-1461.

Brooks, Sarah (2003) *Interdependent and Domestic Foundations of Policy Change: The Diffusion of Pension Privatization around the World*. Unpublished Manuscript.

Bradford, Colin I (1994). *Redefining the state in Latin America*, Paris: OECD.

Brune, Nancy and Geoffrey Garrett (2000) *The Diffusion of Privatization in the Developing World*, Prepared for presentation at the Annual Meetings of the American Political Science Association, Washington, August 30-September 3.

Byers Michael and Nolte George (2003) (Eds). *United States Hegemony and the Foundations of International Law*, Cambridge University Press, Cambridge.

Castro Eduardo Castro and McNamara, (2003) *The Diffusion of Central Bank Independence*, Paper presented at the UCLA International Institute Conference on the International Diffusion of Democracy and Markets, March 7-8.

Cook Paul, Kirkpatrick Colin, Martin Minogue and Parker, David (2004) (Eds). *Leading Issues in Competition, Regulation and Development*, CRC Series on Regulation Cheltenham: Edward Elgar, Forthcoming.

Coleman James (1990) *Foundation of Social Theory*, Cambridge, Mass: Belknap Press of Harvard University Press.

Dolowitz David and Marsh David, (2000) Learning from Abroad: The Role of Policy Transfer in Contemporary Policy Making *Governance*, Vol. 13(1), pp. 5-24.

Drake, Paul (1989) *The Money Doctor in the Andes: The Kemmerer Missions, 1923-1933*, Durham, NC: Duke University Press.

Edwards, Sebastian (1995) *Crisis and Reform in Latin America*, Oxford: Oxford University Press

Edwards, Sebastian (1997) Trade Liberalization Reforms and the World Bank, *American Economic Association Papers and Proceedings*, May, pp. 43-48

Eisner, Marc Allen (2000) *Regulatory Politics in Transition*. Baltimore: Johns Hopkins University Press.

Elkins Zachary (2001) *Designed By Diffusion: International Networks of Influence in Constitutional Reform*, Prepared for delivery at the Annual Meeting of the American Political Science Association August 30th-September 3, 2001.

Freeman, G. (1986) National Styles and Policy Sectors: Explaining Structured Variation, *Journal of Public Policy*, Vol. 5, 467-496.

Gale Douglas (1996) What Have We Learned from Social Learning?, *European Economic Review*, Vol. 40, pp. 617-628,

Gilardi, Fabrizio (2003a) *Designed by Diffusion: International Networks of Influence in Constitutional Reform*, Prepared for delivery at the workshop on the Internationalization of Regulatory Reforms: The Interaction of Policy Learning and Policy Emulation in Diffusion Processes, Berkeley CA, April 24-25

Gilardi, Fabrizio (2003b) *Delegation to Independent Regulatory Agencies in Western Europe: A Cross-Sectional Comparison*, Paper presented at the Workshop Delegation in Contemporary Democracies, ECPR Joint Sessions, Edinburgh, 29 March – 2 April.

Gleditsch Kristian and Ward Michael (2003) *Diffusion and the International Context of Democratization*, Paper presented at the UCLA International Institute Conference on the International Diffusion of Democracy and Markets, March 7-8.

Granovetter Mark, (1978) Threshold Models of Collective Behavior, *American Journal of Sociology*, Vol. 83, pp. 1420-1443.

Gray, Virginia, (1973) Innovation in the States: A Diffusion Study, *American Political Science Review*, Vol. 67(4). pp. 1174-1185.

Guisinger Alexandra (2003) *Trade Protection and Liberalization: Is there a Role for Diffusion?*, Paper presented at the UCLA International Institute Conference on the International Diffusion of Democracy and Markets**,** March 7-8**.**

Haas M. Peter, (1992) Introduction: Epistemic Communities and International Policy Coordination, *International Organization*, Vol. 46, No. 1, pp. 1-36.

Haggard Stephan and Robert Kaufman (1992) (Eds.).*The Politics of Economics Adjustment,* Princeton: Princeton University Press.

Harberger C. Arnold (1993) Secrets of Success: A Handful of Heroes, *American Economic Association Papers and Proceeding*, May, pp. 343-350.

Hensiz Witold (2000).The Institutional Environment of Economic Growth, *Economics and Politics*, 12(1). pp. 1-31.

Hollingsworth J. Roger, Schmitter C. Philippe and Streeck Wolfgang, (1994) Capitalism, Sectors, Institutions and Performance, in: Hollingsworth et al., (eds.). *Governing Capitalist Economies*, Oxford University Press, New York and Oxford, pp. 3-16.

Hood, Christopher, Colin Scott, Oliver James, George Jones, and Tony Travers (1999) *Regulation Inside Government: Waste-Watchers, Quality Police, and Sleaze-Busters*. Oxford University Press, Oxford.

Ikenberry G. John, (1990) The International Spread of Privatisation Polices: Inducements, Learning, and Policy Bandwagoning, In: Suleiman Ezra and Waterbury John, *The Political Economy of Public Sector Reform and Privatisation*, Westview Press, Boulder, pp. 88-110.

Jaggers, Keith and Monty G. Marshall. (2000) *Polity IV Project: Political Regime Characteristics and Transitions, 1800-1999*, Center for International Development and Conflict Management, University of Maryland http://www.cidcm.umd.edu/inscr/polity/.

Jacoby, Wade (2000) *Imitation and Politics: Redesigning Modern Germany*, Ithaca: Cornell University Press.

Jacoby Wade (2001) Tutors and Pupils: International Organizations, Central European Elites, and Western Models, *Governance*, Vol. 14(2), pp. 169-200.

Jayasuriya, Kanishka (2001) Globalization and the Changing Architecture of the State: The Politics of the Regulatory State and the Politics of Negative Co-ordination, *Journal of European Public Policy*, 8 (1), pp. 101-123.

Jordana, Jacint and Levi-Faur, David (Eds), (2004) *The Politics of Regulation in the Age of Governance*, Elgar and the Centre on Competition and Regulation, University of Manchester, Forthcoming.

Kindleberger Charles, (1981) Dominance and Leadership in the International Economy *International Studies Quarterly,* 25(2), pp. 242-254.

Kock De M.H. (1974) *Central Banking*, Crosby Lockwood staples, London. Fourth Edition

Krasner Stephen, (1976) State Power and Structure of Foreign Trade *World Politics* Vol. 28, pp. 317-347.

Lerner, Daniel (1964) The Transfer of Institutions, In: Hamilton B. William (ed). *The Transfer of Institutions*, Duke University Press, Durham, N.C. and Cambridge UP, London, pp. 3-26.

Levi-Faur, David (1998) The Competition State as a Neo-Mercantilist State, *The Journal of Socio-Economics*, Vol. 27(6), pp. 665-685.

Levi-Faur, David (1999) The Governance of Competition: the interplay of technology, economics, and politics in the making of the European Union's electricity and telecoms regimes, *Journal of Public Policy*, Vol. 19(2), pp. 137-169.

Levi-Faur, David (2001) *Herding towards a New Convention: On Herds, Shepherds, and lost Sheep in the Liberalization of Telecommunications and Electricity Industry*, Paper presented at the ECPR First General Conference, September 2001. Available from Nuffield College Working Paper in Politics, W6-2002, Oxford.

Levi-Faur, David (2003a) The Politics of Liberalization: Privatization and regulation-for-competition in Europe's and Latin America's Telecoms and Electricity industries, *European Journal of Political Research*, Vol. 42(5), pp. 705-740.

Levi-Faur, David (2003b) When Diffusion Does Not Work: Regulatory Reforms in the Arab World and Latin America Compared, Unpublished manuscript.

Levi-Faur, David (2004a) On the Net Impact of the European Union Policy Process: The EU's telecoms and electricity Regimes between the global and the national, *Comparative Political Studies*, Forthcoming.

Levi-Faur David, (2004b) Comparative Research Design in the Study of Regulation: How to Increase the Number of Cases without Compromising the Strengths of Case-oriented Analysis, In Jacint Jordana and Levi-Faur David (Eds). *The Politics of Regulation in the Age of Governance*, Elgar and the Centre on Regulation and Competition, University of Manchester, Forthcoming.

Levy Brain and Spiller Pablo (1996). *Regulations, Institutions, and Commitment; Comparative Studies of Telecommunications*, Cambridge University Press, Cambridge.

Lodge Martin (2002) *On Different Tracks; Designing Railways Regulation In Britain and Germany*, Praeger, Westport, Connecticut.

Loughlin, Martin, and Colin Scott, (1997) The Regulatory State, in Patrick Dunleavy, Ian Holliday, Andrew Gamble, and Gillian Peele (Eds.). *Developments in British Politics 5.* Basingstoke: Macmillan.

Mainwaring, Scott, Brinks Daniel and Perrez-Linann Anibal (2001) Classifying Political Regimes in Latin America, 1945-1999, *Studies in Comparative International Development*, Vol. 36(1), PP. 37-65.

Mainwaring Scott and Matthew Shugart (1997) (Eds.), *Presidentialism and Democracy in Latin America*. Cambridge University Press, Cambridge.

Majone Giandomenico, (1991) Cross-National Sources of Regulatory Policy Making in Europe and the United States, *Journal of Public Policy*, Vol. 11, No. 1, pp. 79-106.

Majone, Giandomenico (1994) The Rise of the Regulatory State in Europe, *West European Politics* Vol. 17, 77-101.

Majone, G. (1997) From the Positive to the Regulatory State. Causes and Consequences of Changes in the Mode of Governance, *Journal of Public Policy*, Vol. 17(2), 139-167.

Manzetti Luigi (2000).(Ed). *Regulatory Policy in Latin America: Post-Privatization Realities*, Miami: North-South Center Press.

March J. G. and Olsen, J.P. (1989) *Rediscovering Institutions* New York, Free Press.

McCraw, Thomas (1984). *Prophets of Regulation*, Cambridge, Mass: Belknap Press..

McGowan, F. and Wallace, H. (1996) Towards a European Regulatory State, *Journal of European Public Policy*, Vol.3(4), 560-576.

Meseguer, Covadonga (2002) *Bayesian Learning about Politics*, Juan March Institute Madrid.

Meseguer, Covadonga (2003) *The diffusion of privatisation in industrial and Latin American countries: what role for learning?* Prepared for delivery at the workshop on the Internationalization of Regulatory Reforms: The Interaction of Policy Learning and Policy Emulation in Diffusion Processes, Berkeley, April 24-25

Milner, Helen (1999) The Political Economy of International Trade, *Annual Review of Political Science*, Vol. 2, pp. 91-114.

Milner Helen, (2001) *Why the Rush to Free Trade? Democracy and Trade Policy in Developing Countries*, Paper presented for the annual meeting of the American Political Science Association, San Francisco, Aug. 30-Sept 2.

Milner Helen (2003) *The Global Spread of the Internet*, Paper presented at the UCLA International Institute Conference on the International Diffusion of Democracy and Markets, March 7-8.

Moran, Michael (2000) From Command State to Regulatory State?, *Public Policy and Administration*, 15(4), pp. 1-13.

Moran, Michael (2002) Understanding the Regulatory State *British Journal of Political Science* Vol. 32, pp. 391-413.

Mukand Sharun and Rodrik Dani (2002) *In Search of the Holy Grail: Policy Convergence, Experimentation and Economic Performance*, Center for Economic Policy Research, Discussion Paper in Public Policy, No. 3525

Müller Markus, (2002) *The New Regulatory State in Germany*, Birmingham University Press, Birmingham.

Murillo, M. Victoria (2002) Political bias in policy convergence: privatization choices in Latin America. *World Politics*, 54(4). 462-493.

O'Donnell, Guillermo A., Philippe C. Schmitter, and Laurence Whitehead (1986) *Transitions from authoritarian rule*. Baltimore: Johns Hopkins University Press.

Orenstein Mitchell (2003) Mapping the Diffusion of Pensions Reforms, In: Holzmann Robert, Orenstein Mitchell and Rutkowski Michal, (Eds). *Pension Reform in Europe: Process and* Progress¸ Washington., World Bank, pp. 171-192

Payne J. Mark et al. (2002). *Democracies in Development: Politics and Reform in Latin America*, Washington, DC : Stockholm, Sweden : Inter-American Development Bank ; International Institute for Democracy and Electoral Assistance.

Przeworski Adam and Vreeland James (2000) The Effect of IMF Programs on Economic Growth, *Journals of Development Economics*, Vol. 62, pp. 385-421.

Quinn P. Dennis and Toyoda Maria (2002) *Anti-Capitalist Sentiment as a Determinant of International Financial Liberalization*, Paper presented at the 2002 Annual Meeting of the American Political Science Association, Boston, August 29th – September 1st.

Ramió Carles and Salvador Miquel (2004). Administrative Reforms in a Globalized World: Human Resource Management in Latin America's Public Administration, In: Levi-Faur D. and Vigoda E. (Eds). *International Public Policy and Management: Policy Learning Beyond Regional, Cultural and Political Boundaries,* Marcel Dekker, Forthcoming

Remmer L. Karen (1998) The Politics of Neoliberal Economic Reform in South America, 1980-1994, *Studies in Comparative International Development*, Vol. 33(2). pp. 3-29.

Remmer L. Karen (2002) The Politics of Economic Policy and Performance in Latin America,, *Journal of Public Policy*, Vol. 22 (1). pp. 29-59.

Rodrik Dani (1996) Understanding Economic Policy Reform, *Journals of Economic Literature*, Vol. 34, pp. 9-41.

Rogers, M. Everett (1995) *The Diffusion of Innovations*. New York: Free Press (5th ed.).

Rose-Ackerman, Susan (1992) *Rethinking the Progressive Agenda; The Reform of the American Regulatory State*, New York: The Free Press.

Ross–Schneider Ben and Heredia Blanca (2003) *Reinventing Leviathan: The Politics of Administrative Reform in Developing Countries*, North-South Center Pres, University of Miami, Florida.

Rufin, Carlos (2000) *The Political Economy of Institutional Change in the Electricity Supply Industry*, A thesis presented to the Committee on Public Policy in partial fulfillment of the requirement for the degree of Doctor of Philosophy, Harvard University, Cambridge, Massachusetts.

Schamis, Hector (1999) Distributional Coalitions and the Politics of Economic Reform in Latin America. *World Politics,* Vol. 51(2). pp. 236-268.

Schelling Thomas, (1978) *Micromotives and Macrobehavior*, W.W. Norton and Company, New York and London.

Simmons, Beth and Elkins Zachary. (2000) *Globalization and Policy Diffusion: Explaining Three Decades of Liberalization*, Prepared for presentation at the Annual Meetings of the American Political Science Association, Washington, DC, August 30-September 3, 2000. An updated version is forthcoming in M. Kahler, and D. Lake (Eds.), *Globalizing Authority: Economic Integration and the Changing Structure of Governance*.

Simmons Beth and Elkins Zachary (2003) *The Globalization of Liberalization: Policy Diffusion in the International Political Economy*, Prepared for delivery at the workshop on the Internationalization of Regulatory Reforms: The Interaction of Policy Learning and Policy Emulation in Diffusion Processes, Berkeley CA, April 24-25.

Spiller, Pablo Stein Ernesto and Tommasi Mariano, (2003) *Political Institutions, Policymaking Processes, and Policy Outcomes: An Intertporal Transactions Framework*, Leitner Working Paper 2003-03, Yale Center for International and Area Studies.

Stalling, Barbara and Robert Kaufman, (1989) (Eds.) *Debt and Democracy in Latin America*, Boulder, Westview.

Stallings, Barbara and Wilson Peres (2000) *Growth, Employment, and Equity: the Impact of the Economic Reforms in Latin America and the Caribbean*, Washington, D.C: Brookings Institute.

Tafel Heather and Boniface Dexter, (2003) Old Carrots, New Sticks: Explaining Labor Strategies toward Economic Reform in Eastern European and Latin America, *Comparative Politics*, Vol. 35(3), pp. 313-333.

Vellinga, Menno (1998) *The Changing Role of the State in Latin America*, Boulder: Westview Press.

Vives Xavier, (1996) Social Learning and Rational Expectations, *European Economic Review*, Vol. 40, pp. 589-601.

Vogel. David (1989) *Fluctuating Fortunes: The Political Power of Business*, New York: Basic Books.

Vogel, Stephen K. (1996) *Freer Markets, More Rules: Regulatory Reform in Advanced Industrial Countries*, Cornell University Press, Ithaca and London.

Vreeland, James Raymond (2003) *The IMF and economic development*. New York: Cambridge University Press.

Walker, Jack (1969) The Diffusion of Innovation among American States. *American Political Science Review* 63: 880-899.

Wallis Joe, (1999) Understanding the Role of Leadership in Economic Policy Reform, *World Development*, Vol. 27(1), pp. 39-53.

Way, Christopher (2003) *Fear Factor: How Political Insecurity Shapes the Diffusion of Financial market Deregulation*, Prepared for delivery at the workshop on the Internationalization of Regulatory Reforms: The Interaction of Policy Learning and Policy Emulation in Diffusion Processes, Berkeley CA, April 24-25

Wellenius, Bjorn, (2000) Regulating the Telecommunications Sector: The Experience of Latin America, In: Manzetti Luigi, *Regulatory policy in Latin America: Post-Privatisation Realities*, Coral Gables, Florida: North-South Center Press, pp. 189-241.

Weyland, Kurt (1998) Swallowing the Biter Pill: Sources of Popular Support for Neoliberal Reform in Latin America, *Comparative Political Studies*, Vol. 31(5). pp. 539-568.

Weyland Kurt (2002) *The politics of market reform in fragile democracies : Argentina, Brazil, Peru, and Venezuela*, Princeton: Princeton University Press.

Whitehead, Laurence, (1994) State Organization in Latin America Since 1930, In: Bethell Leslie *The Cambridge History of Latin America*, Vol. VI, Cambridge, Cambridge University Press, pp. 3-95.

Wilks Stephen and Bartle Ian (2002) The Unanticipated Consequences Creating Independent Competition Agencies, *West European Politics*, Vol. 25(1), pp. 148-172.

Wilson, K. Graham (2003). *Policy Transfer Versus Varieties of Capitalism in environmental Policy*, Prepared for delivery at the workshop on the Internationalization of

Regulatory Reforms: The Interaction of Policy Learning and Policy Emulation in Diffusion Processes, Berkeley CA, April 24-25.

Young Peyton H. (1996) The Economics of Convention, *Journal of Economic Perspective*, Vol. 10, pp. 105-122.