

**Countering Fragmentation, Taking Back the State, or Partisan Agenda-Setting?  
Explaining Policy Integration and Administrative Coordination Reforms**

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## Countering Fragmentation, Taking Back the State, or Partisan Agenda-Setting? Explaining Policy Integration and Administrative Coordination Reforms

### **Abstract**

*Policies to integrate and coordinate across sectors have become important in recent years, but we know little about the drivers of these reforms. This paper evaluates three explanations for differences in patterns of policy integration and administrative coordination reforms across countries and policy sectors over time. Reform activity could reflect: (1) the fragmenting effects of agencification; (2) a strategy of governments to regain policy control; or (3) partisan agendas. We test these explanatory scenarios using multilevel probit and structural equation models on an original dataset of policy integration and administrative coordination reforms. Our findings support the claim that reforms are a reaction to the institutional fragmentation produced by agencification and that agencies drive these reforms. Furthermore, we find that left parties are particularly likely to pursue policy integration reforms. We also find that policy integration and administrative coordination reform frequencies are linked but have different path dependencies.*

Claims that policies are fragmented and government is “siloed” are ubiquitous (Peters 2015a). Such claims range across nearly every policy sector, from environmental and climate policy (Adele and Russel 2013), to health policy (Carey and Crammond 2015), and social policy (Cejudo and Michel 2017). This fragmentation is charged with contributing to policy incoherence (May, Sapotichne, and Workman 2006), policy failure (Peters 2015b) and weak responses to complex or wicked public problems (Head and Alford 2015). A common view is that these challenges have been accentuated by New Public Management (NPM) reforms (Verhoest, Bouckaert and Peters 2007; Christensen and Laegreid 2007a).

Scholars point to different solutions for policy fragmentation and government “siloism.” Prominent concepts include joined-up government (Pollitt 2003; Perri 6 2004; Davies 2009), policy integration (Briassoulis 2004), policy coordination (Peters 2018), whole-of-government reform (Christensen and Laegreid 2007), agency collaboration (Bardach 1998), network governance (Sørensen and Torfing 2016) and boundary-spanning policy regimes (Jochim and

May 2010). Recent reviews point to the importance of distinguishing policy and administrative-organizational aspects of cross-sectoral governance (Tosun and Lang 2017; Trein et al., 2019).

While the problem and its consequences have been mapped out and potential solutions explored, the literature has not adequately addressed the political dimensions of the issue. Whereas it may appear rational and desirable to have better integration, policy reforms are costly to undertake and difficult to implement and sustain (Howlett 2014; Patashnik 2014; Vince 2015; Candel 2019). Effective administrative coordination can prove elusive (Lægreid et al. 2015; Hustedt and Danken 2017). Nevertheless, the number of reforms has grown over time (see below). Given the costs and the challenges of reform, *who*—ministers, cabinets, governments, political parties, or agencies—has the motivation and capacity to address this issue and why?

To explore this question, we build on existing literature to develop three alternative explanatory scenarios:

- The first scenario proposes that these reforms are a consequence of the creation of new special-purpose and relatively autonomous public agencies (“agencification”).
- The second scenario suggests that these reforms are a political strategy by the central government to regain control over autonomous agencies and policy subsystems.
- The third scenario proposes that reforms are the result of partisan policy agendas and are hence a consequence of partisan coalitions in government and parliament.

To assess these scenarios, we estimate multilevel regression models on an original dataset on policy integration and administrative coordination reforms in four policy fields and thirteen countries between 1980 and 2014. Our results provide the strongest support for the first scenario and suggest that administrative coordination and policy integration reforms are a reaction to the institutional fragmentation produced by NPM reforms and the expansion of the regulatory state. Yet our results also extend some support to partisan agenda scenarios.

In addition, we explore the dynamic relationship of the two types of reform using structural equation modelling. We show that policy integration and administrative coordination reform frequencies are linked, but follow different path dependencies.

### **Policy Integration and Administrative Coordination Reforms**

Our analysis concerns cross-sectoral policy reforms and tries to understand differences in reform patterns across countries and policy fields. Therefore, we draw a distinction between policy integration and administrative coordination reforms (Tosun and Lang 2017; Trein et al. 2020).<sup>1</sup> For our purposes, reforms are high-level changes in visions, ideas, laws, and organizational constellations. *Policy integration* refers to reforms that connect two or more policy fields by a common policy instrument or new framework legislation with the intention of merging the policy and professional practices of specific policy sectors. Policy integration reforms include strategies, action plans and planning as well as legislation (Jordan and Lenschow 2010; Candel and Biesbroek 2016; Cejudo and Michel 2017). *Administrative coordination* reform refers to changes in the administrative hardware with the intention of improving coordination between ministries or agencies (Perri 6 2004; Laegreid and Christensen 2007a). These reforms may take a variety of shapes and forms, including new coordination rules, information or data systems, network organizations or service mergers (Bouckaert et al. 2010). Such reforms may even include the creation of an agency specifically designed to coordinate between policies. We do not include coordination across sectors of society (e.g., public-private) as part of this concept.

To develop a more general explanation of policy integration and administrative coordination, we investigate four different policy fields--environment, migration, public health, and unemployment. Since the substance of reforms differs across policy sectors, we illustrate typical reforms below:

For *environmental policy*, a typical example of policy integration and administrative coordination is a reform that aims to produce integrated sustainability or climate policies

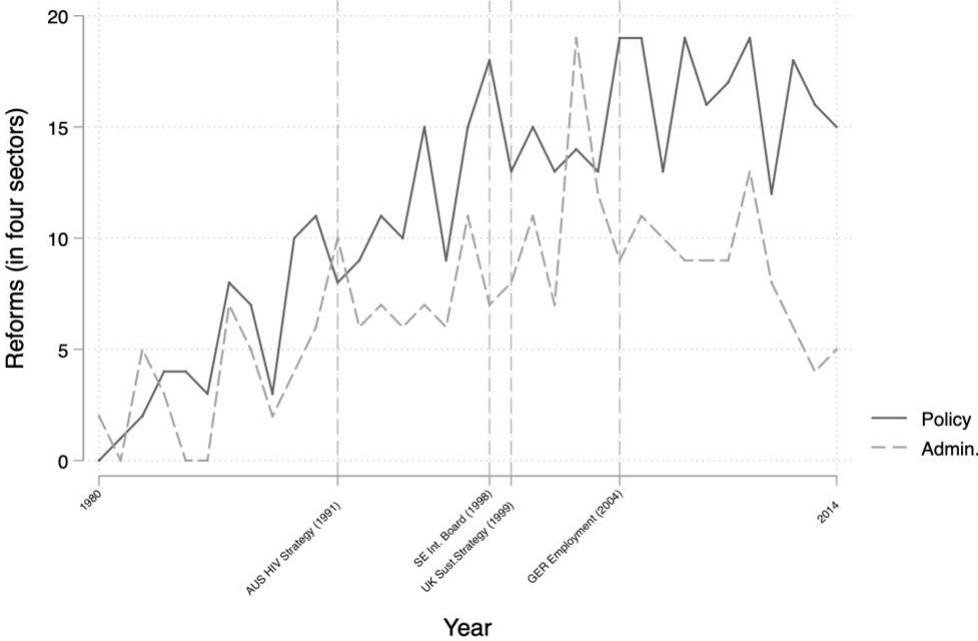
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<sup>1</sup> The distinction between administrative coordination and policy integration is different from the scales of policy coordination put forward by the classic literature on public administration and policy coordination (Metcalf 1994; Braun 2008).

(Jordan and Lenschow 2010). Such reforms obligate decision makers and professionals from different policy sectors to develop coordinated environmental policy, such as a common sustainable development strategy. A specific example is the Sustainable Development Strategy put into place by the UK government in 1999, which underlines the government’s commitment to establishing integrated impact assessment and sustainable development tools.

For *migration policy*, a typical reform seeks to coordinate or integrate immigration and immigrant integration policies and programs (Geddes and Scholten 2016). A specific example of administrative coordination in this policy area is the establishment of the Swedish Integration Board in 1998. Although direct responsibility for newly arrived immigrants remained in municipal hands, the new Board was given jurisdiction over disbursing their introduction allowance and issuing general integration guidelines (Lemaître 2007, 15).

Figure 1: Number of reforms per year (four policy fields nested in 13 countries)<sup>2</sup>



For *public health policy*, we focus on policy and administrative reforms that combine curative and preventative elements of health policy, whether aimed at one specific health problem, such as cancer, or more generally (Trein 2017). National health strategies provide one

<sup>2</sup> Graphs in this paper use the Stata *blindschemes* package (Bischof 2017).

illustration. A specific example includes the Australian government's 1991 national AIDS strategy, which combined preventative and curative elements in responding to the AIDS epidemic (Baum 2008, 494).

For *unemployment policy*, we focus on the integration and coordination of welfare benefits and labor market activation measures (Claasen and Clegg 2011). One particular example is the German labor market reform of 2004, which merged unemployment insurance and social assistance. The reform restructured benefits and reintegration efforts and created one-stop municipal shops that administered benefits and reintegration measures together (Schiller 2016). This reform combined administrative coordination and policy integration.

To collect data on these reforms, we coded administrative coordination and policy integration reform events across these four policy fields from 1980 through 2014 for thirteen different countries—Australia, Austria, Belgium, Canada, France, Germany, Italy, Netherlands, New Zealand, Sweden, Switzerland, UK, and U.S (see the methods section for coding details). The aggregate data indicate that these reforms increased until the mid-2000s and then leveled off or declined. As Figure 1 indicates, the two types of reform follow a similar pattern, but policy integration reforms are typically more frequent than administrative coordination reforms.<sup>3</sup>

## **Explanatory Scenarios and Hypotheses**

Although there are similarities in the extent of cross-sectoral policy reforms over time, we expect that there are differences between countries. In this article, we focus on three different explanatory scenarios to explain the presence of cross-sectoral reforms.

### *Scenario 1: Agencification*

One common claim is that policy integration and administrative coordination reforms are a policy response to the institutional fragmentation created by NPM reforms and by the expansion of the regulatory state. These reforms led to the creation of many new special-purpose agencies operating at “arms-length” from ministerial control—a process known as

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<sup>3</sup> We show only the period from 1985-2014 in Figure 1. There were few reforms before 1985. In the statistical analysis, we include the entire period in order to produce more robust results. More descriptive information on the data can be found in this paper: (Trein and Maggetti 2020).

“agencification” (Egeberg and Trondal 2009). In European Union countries, agencification has occurred both at the national level and at the EU level.

The first scenario suggests that policy integration and administrative coordination reforms are a consequence of delegating competencies to specialized agencies at the national and international level (Hooghe and Marks 2003). In the context of increasingly fragmented politico-administrative systems, policy integration and administrative coordination are a counter-movement to fragmentation through policy production (Verhoest, Bouckaert and Peters 2007; Orren and Skowronek 2017; Adam et al. 2018). A typical view is that agencification produced a corresponding need for “whole of government” or “joined up government” reforms to counter the negative effects of institutional fragmentation (Christensen and Lægreid. 2007a; Bouckaert et al. 2010). Against this background, we hypothesize:

*Hypothesis 1a: A larger degree of agencification (domestic and European) makes policy integration and administrative coordination reforms more likely*

This hypothesis is not specific about which institutions are driving these reforms. One somewhat counter-intuitive possibility is that agencification places agencies themselves in the driver’s seat. Due to their technical expertise and legal mandates, ministries and agencies often have a considerable policymaking role, i.e., in agenda-setting and pre-parliamentary discussions and during policy implementation (Maggetti 2009, 254; Verschuere and Bach 2012). NPM and regulatory state reforms may have enhanced their role as policy agenda-setters (Thatcher 2005; Christensen and Laegreid 2007b; cf. Yesilkagit and Van Thiel 2011; Dohler 2002). Links between national and European agencies may further enhance the autonomy of national regulatory agencies (Egeberg 2008; Bach and Ruffing 2013; Bach, Ruffing and Yesilkagit 2015).

While agencies may have the capacity to push for integration reforms, their motivation for doing so is not obvious. Ministries and agencies are typically seen as advocates of sectoral policy and NPM and the regulatory state reforms have generally increased agency specialization. Recent research on Norwegian agencies finds that inter-agency coordination

actually declines with greater agency autonomy (Bjurstrøm 2019). Still, ministries and agencies do lead integration reforms (Negev 2016; Biesbroek and Candel 2019; Duffy and Cook 2019) and agencies with innovation-oriented cultures are found to be particularly inclined to support policy integration (Molenveld, Verhoest and Wynen 2020). The impetus may arise from the need to fulfill agency responsibilities (e.g., Negev 2016), a task made more difficult by inter-agency interdependence and problem complexity. It is also possible that agencies develop integrative strategies to manage the competing demands of conflicting stakeholders (Aurich-Beerheide et al. 2015) or subsystems (Candel and Biesbroek 2016) or to preserve their own autonomy (Rommel and Verhoest 2014). In summary, if agencification grants more autonomy and responsibility to agencies to fulfill a particular mission or mandate but administrative fragmentation hinders them from doing so, it is possible that agencies themselves will be motivated to sponsor policy integration or administrative coordination reforms.

While we cannot easily test for all the agency motives driving reform, greater agency autonomy and agenda-setting power may enable agencies to sponsor policy integration and administrative coordination reforms, as captured by the following hypotheses:

*Hypothesis 1b: More agency agenda-setting power makes policy integration and administrative coordination reforms more likely*

*Hypothesis 1c: Higher agency autonomy makes administrative coordination reforms more likely*

#### *Scenario 2: Central government takes back control*

An alternative scenario is that policy integration and administrative coordination reflect government attempts to claw back the power and initiative lost through agencification. Put differently, governments pursue such reforms because they want to reign in rogue agencies or reduce policy fragmentation. In this case, “reassertion of the centre” via “whole of government” reforms and other types of administrative and policy integration are strategies of the central government to reclaim its capacity to act (Roness et al. 2008; Tosun and Lang 2017). Rommel and Verhoest observe that “[t]he classic organizational perspective argues

that coordination is imposed by the political principals, as a tool to reduce autonomy and to restore policy coherence“ (2014, 310).

In this second scenario, single party or coalition governments or individual cabinet ministers are the agents of reform, with variations in the relative strength of governments versus individual ministers explaining which one takes the initiative. Single party majoritarian governments are generally understood to enhance government power over ministers (Andeweg 2000). In coalition governments, ministerial policy autonomy depends on the strength and specificity of coalition agreements (Timmermans 2006; Alexiadou 2015; Schermann and Ennsner-Jedenastik 2014). Prime Ministers also vary in the strength of their power over coalitions and individual ministers (Bäck, Debus and Müller 2016).

These considerations suggest the opposite relationship between agency autonomy and policy integration and administrative coordination reforms: autonomous agencies are expected to resist government initiatives to curb their autonomy. Thus, we articulate a hypothesis that proposes an alternative explanation to the first scenario:

*Hypothesis 2a: Higher agency autonomy makes policy integration and administrative coordination reforms less likely*

To distinguish whether it is the cabinet or the ministry that takes the initiative on such reforms, we add two additional hypotheses. The literature discussed above implies that the focus should be on policy-related reforms if cabinets are driving reforms. In this case, high-level politics would drive reforms, which would be expected to take the form of policy integration rather than administrative coordination reforms. However, if ministries enjoy autonomy from the cabinet, ministers would be more likely to seek reform via administrative coordination (over which they have greater control) rather than via policy integration (which depends on wider parliamentary or legislative support):

*Hypothesis 2b: A larger degree of agencification makes policy integration reforms more likely where cabinets have strong control over ministerial portfolios*

*Hypothesis 2c: A larger degree of agencification makes administrative coordination reforms more likely where ministers have strong political control over their departments and autonomy from the cabinet*

### *Scenario 3: Party politics*

The third scenario extends the theoretical logic from Scenario 2 to political parties. While reforms may be driven by the desire of cabinets or ministers to reassert their authority over autonomous agencies or to counteract fragmented government, a third possibility is that these reforms reflect partisan agendas. We find some suggestions in the literature on policy integration that integration or coordination depend on the political party or coalition in power, which suggests that specific parties use cross-sectoral reforms when they serve their political agendas. For example, center-left governments have pushed for environmental policy integration because their voters support the goals of these policies, while center-right governments have prevented or removed it (Jordan and Lenschow 2010). Similarly, a shift from a center-left to a center-right government in Italy led to a loss of support for a more integrated development policy (Prontera 2016). Left parties are also more likely to pursue integrated policies compared to right-wing and liberal parties as their voters are more likely to support social investment policies, which entail, for example, combining immigration with immigrant integration and health care with prevention (e.g., Häusermann et al. 2013; Trein 2017).

The evidence regarding the effects of partisan strategies on administrative coordination is more mixed. According to one perspective, governing parties – and especially left parties – are the driving factor behind policy integration and administrative coordination (Bolleyer 2011; Hustedt and Danken 2017; Peters 2015a, 36; Pollitt and Bouckaert 2017, 335). Another perspective has emphasized however that whole-of-government reforms are not subject to party differences (Chow et al. 2007; Christensen and Laegreid 2007a). Against this background, we propose the following hypothesis, focusing on policy integration only:

*Hypothesis 3a: Stronger left parties in government make policy integration reforms more likely*

In addition to the political orientation of political parties, the partisan composition of government should also affect whether governments will pursue cross-sectoral policies. Research has shown that coalition governments are more likely to pursue reforms that integrate different policies by changing ministerial portfolio design (Sieberer et al. 2019). For example, left parties in coalition governments are more likely to combine social benefits with training measures to compensate potential losers of the reform (Häusermann et al. 2013; Knotz and Lindvall 2015). Therefore, we hypothesize:

*Hypothesis 3b: Stronger left parties in government are more likely to pursue policy integration and administrative coordination reforms if they are part of a coalition government*

Finally, the fractionalization of the party system could impact the representation of policy preferences (Curino and Hino 2012). In a proportional representation system, legislative fractionalization results in the representation of a greater variety of policy preferences (Huber and Powell 1994). The presence of smaller political parties (i.e., niche parties) influences the policy preferences of mainstream political parties. For example, if right-wing populist parties are in parliament, other parties are more likely to voice anti-immigration policy positions (Abou-Chadi 2016). Against this background, we hypothesize that:

*Hypothesis 3c: A larger fractionalization of the party system makes policy integration and administrative coordination reforms more likely*

The three scenarios follow a logic of equifinality, i.e., they suggest different explanatory logics for one particular phenomenon. Nevertheless, they are also partially complementary insofar as both the role of agencies, ministers, governments and parties could all play a role in explaining cross-sectoral reforms. In our empirical analysis, we compare the explanatory power of the three scenarios, but also consider whether they contradict or complement one another.

In the next section, we explain the details of our dataset, our methods of analysis, and our operationalization of these hypotheses.

## Data and Methods

To evaluate our scenarios, we use a multilevel dataset that records policy integration and administrative coordination reform events in four policy fields and thirteen countries over the time period from 1980-2014. The dataset contains information on the four policy fields discussed above (environment, migration, public health, and unemployment) in thirteen advanced democracies facing policy integration and administrative coordination challenges – Australia, Austria, Belgium, Canada, France, Germany, Italy, Netherlands, New Zealand, Sweden, Switzerland, UK, and US. The starting point of the dataset is the year 1980 because policy integration and administrative reforms become more prominent after this date (Figure 1). We use a binary coding of reform events in a sector, country, and year. To collect the data, we first surveyed the secondary literature, edited books, and government policy reports. We then created time series data sheets for reform events. To ensure the accuracy of the data, we sent each data sheet to a country policy expert for validation and excluded unclear reform events. If we could not obtain expert validation, we conducted additional research on the country/policy field. Reform events are coded “1” if they aim to produce integration and coordination and “0” otherwise. Information on the coding scheme for the reforms can be found in the Supplementary Materials document.<sup>4</sup>

We use a number of independent variables to operationalize the scenarios. Table S2 in the supplementary materials summarizes these variables and demonstrates how they relate to our hypotheses and indicates their source. Variables vary either at the country level or at the country and policy field levels (Table 1 provides descriptive statistics). We briefly describe each variable as follows:

*Domestic agencification:* As conventionally understood, agencification encompasses the development of new service delivery and regulatory agencies. The best available proxy of agencification for our purposes is a time-series cross-national dataset measuring the diffusion

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<sup>4</sup> We thank Stefano Assanti and Iris Meyer who helped with the data collection. To prevent endogeneity between the dependent variable (administrative coordination) and the independent variable (agencification), we have ensured that no instance of a creation of an independent regulatory agency included in the agencification variable was also coded as an administrative coordination reform.

of regulatory agencies in different countries over time. While it would be ideal to have data on all new agencies, this data on regulatory agencies does capture the tendency of a nation to engage in agency creation. The variable is a count of the number of independent regulatory agencies in fifteen policy fields (Competition, Water, Electricity, Telecommunications, Postal Services, Gas, Environment, Work Safety, Pharmaceuticals, Food Safety, Health Services, Financial Services, Pensions, Insurance, Security and Exchange) using the data by Jordana et al. (2011).

*European Agencification:* To operationalize the international dimension, we created a binary variable that measures whether a European Agency is present in a given policy field based on data from Levi-Faur (2011). The variable is assigned a score of “1” if an agency is present in a policy field and the country is an EU member and “0” otherwise. The dates for establishing the agencies are as follows: 1990 environment (European Environmental Agency), 1993 public health (European Medicines Agency), and 2004 for migration (European Border and Coast Guard Agency). For employment, we did not identify an EU agency.

*Domestic agency autonomy:* To measure agency autonomy, we created a compound variable, as we do not have a direct time-series cross-sectional measurement for agency autonomy.<sup>5</sup> We draw on a review article by Maggetti and Verhoest (2012, 248) suggesting that – among other factors – agency autonomy is linked to the presence of a civil law system, the age of the agency and the politicization of senior civil servants. We chose these three elements as they appear the least contested ones in their power to predict agency autonomy. To capture these factors, we combined these measures with the scope of domestic agencification through regression scores from a principal component analysis (see Supplementary Material for details).

*EU-agency autonomy:* This variable uses information on the independence of EU agencies based on the data by Wonka and Rittberger (2010, 731-732).

*Domestic agencies’ agenda-setting capacity:* The operationalization of agency agenda-setting capacity relies on the insight that agencies have more agenda-setting capacity in non-

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<sup>5</sup> The measure by Jordana et al. (2018) offers only a cross-sectional measure of agency autonomy.

professionalized parliaments (Maggetti 2009, 453-454). Consequently, we assume that agencies are more likely to have agenda-setting capacity where governments are unstable and elections are frequent. To operationalize agenda-setting capacity, we again created a compound variable, consisting of two elements. First, we created a continuous variable that measures the number of elections using the variable *elect* in the Comparative Political Dataset (CPD) (Armingeon et al. 2017). Second, we used the variable *gov\_chan* from the same dataset to operationalize a change in government. To aggregate information from both variables into one, we first combine these two measures with the presence of agencies through regression scores from a principal component analysis (see Supplementary Material for details).

*Head of government's control over ministers:* To code this item, we used the Quality of Government dataset (variable *v2exdfshg\_nr*). This variable is based on expert survey data on Head-of-Government control over Ministries (continuous variable, ranging from "0" to "3") (Teorell et al. 2017). To complete the data, we coded Switzerland with "0" (no control by head of government over ministers), and the US with "2" (considerable control by head of government over ministers). We also coded an inverse version of this variable that measures the *autonomy of the ministers*, which corresponds to some of our theoretical expectations.

*Left party in government:* To operationalize the power of left parties, we use a variable measuring the strength of left vs. right and central parties in government from the CPD (Armingeon et al. 2017) (variable *gov\_party*).

*Multiparty government:* To measure whether the government in power is a single or a multiparty government, we create a binary variable. Specifically, we use the information from the continuous variable *gov\_type* in the CPD (Armingeon et al. 2017), which distinguishes different types of governments, to create a variable that distinguishes between governments consisting of a single party and governments with multiple parties.

*Party system fractionalization:* To operationalize the fragmentation of the party system, we use a measure of legislative fractionalization. Specifically, we use the variable *cpds\_frleg* from the CPD (Armingeon et al. 2017), which measures the legislative fractionalization of the party system according to the Rae index (Rae 1968).

In addition, we incorporate a set of control variables into the analysis. These variables include problem pressure in the policy field, national debt, political constraints, and time. We justify and explain these control variables in the Supplementary Materials document.

*Table 1: Descriptive statistics of variables*

Variables	Obs.	Mean	Std. Dev.	Min	Max
<b>Dependent variables</b>					
Policy integration reform	1,820	0.2192308	0.413839	0	1
Administrative coordination reform	1,820	0.1340659	0.3408168	0	1
<b>Independent variables</b>					
Domestic agencification	1,820	8.248352	3.662188	1	14
European agencification	1,820	0.2362637	0.4249028	0	1
Domestic agency autonomy	1,736	4.58E-09	1	-2.3049	1.866929
EU-agency autonomy	1,820	0.0829048	0.1602961	0	0.5166667
Domestic agencies' agenda-setting capacity	1,820	1.21E-09	0.7817561	-2.171613	1.926757
Head of gov. control over ministers	1,820	2.004396	1.235352	0	3
Autonomy of Minister from cabinet	1,820	0.9956044	1.235352	0	3
Strength of left parties in government	1,816	2.39207	1.517001	1	5
Multiparty government	1,820	0.6153846	0.486638	0	1
Fractionalization of the party system	1,820	0.6799713	0.1211396	0.409096	0.88987
<b>Control variables</b>					
Problem pressure in policy field	1,619	-2.33E-10	1	-0.5589707	10.18228
National debt (% of GDP)	1,820	67.86109	30.30169	19.51117	159.1395
Political constraints	1,820	0.8093352	0.0637795	0.3408506	0.8940727
t (time)	1,820	17	10.10228	0	34
t <sup>2</sup> /10	1,820	39.1	35.53649	0	115.6
t <sup>3</sup> /100	1,820	101.15	116.129	0	393.04

Table 1 provides summary statistics for our dependent and independent variables. We estimate probit regression models to evaluate the probabilities for reforms as specified in the hypotheses. Due to the data's multilevel structure (reforms per year, nested in four sectors, nested in thirteen countries) we use multilevel models (Steenbergen and Jones 2002). To deal with the potential problem of few clusters at the country level (13), we collapse the multilevel structure into 52 clusters, i.e., four policy fields nested in 13 countries. To correctly interpret the results, we clustered the standard errors at the highest (country) level. We also use

alternative estimation strategies (including three-level models) to test the robustness of our results (cf. supplementary materials).

**Results of regression analyses**

Our first scenario proposed that reforms are a response to the agencification produced by NPM and by the expansion of the regulatory state. A possible corollary of this scenario is that agency autonomy and agenda-setting power are enhanced by agencification, placing the new special-purpose, arms-length agencies in the role of advocates of policy integration and administrative coordination. Our second scenario imagines the opposite dynamic. Instead of agencies advocating integration and coordination, this role is played by governments whose objective is to reclaim policy initiative from autonomous agencies and to restore policy coherence challenged by sectoral specialization. We hypothesize that if strong cabinets were the primary agents, they might attempt to achieve these objectives through both policy integration and administrative coordination, while if ministers took the initiative they would be more likely to pursue these objectives via administrative coordination. Our third scenario proposes that reforms are instruments for achieving partisan agendas. If this is true, we should expect reforms to reflect the coalition or party in control of government. Left parties, in particular, are expected to advance more policy integration and administrative coordination reforms. However, depending on whether government is a multiparty or single party government, or the party system is fractionalized, we might expect different outcomes: coalition governments might favor policy integration and administrative coordination; a fractionalized party system on the other hand should result in fewer reforms.

*Table 2: Multilevel regression estimates (standard errors clustered at country level in parentheses)*

	Model (1) PI	Model (2) AC	Model (3) PI	Model (4) AC	Model (5) PI
Domestic agencification	0.042*** (0.011)	-0.006 (0.020)			
European agencification	0.176*** (0.062)	0.143 (0.116)			
Domestic agency autonomy			0.214*** (0.040)	0.028 (0.081)	
EU-agency autonomy			0.632*** (0.203)	0.351 (0.333)	

Domestic agencies' agenda-setting capacity					0.211*** (0.069)
Head of gov. control over ministers	0.029 (0.049)		0.008 (0.049)		0.032 (0.051)
Autonomy of Minister from cabinet		0.001 (0.052)		-0.008 (0.053)	
Multiparty government	0.050 (0.075)	0.022 (0.118)	0.157 (0.112)	0.056 (0.108)	0.075 (0.080)
Strength of left parties in government	0.053** (0.024)	0.055 (0.034)	0.075*** (0.026)	0.055 (0.036)	0.060** (0.023)
Fractionalization of the party system	-0.075 (0.503)	-0.145 (0.760)	-0.123 (0.567)	0.048 (0.857)	0.065 (0.653)
Problem pressure in policy field	-0.090*** (0.034)	-0.076** (0.036)	-0.097*** (0.035)	-0.082** (0.035)	-0.096** (0.040)
National debt	-0.001 (0.001)	0.000 (0.002)	0.002 (0.002)	0.001 (0.001)	-0.000 (0.002)
Political constraints	-0.264 (1.115)	-0.354 (0.523)	-0.429 (1.033)	-0.326 (0.528)	-0.455 (1.209)
Time (t)	0.176*** (0.048)	0.060 (0.054)	0.166*** (0.056)	0.051 (0.050)	0.161*** (0.052)
t <sup>2</sup> /10	-0.078** (0.032)	0.014 (0.030)	-0.072* (0.038)	0.016 (0.029)	-0.067* (0.035)
t <sup>3</sup> /100	0.011* (0.006)	-0.008 (0.005)	0.010 (0.007)	-0.008 (0.005)	0.009 (0.007)
Constant	-2.236* (1.153)	-1.799** (0.797)	-1.934* (1.072)	-1.916** (0.780)	-1.846 (1.258)
Variance Sector/Country	0.027** (0.011)	0.007 (0.012)	0.025* (0.013)	0.005 (0.012)	0.031** (0.012)
AIC	1677.54	1266.00	1595.18	1228.80	1681.51
BIC	1742	1331	1659	1293	1746
Observations	1615	1615	1546	1546	1615

Significance levels: \* p<0.1 \*\* p<0.05 \*\*\* p<0.01

The results of our analysis are reported in Table 2. We test for the different scenarios together as much as the correlation of the explanatory variables permits (cf. supplementary materials). For example, variables measuring domestic and European agencification are also part of the variables that measure agency autonomy, as discussed above. Thus, it does not make sense to control for both in the same model.

What do the findings tell us about the likelihood of these different scenarios and their respective hypotheses? With respect to scenario one, the regression analyses provide significant support for the importance of agencification, both at the domestic and European levels. More agencies at the national level and the presence of a European agency in the policy

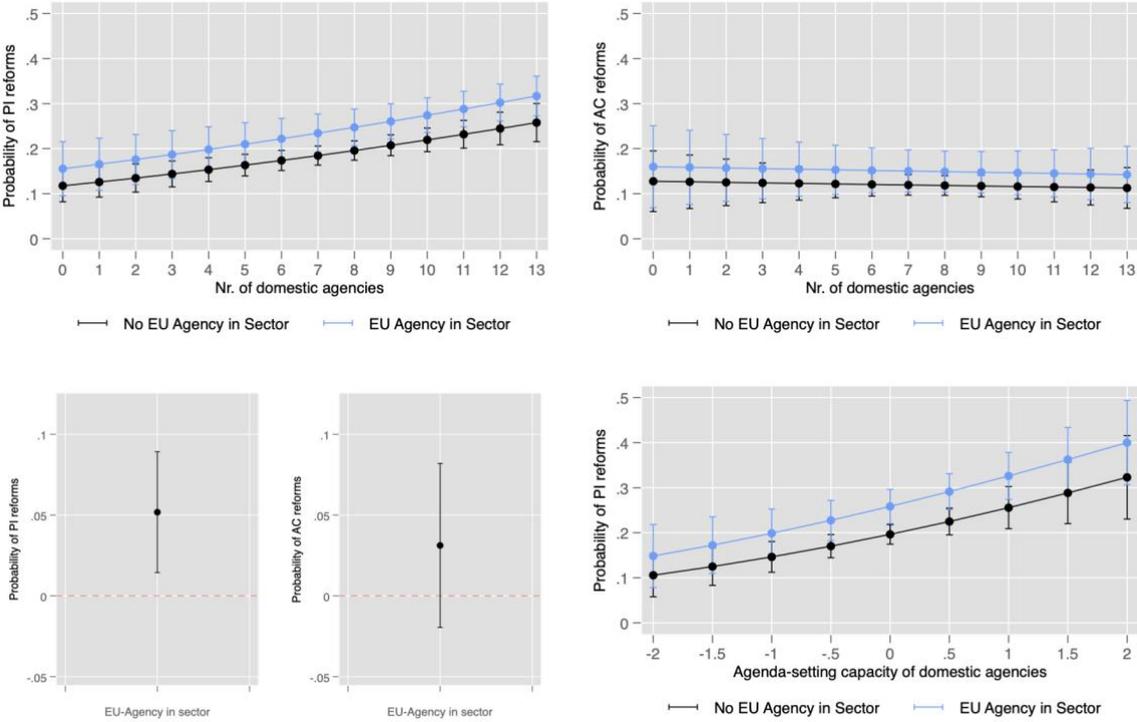
field increase the probability of policy integration (PI) reforms. The findings are not the same for administrative coordination (AC), which seem to follow a different logic (compare models 1 and 2). These results suggest that domestic and European agencification encourage policy integration reforms. The results also support the corollary hypothesis that national agencies drive the reforms rather than national governments, with agency agenda-setting power having a positive effect on policy integration reforms. However, agency autonomy does not make administrative coordination reforms more likely.

The results provide weak support for the argument that governments are responsible for initiating policy integration (Scenario 2). Our analysis shows that Head of Government control over ministers does not have an impact on the likelihood of policy integration (Models 1, 3, 5). Reciprocally, ministerial autonomy does not result in more administrative coordination reforms (Models 2 and 4). Furthermore, autonomy of EU agencies and national regulatory agencies has a positive effect on PI reforms (Model 3), which indicates support for the first rather than the second scenario.

With respect to the third scenario, we find that left parties in government drive policy integration reforms, leading us to accept Hypothesis 3a. Our results also suggest that multiparty governments lead to more reforms and that more fractionalized party systems result in less policy integration and administrative coordination reforms. Nevertheless, the coefficients for both variables are not statistically significant.

The control variables have some explanatory power. Surprisingly, policy field-specific problem pressures are negatively associated with policy integration reforms. If anything, problem pressure dampens integrative reforms. Neither debt nor political constraints (e.g., veto power) appear to have explanatory power for cross-sectoral reforms. Reforms become more likely as time passes ( $t_1$ , Table 2), with early reforms having positive effects on later reforms. The results for administrative coordination are less clear cut. None of the variables that we discussed in the theory section seem to have a strong impact for explaining administrative coordination. Only problem pressure seems to decrease the probability for administrative coordination reforms.

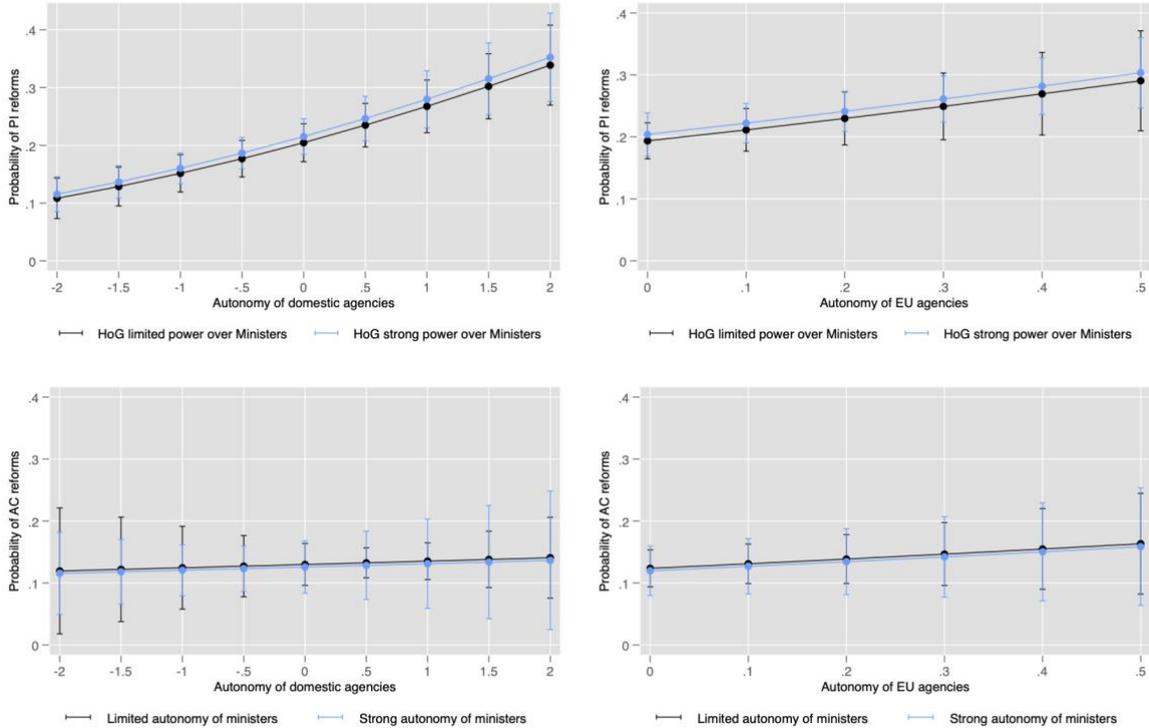
Figure 2: Effect size Scenario 1



To better interpret these results, we now turn to a graphical interpretation of the most important findings related to the three scenarios. For comparative purposes, we summarize the main effects for each scenario in one graph (Figure 2 – Figure 4).

The results show that a change from few to many agencies at the national level increases the probability for policy integration (PI) reforms by a bit more than six percent per year in a policy field; similarly, after the establishment of a European agency the probability for reforms increases around six percent. The results differ for administrative coordination (AC) reforms. In this case, the results do not suggest that the presence of more agencies at the domestic level significantly augments the number of reforms. Concerning the European dimension of agencification, our analysis suggests that establishing a European agency makes both PI and AC more likely, but the coefficients are only statistically significant for PI (Figure 2). Ultimately, our findings indicate that increased agenda-setting capacities for agencies particularly augments the probability for policy integration reforms. Agencies’ agenda-setting power has a stronger effect than the existence of domestic regulatory agencies. The presence of an EU agency increases this effect even more (Figure 2).

Figure 3: Effect size Scenario 1 and Scenario 2

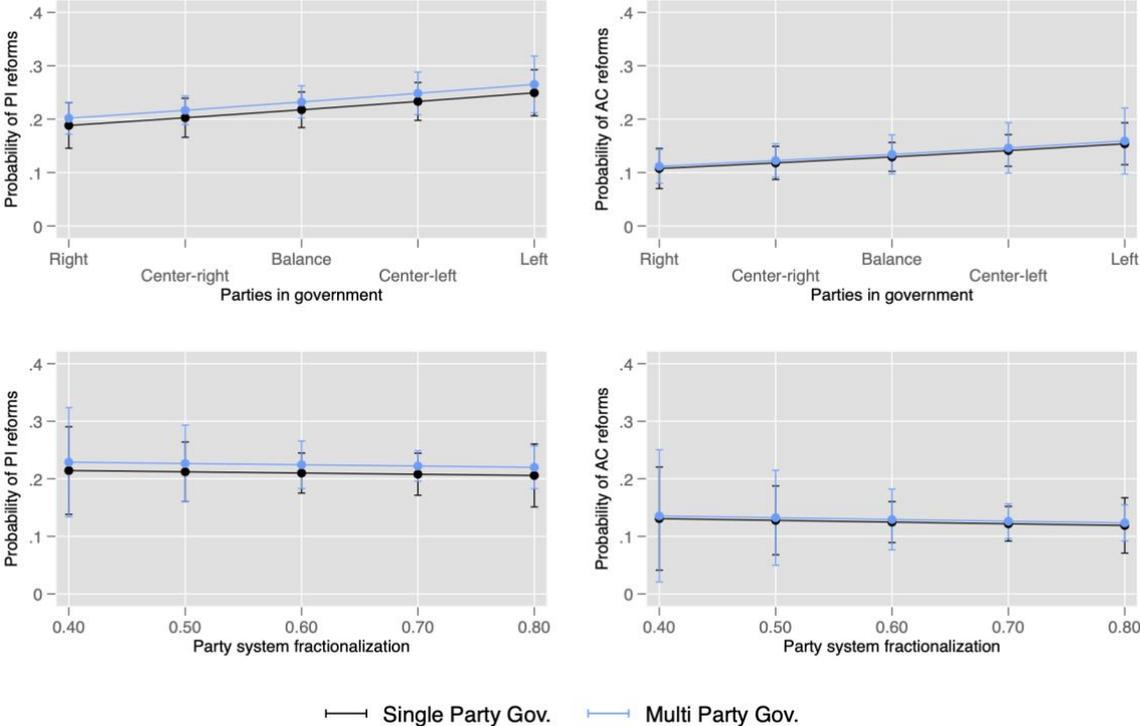


Regarding the second scenario, our findings indicate that greater autonomy of domestic and European agencies makes it more likely that governments embark on PI reforms. In particular, augmenting the autonomy of domestic agencies makes it more likely that governments undertake policy integration reforms. Again, the findings are much weaker concerning administrative coordination, i.e., higher agency autonomy does not augment the probability of AC reforms. Furthermore, the results indicate that a tighter control of the head of government over ministers makes PI reforms more likely but the coefficients are not significant statistically, even if we collapse the variable into a binary measure (Figure 3). Stronger autonomy of ministers from the head of government does not increase the probability for administrative coordination reforms (Figure 3).

Concerning the third scenario, our analyses reveal that the more power left parties have in government, the more likely these governments are to pursue policy integration reforms. Such reforms become even more probable if the government consists of multiple parties. Regarding AC reforms, the findings suggest that left parties in government tend to push for

more cross-sectoral reforms. Nevertheless, this result is not statistically significant. The findings also show that the augmentation of party system fractionalization decreases the probability for PI and AC reforms, though these results are not statistically significant.

Figure 4: Effect size Scenario 3



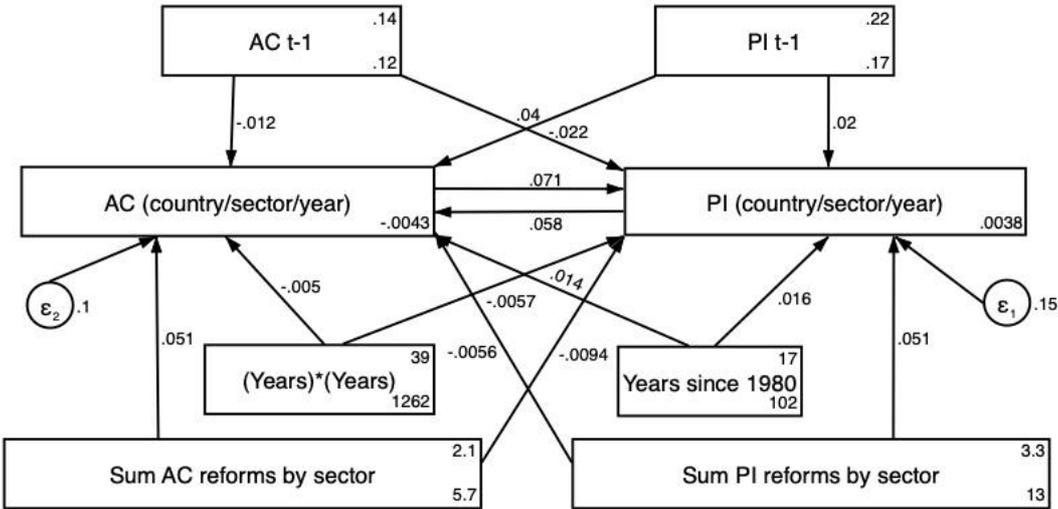
The finding of a negative relationship between problem pressure and integration reforms is counter-intuitive given that we expected problem pressure to generate urgency for integration reforms. Several possible explanations occur to us, though we cannot evaluate them with our existing data. A first possibility is that high problem pressure is a *symptom* of weak integrative capacity or leadership (Rayner and Howlett 2009; Candel 2019). A second possibility is that strong problem pressures actually drive greater attention to specific sectoral reforms rather than broad integrative reform, especially regarding complex policies such as environmental policy (Trein et al. 2020). In other words, decisionmakers prefer “patching” over “packaging” (Howlett and Rayner 2013). A third possibility is that problem pressures trigger political conflict or strong sectoral resistance to reform that undermine integrative reforms (Nilsson and Persson 2003).

**The interaction of policy integration and administrative coordination reforms**

Another surprise of the preceding analysis is that our multilevel regression models generally do not explain administrative coordination reforms. As suggested by Figure 1, however, PI and AC reforms are potentially linked to one another. In order to explore this linkage more inductively (Yom 2015), we use structural equation modeling (Acock 2013) to examine the interaction between policy integration and administrative coordination reforms.

The structural equation model (SEM)<sup>6</sup> uses the following variables including: binary variables indicating whether a PI or AC reform had occurred in that year; binary variables measuring whether an administrative coordination or policy integration reform occurred in the year prior to a reform; continuous variables counting the cumulative policy integration and administrative coordination reforms in each policy field since 1980. We also add the time and the time-squared variables since 1980.

*Figure 5: The coevolution of administrative coordination and policy integration reforms*



<sup>6</sup> We used the Stata commands sem (standard structural equation models) and gsem (generalized structural equation models) to estimate the model. Figure 5 shows the normal sem model because it allows us to specify a non-recursive system between policy integration and administrative coordination reforms. The results do not change when we use the gsem estimator, so we do not show these models. The Supplementary Materials document provides descriptive statistics for the additional variables as well as a comparative table of the sem and gsem models.

The results suggest some interesting insights into the relationship between the two types of reform (Figure 5; Table 3). The general finding is that reforms are interdependent in particular ways -- if an administrative coordination reform occurs, there is an increased likelihood that a policy integration reform will also occur, and vice versa. But the model suggests that overall, the two types of reforms are introduced together rather than sequentially; a policy integration or administrative coordination reform in the prior year has no statistically significant impact on the other type of reform. Nevertheless, we see a cumulative effect of reforms over time for each type of reform: a higher frequency of policy integration reforms in the past makes future policy integration more likely (in the same policy field and country). The same is true for administrative coordination reforms. Yet this interdependence does not hold across reform types--a higher count of administrative coordination reforms since 1980 does not result in more policy integration reforms or vice versa. Finally, the model also confirms that the more years that have passed since 1980, the more likely both types of reforms become, with the reforms following the distribution of an inverse u-curve (negative value of the squared time variable).

*Table 3: Structural equation model (robust standard errors clustered at country level)*

Variables	Coefficient	Std. Error	Coefficient	Std. Error
	Policy integration		Administrative coordination	
Policy integration reform			0.058***	(0.008)
Administrative coordination reform	0.071***	(0.012)		
Time since 1980	0.016***	(0.003)	0.014***	(0.002)
(Time since 1980) <sup>2</sup>	-0.006***	(0.001)	-0.005***	(0.001)
Count admin. coord. reform (since 1980)	-0.009	(0.007)	0.051***	(0.004)
Count policy integration reform (since 1980)	0.051***	(0.005)	-0.006	(0.003)
Administrative coordination reform t-1	0.040	(0.038)	-0.012	(0.032)
Policy integration reform t-1	0.020	(0.016)	-0.022	(0.018)
Constant	0.004	(0.022)	-0.004	(0.011)
Variance policy integration	0.146***	(0.008)		
Variance administrative coordination			0.105***	(0.007)
Observations			1820	

\* p<0.1 \*\* p<0.05 \*\*\* p<0.01

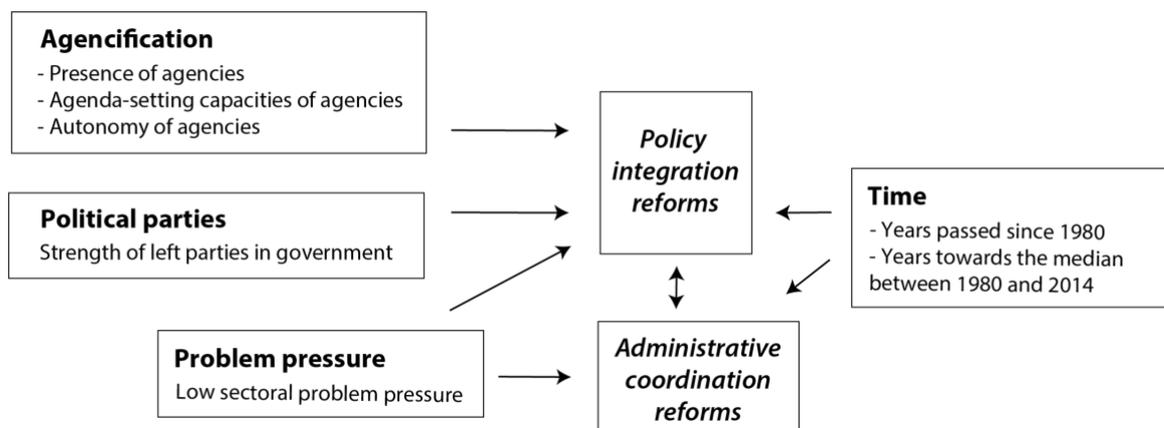
These results suggest that administrative coordination and policy integration reforms are coupled. There is a likelihood that they are introduced together, perhaps as a single package (though policy integration reforms are more likely than administrative coordination reforms). Furthermore, past policy integration and administrative coordination reforms in one policy field make subsequent reforms of the same type more likely. The more a country pursues policy integration reforms, the more likely that further policy integration reforms will follow. The same finding holds for administrative coordination reforms. Interestingly, there is no overlap between the two types of reforms in terms of reform trends, i.e., a higher frequency of past administrative coordination reforms does not make policy integration reforms more likely and vice versa. The results show that the reforms are linked in terms of their event timing, but that the reform types develop independently. This finding supports our conceptual decision to separate administrative coordination and policy integration reforms.

### **Agencies and party politics drive cross-sectoral reforms**

The results of our analysis support the first scenario—namely, that agencification drives PI reforms. Notably, the presence of many independent regulatory agencies at the national as well as at the European level makes cross-sectoral reforms more likely. If we add information operationalizing agency agenda-setting capacity, the effects get even stronger (Figure 2). Our results also show that higher agency autonomy augments the probability of PI reforms but not AC reforms. Furthermore, our results lead us to reject the hypothesis that central government control over ministers increases the likelihood of PI reforms. Nor do our findings indicate that more ministerial autonomy augments AC reforms. These results suggest that cross-sectoral reforms are not purely a strategy of central government to regain control over “rogue” agencies but part of a policymaking agenda driven – either directly or indirectly – by agencies themselves (Figure 6).

The results of our analysis also extend support to the third scenario. Specifically, our findings suggest that greater control of left parties over government makes PI reforms more likely. The regression models support the argument that the heterogeneity of left parties’ policy preferences translate into more PI reforms, and, to a lesser extent, into more administrative coordination reforms (Figure 6).

Figure 6: Combined results from multilevel regression and structural equation models



Administrative coordination reforms cannot be explained by any of the scenarios that we put forth. However, AC reforms co-occur with PI reforms and this suggests that decisionmakers may couple both aspects of reform. The findings also reveal that PI and AC reforms are a consequence of low problem pressure. This implies that if there is a specific problem—for example high numbers of immigrants and refugees—there are fewer cross-sectoral reforms. In such cases, policymakers may be pursuing sector-specific reforms. Ultimately, the findings show that the more years passed since 1980, the more likely governments are to have put into place PI and AC reforms, though this probability begins to decline in the post-1997 period.

## Conclusion

With this paper, we aim to improve our understanding of why governments engage in reforms that integrate policy instruments and coordinate public sector organizations. To advance this goal, we formulated three sets of hypotheses (scenarios) that draw on insights from different strands of political science and public administration research. Our paper has emphasized that the answer to this question is not an obvious one. To conclude, we briefly review our findings, consider the limitations of our analysis, and discuss implications for future research.

Our analysis reinforces the common view that NPM reforms and the development of the regulatory state have driven policy integration reforms. By creating specialized agencies at both the domestic and European level, i.e., through agencification, NPM reforms and the

regulatory state have accentuated a demand for cross-cutting reforms of policy and administration. However, these reforms are not being driven by central governments seeking to regain powers from rogue agencies; rather, our findings suggest that it is agencies that drive these reforms. These findings suggest that agencies may be using the competencies they receive to push for more policy integration reforms.

Furthermore, our results suggest – from a high-level perspective – that left parties are slightly more receptive to the idea of policy integration reforms compared to conservative and liberal parties in government. This finding does not rule out that conservative or liberal governments may also pursue such reforms, but it does suggest that left parties are more inclined to do so. We speculate that this difference may be related to the more heterogeneous policy preferences of left parties' electoral base.

Contrary to our theory, our findings provide limited explanation for AC reforms. Our results do show that such reforms occur in conjunction with policy integration reforms. Thus, we speculate that governments change the coordination of administrative organizations because they conduct a policy integration reform at the same time, rather than pursuing AC independently from PI. Nevertheless, the causal link could also go the other way, i.e., governments pursue PI as they engage in AC reforms. Furthermore, our findings reveal that problem pressure, e.g., a high level of immigration, makes administrative coordination reforms less likely.

Against the background of these findings, our paper points to a number of avenues for future research. The first is to advance better explanations of why governments choose to put into place administrative coordination reforms. Our assessment demonstrates that negative problem pressure explains AC reforms, but none of the other variables that we included in our theoretically-driven scenarios has any impact. Thus, future research might explore the role of administrative traditions in explaining AC reforms. Moreover, scholars could disentangle the causal relationship between PI and AC reforms in more detail.

A second avenue for future research should deal with the role of time in explaining the presence of PI and AC reforms. We have demonstrated that such reforms have augmented

since 1980. This finding raises the question about long-term dynamics of delegation and (re)integration, i.e., it poses the problem of whether a dialectic exists between these two types of reform. Our data allows us to examine the interaction of these reforms over time in a very broad fashion. However, to truly understand these interactions, it would be necessary to examine these processes in more detail than our data allows.

A third avenue for future research is to improve on measurement. Notably, agencification works as a proxy for institutional fragmentation and government silos. More direct measures might provide better results for the role of national agencies. We also note that agencification is only one dimension of NPM reforms that potentially contributes to fragmentation. Our analysis does not consider another major dimension -- contracting out. Improved measures for "problem pressure" would also be highly desirable and we acknowledge that our operationalization is rather loose.

## References

- Abou-Chadi, Tarik. 2016. "Niche party success and mainstream party policy shifts—how green and radical right parties differ in their impact." *British Journal of Political Science* 46 (2):417-36.
- Adam, Christian, Yves Steinebach, and Christoph Knill. 2018. "Neglected challenges to evidence-based policy-making: the problem of policy accumulation." *Policy Sciences*, 51(3):269-290.
- Acock, Alan C. 2013. *Discovering Structural Equation Modeling using Stata*. College Station, Texas.
- Alexiadou, Despina. 2015. "Ideologues, partisans, and loyalists: Cabinet ministers and social welfare reform in parliamentary democracies." *Comparative Political Studies*, 48(8):1051-1086.
- Andeweg, Rudi B. 2000. "Ministers as double agents? The delegation process between cabinet and ministers." *European Journal of Political Research*, 37(3):377-395.
- Armingeon, Klaus, Christian Isler, Laura Knöpfel, David Weisstanner, and Sarah Engler. 2017. *Comparative Political Data Set 1990-2014*. University of Bern: Institute of Political Science.
- Aurich-Beerheide, Patrizia, Catalano, Serida L., Graziano, Paolo R., & Zimmermann, Katherine (2015). Stakeholder participation and policy integration in local social and employment policies: Germany and Italy compared. *Journal of European Social Policy*, 25(4), 379-392.
- Bach, Tobias and Eva Ruffing. 2013. "Networking for autonomy? National agencies in European networks." *Public Administration*, 91(3):712-726.
- Bach, Tobias, Eva Ruffing, and Kutsal Yesilkagit. 2015. "The differential empowering effects of Europeanization on the autonomy of national agencies." *Governance*, 28(3):285-304.
- Bäck, Hanna, Marc Debus, and Wolfgang C. Müller. 2016. "Intra-party diversity and ministerial selection in coalition governments." *Public Choice*, 166(3-4):355-378.
- Bardach, Eugene. 1998. *Getting Agencies to work together: The Practice and Theory of Managerial Craftsmanship*. Washington D.C.: Brookings Institution Press.
- Baum, Fran. 2008. *The New Public Health*. Melbourne; New York: Oxford University Press.

- Béland, Daniel, and André Lecours. 2005. "Federalism, Nationalism, and Social Policy Decentralisation in Canada and Belgium." *Regional and Federal Studies* 17 (4):404-15.
- Bischof, Daniel. 2017. "New Graphic Schemes for Stata: plotplain and plottig." *Stata Journal* 17 (3):748-759.
- Bjurstrøm, Karl H. (2019). How interagency coordination is affected by agency policy autonomy. *Public Management Review*, 1-25.
- Bolleyer, Nicole. 2011. "The influence of political parties on policy coordination." *Governance*, 24(3):469-494.
- Bouckaert, Geert, B. Guy Peters, and Koen Verhoest. 2010. *The Coordination of Public Sector Organizations: Shifting Coalitions of Public Management*. Hampshire: Palgrave Macmillan.
- Biesbroek, Robbert, & Candel, Jereon. J. (2019). Mechanisms for policy (dis) integration: explaining food policy and climate change adaptation policy in the Netherlands. *Policy Sciences*, 1-24.
- Candel, Jereon. J. (2019). The expediency of policy integration. *Policy Studies*, 1-16.
- Candel, Jeroen JL, and Robbert Biesbroek. 2016. "Toward a Processual Understanding of Policy Integration." *Policy Sciences* 49 (3):211-31.
- Carey, Gemma, and Brad Crammond. 2015. "Action on the social determinants of health: views from inside the policy process." *Social Science & Medicine*, 128:134-141.
- Cejudo, Guillermo M, and Cynthia L Michel. 2017. "Addressing fragmented government action: Coordination, coherence, and integration." *Policy Sciences* 50:745–67.
- Chow, Danny S. L., Christopher Humphrey, and Jodie Moll. 2007. "Developing whole of government accounting in the UK: Grand claims, practical complexities and a suggested future research agenda." *Financial Accountability & Management*, 23 (1): 27-54.
- Christensen, Tom, and Per Lægreid. 2007a. "The Whole-of-Government Approach to Public Sector Reform." *Public Administration Review* 67 (6):1059-66.
- Christensen, Tom, and Per Lægreid. 2007b. "Regulatory agencies—The challenges of balancing agency autonomy and political control." *Governance*, 20(3), 499-520.
- Curini, Luigi, and Airo Hino. 2012. "Missing links in party-system polarization: How institutions and voters matter." *The Journal of Politics* 74 (2):460-73.

- Clasen, Jochen, and Daniel Clegg, eds. 2011. *Regulating the Risk of Unemployment: National Adaptations to Post-industrial Labour Markets in Europe*. Oxford: Oxford University Press.
- Davies, Jonathan S. 2009. "The limits of joined-up government: Towards a political analysis." *Public Administration*, 87(1), 80-96.
- Dohler, Marian. 2002. "Institutional choice and bureaucratic autonomy in Germany." *West European Politics*, 25(1), 101-124.
- Duffy, Robert J., & Cook, Jeffrey. J. (2019). Overcoming bureaucratic silos? Environmental policy integration in the Obama administration. *Environmental Politics*, 28(7), 1192-1213.
- Egeberg, Morten, and Jarle Trondal. 2009. "Political leadership and bureaucratic autonomy: Effects of agencification." *Governance*, 22(4), 673-688.
- Egeberg, Morten. 2008. "European government (s): Executive politics in transition?" *West European Politics*, 31(1-2), 235-257.
- Geddes, Andrew., and Peter Scholten. 2016. *The politics of migration and immigration in Europe*. Sage.
- Häusermann, Silja, Georg Picot, and Dominik Geering. 2013. "Rethinking Party Politics and the Welfare State – Recent Advances in the Literature." *British Journal of Political Science* 43 (1):221-40.
- Head, Brian. W., and John Alford. 2015. "Wicked problems: Implications for public policy and management." *Administration & Society*, 47(6):711-739.
- Hooghe, Liesbet, and Gary Marks. 2003. "Unraveling the Central State, but how? Types of Multi-Level Governance." *The American Political Science Review* 97 (2):233-43.
- Hooghe, Liesbet, Gary Marks, Arjan H. Schakel, Sandra Chapman-Osterkat, Sara Niedzwiecki, and Sarah Shair-Rosenfield. 2016. *Measuring Regional Authority. Volume I: A Postfunctionalist Theory of Governance*. Oxford: Oxford University Press.
- Howlett, Michael. 2014. "Why are policy innovations rare and so often negative? Blame avoidance and problem denial in climate change policy-making." *Global Environmental Change*, 29:395-403.
- Howlett, Michael, & Rayner, Jeremy (2013). Patching vs Packaging in Policy Formulation: Assessing Policy Portfolio Design. *Politics and Governance*, 1(2), 170-182.

- Huber, John D, and G Bingham Powell. 1994. "Congruence between citizens and policymakers in two visions of liberal democracy." *World Politics* 46 (3):291-326.
- Hustedt, Thurid, and Thomas Danken. 2017. "Institutional logics in inter-departmental coordination: Why actors agree on a joint policy output." *Public Administration*, 95(3):730-743
- Jordan, Andrew, and Andrea Lenschow. 2010. "Environmental Policy Integration: A State of the Art Review." *Environmental Policy and Governance* 20 (3):147-58.
- Jordana, Jacint, David Levi-Faur, and Xavier Fernández i Marín. 2011. "The Global Diffusion of Regulatory Agencies: Channels of Transfer and Stages of Diffusion." *Comparative Political Studies* 44 (10):1343-69.
- Jordana, Jacint, Xavier Fernández-i-Marín, and Andrea C Bianculli. 2018. "Agency Proliferation and the Globalization of the Regulatory State: Introducing a Data set on the Institutional Features of Regulatory Agencies." *Regulation & Governance* 12 (4):524-40.
- Lægreid, Per, Külli Sarapuu, Lise H. Rykkja, and Tiina Randma-Liiv. 2015. "New coordination challenges in the welfare state." *Public Management Review*, 17(7): 927-939
- Lemaitre, Georges. 2011. "The Integration of Immigrants into the Labour Market: The Case of Sweden", *OECD Social, Employment and Migration Working Papers* (48), Paris: OECD Publishing.
- Levi-Faur, David. 2011. "Regulatory networks and regulatory agencification: towards a Single European Regulatory Space." *Journal of European Public Policy* 18 (6):810-29.
- Lodge, Martin, and Kai Wegrich. 2014. *The Problem-solving Capacity of the Modern State: Governance Challenges and Administrative Capacities*. Oxford, New York: Oxford University Press.
- Maggetti, Martino. 2009. "The role of independent regulatory agencies in policy-making: a comparative analysis." *Journal of European Public Policy*, 16(3):450-470.
- Maggetti, Martino, and Koen Verhoest. 2014. "Unexplored aspects of bureaucratic autonomy: a state of the field and ways forward." *International Review of Administrative Sciences* 80 (2):239-56.
- May, Peter J., Joshua Sapotichne, and Samuel Workman. 2006. "Policy coherence and policy domains." *Policy Studies Journal*, 34(3):381-403.

- Molenveld, Astrid, Verhoest, Koen, & Wynen, Jan. 2020. Why public organizations contribute to crosscutting policy programs: the role of structure, culture, and ministerial control. *Policy Sciences*, 1-31.
- Negev, Maya (2016). Interagency aspects of environmental policy: The case of environmental health. *Environmental Policy and Governance*, 26(3), 205-219.
- Nilsson, M. & A. Persson. 2003. Framework for analysing environmental policy integration, *Journal of Environmental Policy & Planning*, 5:4, 333-359
- Orren, Karen, and Stephen Skowronek. 2017. *The policy state: An American predicament*. Cambridge: Harvard University Press.
- Patashnik, Erik. M. 2014. *"Reforms at risk: What happens after major policy changes are enacted."* Princeton University Press.
- Perri 6. 2004. "Joined-Up Government in the Western World in Comparative Perspective: A Preliminary Literature Review and Exploration." *Journal of Public Administration Research and Theory* 14 (1):103-38.
- Peters, B. Guy. 2018. "The challenge of policy coordination." *Policy Design and Practice*, 1(1): 1-11.
- Peters, B. Guy. 2015a. *Pursuing horizontal management: The politics of public sector coordination*. University Press of Kansas.
- Peters, B. Guy. 2015b. "State failure, governance failure and policy failure: Exploring the linkages." *Public Policy and Administration*, 30(3-4):261-276.
- Pollitt, Christopher. 2003. "Joined-up government: a survey." *Political Studies Review*, 1(1):34-49.
- Pollitt, Christopher, and Geert Bouckaert. 2017. *Public Management Reform. A Comparative Analysis into the Age of Austerity*. Oxford: Oxford University Press.
- Prontera, Andrea. 2016. "Subsystem politics and policy coherence in development cooperation: Evidence from four EU Member States." *Comparative European Politics*, 14(3):298-318.
- Rayner Jeremy & Michael Howlett 2009. Conclusion: Governance arrangements and policy capacity for policy integration, *Policy and Society*, 28:2, 165-172

- Rommel, Jan, and Koen Verhoest. 2014. "Exploring effects of coordination on the autonomy of regulators: energy regulators in Belgium." *International Review of Administrative Sciences*, 80(2):298-317.
- Roness, Paul G., Koen Verhoest, Kristin Rubecksen, and Muiris MacCarthaigh. 2008. "Autonomy and regulation of state agencies: reinforcement, indifference or compensation?" *Public Organization Review*, 8(2):155-174.
- Rueda, David. 2006. "Social Democracy and Active Labour-market Policies: Insiders, Outsiders and the Politics of Employment Promotion." *British Journal of Political Science*, 36(3):385-406.
- Schermann, Katrin, and Laurenz Ennsner-Jedenastik. 2014. "Coalition policy-making under constraints: Examining the role of preferences and institutions." *West European Politics*, 37(3):564-583.
- Schiller, Christof. 2016. *The Politics of Welfare State Transformation in Germany. Still a Semi-sovereign State?* Milton Park & New York: Routledge.
- Sieberer, Ulrich, Thomas M. Meyer, Hanna Bäck, Andrea Ceron, Albert Falcó-Gimeno, Isabelle Guinaudeau, Martin Ejnar Hansen, Kristoffer Kolltveit, Tom Louwerse, Wolfgang C. Müller and Thomas Persson. 2019. "The Political Dynamics of Portfolio Design in European Democracies." *British Journal of Political Science*: 1-16.
- Sørensen, Eva, Jacob Torfing. Eds. 2016. *Theories of democratic network governance*. Heidelberg: Springer.
- Steenbergen, Marco R, and Bradford S Jones. 2002. "Modeling Multilevel Data Structures." *American Journal of Political Science* 46 (1):218-37.
- Timmermans, Arco. (2006). "Standing apart and sitting together: Enforcing coalition agreements in multiparty systems." *European Journal of Political Research*, 45(2):263-283.
- Teorell, Jan, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Anna Khomenko, and Richard Svensson. 2017. *The Quality of Government Standard Dataset*. University of Gothenburg: The Quality of Government Institute.
- Thatcher, Mark. 2005. "The third force? Independent regulatory agencies and elected politicians in Europe." *Governance*, 18(3):347-373
- Tosun, Jale, and Achim Lang. 2017. "Policy Integration: Mapping the Different Concepts." *Policy Studies* 38 (6):553-70.

- Trein, Philipp. 2017. "Coevolution of policy sectors: A comparative analysis of healthcare and public health." *Public Administration*, 95(3), 744-758.
- Trein, Philipp, Iris Meyer and Martino Maggetti. 2019. "The Integration and Coordination of Public Policies: A Systematic Comparative Review." *Journal of Comparative Policy Analysis: Research and Practice*, 21(4), 332-349.
- Trein, Philipp and Martino Maggetti (2020). "Patterns of Policy Integration and Administrative Coordination Reforms: A Comparative Empirical Analysis." *Public Administration Review*, 80(2), 198-208.
- Trein, Philipp, Martino Maggetti and Iris Meyer (2020). "Necessary conditions for policy integration and administrative coordination reforms: an exploratory analysis." *Journal of European Public Policy*, 1-22.
- Verhoest, Koen, Geert Bouckaert, and G. Guy Peters. 2007. "Janus-faced reorganization: specialization and coordination in four OECD countries in the period 1980—2005." *International review of administrative sciences*, 73(3):325-348.
- Verschuere, Bram, and Tobias Bach. 2012. "Executive agencies, ministers, and departments: Can policy and management ever be separated?" *Administration & Society*, 44(2):183-206.
- Vince, Joana. 2015. "Integrated policy approaches and policy failure: the case of Australia's Oceans Policy." *Policy Sciences*, 48(2):159-180.
- Wonka, Arndt, and Berthold Rittberger. 2010. "Credibility, Complexity and Uncertainty: Explaining the Institutional Independence of 29 EU Agencies." *West European Politics* 33 (4):730-52.
- Yesilkagit, Kutsal, and Sandra van Thiel. 2011. "Autonomous agencies and perceptions of stakeholder influence in parliamentary democracies." *Journal of Public Administration Research and Theory*, 22(1):101-119.
- Yom, Sean. 2015. "From Methodology to Practice: Inductive Iteration in Comparative Research." *Comparative Political Studies* 48 (5):616-44.

# Supplementary material

## Coding of Variables

### Dependent variable

We collected the data, using the scheme in Table S1 to code reforms of policy integration and administrative coordination. For each country and sector, we created a review sheet of reforms that we submitted to at least one expert in the policy field for review, if there was no in-house expertise for the policy field. The response rate for the policy sheets was at 80 percent (in-house expertise included (in-house expertise was consulted for public health policy in Australia, Germany, Switzerland, UK, and US only)). Data collection was done according to the following steps:

1. Survey of secondary literature, edited books, policy reports (international organizations, governments)
2. Creation of time series of reforms
3. Data sheets validated by experts
4. Exclusion reforms that are unclear in their relevance for our analytical focus
5. Additional research in case we could not obtain an expert opinion.

*Table S1: Operationalization of policy integration and administrative coordination across policy sectors (dependent variables)*

<b>Policy field</b>	<b>Policy integration</b>	<b>Administrative coordination</b>
<b>Environment</b> (Object of integration: creation of a field of environmental policy; no purely sectoral integration of environmental	<ul style="list-style-type: none"> <li>- National strategies and action plans for the integration of sustainable development policies</li> <li>- Framework legislation that integrates environmental matters of various sectoral policies</li> <li>- Environmental (framework) legislation that integrates formerly disperse legislation and reduces fragmentation</li> <li>- Constitutional law on environmental protection:</li> </ul>	<ul style="list-style-type: none"> <li>- Transversal bodies for environmental policy at the level of the central government, with competences for formulating national environmental policy and coordinating the implementation of national environmental strategies</li> <li>- Inter-sectoral ministerial councils or working groups for environmental policy, e.g. "green cabinets"</li> </ul>

<p>concerns in other policies)</p>	<ul style="list-style-type: none"> <li>- Central legislation that leads to harmonization of sub-national policy (in federal systems)</li> <li>- Environmental planning at ministerial level</li> </ul>	<ul style="list-style-type: none"> <li>- Increase of the Ministry of Environment's responsibilities of transversal coordination of environmental policy</li> <li>- Intergovernmental agreements and units for environmental policy (in federal systems) that delimit the respective responsibilities</li> <li>- Joint federal and sub-national bodies for nation-wide harmonization and/or coordination</li> <li>- Reorganizations of the central government that lead to integration of the environmental portfolio:</li> <li>- Creation of a public service for the environment or of sustainability units in the public service</li> <li>- Strategies for the promotion of employment in the environmental sector</li> <li>- Reforms that harmonize or coordinate administrative procedures regarding e.g. departmental environmental reporting systems or the development of sustainability action plans</li> </ul>
<p><b>Migration</b> (Object of integration: integration and coordination of immigration and immigrant integration policies and organizations, as well as mainstreaming of immigrant</p>	<ul style="list-style-type: none"> <li>- Integration or coordination of laws referring to temporary and permanent residence</li> <li>- National action plans or strategies for immigration and immigrant integration</li> <li>- Integration policy action plan</li> <li>- Strategy to harmonize immigration and integration policies between sectors and levels of government</li> <li>- Labor market integration and education reforms that make further immigration benefits conditional on</li> </ul>	<ul style="list-style-type: none"> <li>- Organization to integrate or coordinate different ministries and levels of government that are related to immigration and immigrant integration</li> <li>- Accumulating immigration and integration portfolios in one ministry</li> <li>- Creation of interdepartmental working groups</li> <li>- Councils to coordinate different ministries in the field</li> <li>- Commissioner for foreigners</li> <li>- Conditionality of immigration benefits for integration efforts</li> </ul>

<p>integration policies)</p>	<p>employment and education efforts of the applicant</p>	<ul style="list-style-type: none"> <li>- Organizations that bring together policymakers from different sectors and different levels of government at same time</li> </ul>
<p><b>Public health</b> (Object of integration: integration and coordination of curative and preventative elements of health policy)</p>	<ul style="list-style-type: none"> <li>- Reforms that include preventive measures into health the services paid by the general health insurance, such as screening programs</li> <li>- Health promotion and legislation with a focus on the coordination and integration of prevention and cure – either in general or with a focus on specific diseases</li> <li>- General and specific national health strategies (e.g., cancer, diabetes, HIV, tobacco, nutrition, etc.)</li> <li>- Strategies that focus on health inequalities</li> <li>- Public health funds that allow organizations and levels of government to operate policy programs that coordinate or even integrate preventive and curative measures</li> </ul>	<ul style="list-style-type: none"> <li>- Network amongst hospitals with a particular focus on health promotion and prevention</li> <li>- National public health service delivery agency and ministry that includes sections for disease prevention and others that are responsible for curative aspects of health policy</li> <li>- Public organizations that coordinate the prevention and treatment of specific diseases and/or the policy advocacy for it</li> <li>- Establishment of institutions of health information</li> <li>- Inter-ministerial conferences and councils that coordinate preventative and curative aspects concerning certain diseases and/or risk factors, such as drugs, tobacco, cancer etc.</li> </ul>
<p><b>Unemployment</b> (Object of integration: integration and coordination of activation and benefit related policies)</p>	<ul style="list-style-type: none"> <li>- National strategies, action plans or reform packages that integrate active and passive labour market policies (e.g. “welfare to work” principle)</li> <li>- Employment policy reforms that introduce or enhance activation measures in employment policy</li> <li>- Reforms that integrate formerly separated social assistance and/or unemployment benefits, e.g. by creating an integrates system of income and employment benefits</li> <li>- Adoption of reforms that apply an activation approach to pension, family or invalidity policy</li> </ul>	<ul style="list-style-type: none"> <li>- Creation of transversal bodies for employment policy at the level of the central government</li> <li>- Creation of intergovernmental agreements or units (in federal systems) for nation-wide harmonization and/or coordination of employment policy</li> <li>- Reorganizations of the central government that lead to integration of employment portfolio by merging the ministries responsible for various sectors such as employment, social affairs, health, etc.</li> </ul>

		<ul style="list-style-type: none"> <li>- Reorganization of implementation administrations that lead to integration of active and passive employment policy and/or services for employment and social assistance:</li> <li>- Creation of one-stop shop service centers that offer comprehensive services related to social assistance, unemployment benefits, and job placement</li> <li>- Introduction of an individualized approach to employment assistance</li> <li>- Integration of administrative procedures for both unemployment and social security administrations such as unified electronic declarations or social identification cards</li> <li>- Procedures that enhance or institutionalize inter-agency collaboration between unemployment and social security administrations</li> </ul>
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Independent variables

In what follows, we provide some additional information regarding the coding of some of the explanatory variables. Table S2 summarizes all of the explanatory variables and illustrates how they operationalize the hypotheses from the different scenarios. Table S3 reports the correlation between the different independent variables to demonstrate that we cannot include all of them into the same model.

*Domestic agency autonomy*

To operationalize agency autonomy, we created a compound variable that combines a binary variable for the presence of a (1) civil law system, (2) the age of the independent regulatory agency in the policy field, and the (3) degree of politicization of bureaucrats (Maggetti and Verhoest 2014) as well as the presence of agencies in the country. Therefore, we proceeded with the following steps:

1. First, we created a variable recording the presence of a civil law system through a binary variable that takes the value “1” for Australia, Canada, New Zealand, UK, and U.S.
2. Second, we coded a binary variable operationalizing the age of the regulatory agency in the policy field based on the data from Jordana et al. (2011), which contains information on the age of agencies.
3. Third, to measure the politicization of the bureaucracy (as opposed to professionalization), we created a sub-compound variable combining information on administrative traditions and political corruption. Therefore, we proceeded in three steps.
  - a. First, we coded a variable with information on administrative traditions and ranked countries’ bureaucracies from less politicized (i.e. little political control of government/governing parties over appointments in the civil service) to very politicized. The countries are ranked as follows: “1” Canada, New Zealand, UK, “2” Australia, Netherlands, Sweden, Switzerland, “3” Austria, Germany, United States, “4” Belgium, Italy, using information by Painter and Peters (2010) as well as our own knowledge of various administrative systems.
  - b. Second, we created a variable measuring political corruption based on information from the *Quality of Government Dataset* (Teorell et al. 2017).
  - c. Third, in using regression scores from principal component analysis, we combined information on the politicization of bureaucrats with political corruption into a variable recording the politicization of bureaucrats.
4. Fourth, we created a variable measuring autonomy, in combining our variables regarding a civil law system, the age of the independent regulatory agency in the policy field, and the degree of politicization of bureaucrats through regression scores from principal component analysis. All three variables loaded on one factor, which permitted us to combined them into a single measurement.
5. Fifth, we linked the measures for the number and presence of agencies with the above-explained regarding the autonomy of independent regulatory agencies using regression scores from principal component analysis.

### *Domestic agencies' agenda-setting capacity*

To create a variable that measures the agenda-setting capacity of domestic agencies, we proceeded with the following steps:

1. Firstly, we created a variable that counts the number of elections since 1960.
2. Secondly, we created a variable counting the changes in government since 1960.
3. Thirdly, we combined the variables on government change and election change through regression scores from principal component analysis into a measurement of domestic agencies' agenda-setting capacity. The rationale behind the combination of this information is that a higher frequency of change in government and more elections results is a sign of less professionalized parliaments, which in turn gives more agenda-setting powers to domestic agencies (Maggetti 2009, 453-454).
4. Fourth, we combined the variable on domestic agencies' agenda-setting capacity with the presences of agencies using regression scores from principal component analysis.

Control variables

### *Problem pressure*

To construct the variable, we use one indicator as a proxy for measuring the problem pressure on policymakers, in each policy field. We use unemployment rate for unemployment policy, greenhouse gas emissions per GDP unit for environmental policy, inflow of migrants for migration policy, and childhood mortality (infant mortality rate in per cent) for public health policy. We are aware that problem pressure might be more complex, especially in environmental policy and public health policy. We considered to create more complex indicators for these two policy fields but decided to not do that and to have harmonious measures for the four fields. The presence of one core issue in a policy field might change the integration agenda as decisionmakers focus on one particular issue. To make sure that the problem pressure measurements are comparable for each of the four policy fields, we z-standardized the measures around their mean.

*Debt:* We control for the share of national debt because reforms to coordinate and integrate policy instruments can also be motivated by austerity concerns. For example, coordinating and integrating benefits and activation in unemployment policy might be driven by concerns

about high government expenditure and the need to consolidate public expenses (Schiller 2016).

*Political Constraints:* Another control variable concerns the structure of veto points in the political system (Tsebelis 2002). Democratic systems with more veto points may place constraints on the ability to create more integrative policies (Jordan and Lenschow 2010), and more veto points might effectively result in less cross-sectoral reforms of administrative coordination and policy integration.

*Time:* To account for the temporal dimension, we use three independent variables that measure the time since the onset of the reform period in 1980 (Gilardi 2010; de Francesco 2012). By including this variable, we account for the temporal dimension and path dependencies with the intention of capturing the way that reforms often occur as a series and may build on each other over time.

*Table S2: Link between the different variables and the hypotheses*

<b>Concept</b>	<b>Variables and measurement</b>	<b>Variance</b>	<b>Hypotheses</b>
Domestic agencification	Number of domestic agencies in 15 sectors (count variable) (Jordana et al. 2011)	Country	1a, 2b, 2c
European agencification	Presence of European agency in the policy field (binary variable) (Levi-Faur 2011)	Country, policy field	1a
Domestic agency autonomy	Compound variable consisting of: Nr. of domestic agencies; age of the relevant agency in the policy field; civil law vs. common law system; politicized senior civil servants (Maggetti and Verhoest 2012; Painter and Peters 2010)	Country, policy field	1b, 2a
EU-agency autonomy	Independence of European agencies (Wonka and Rittberger 2010)	Country, policy field	1c
Agency agenda-setting power	Compound variable of: Nr. of domestic agencies; frequency of elections since 1960; number of government changes since 1960 (Armingeon et al. 2017)	Country	1c

Cabinet control over ministers and autonomy of ministers	Expert survey data on Head-of-Government control over Ministries (continuous variable) (Teorell et al. 2017)	Country	2b, 2c
Left parties in government	Strength of left parties in government (Armingeon et al. 2017; Schmidt 1996)	Country	3a
Multiparty government	Multi party government (Armingeon et al. 2017)	Country	3b
Legislative fragmentation	Legislative fractionalization of the party system (Rae Index) (Armingeon et al. 2017)		3c
Problem pressure	Sectoral measure for problem pressure (cf. Supplementary Materials for details)	Country, policy field	Control
Debt	Debt as percentage of GDP (Teorell et al. 2017)	Country	Control
Veto points	Institutional constraints (Henisz 2000)	Country	Control
Time	Three continuous variables: (1) t starting in 1980, (2) $(t^*t)/10$ , (3) $(t^*t^*t)/100$	Country	Control

Table S3: Correlation between explanatory variables

	Domestic agencification	European agencification	EU-agency autonomy	Domestic agencies' agenda-setting capacity	Domestic agency autonomy	Autonomy of Minister from cabinet	Head of gov. control over ministers	Strength of left parties in government	Multiparty government	Fractionalization of the party system	Problem pressure in policy field	National debt	Political constraints	time	t2/10	t3/100
Domestic agencification	1															
European agencification	0.2783	1														
EU-agency autonomy	0.3154	0.8855	1													
Domestic agencies' agenda-setting capacity	0.8903	0.1809	0.2168	1												
Domestic agency autonomy	0.7886	0.0142	0.0471	0.7602	1											
Autonomy of Minister from cabinet	-0.256	0.0578	0.0495	-0.2989	-0.4796	1										
Head of gov. control over ministers	0.256	-0.0578	-0.0495	0.2989	0.4796	-1	1									
Strength of left parties in government	-0.0372	0.0923	0.0702	-0.074	-0.0721	-0.1087	0.1087	1								
Multiparty government	-0.2555	0.2309	0.2205	-0.2915	-0.55	0.4554	-0.4554	-0.038	1							
Fractionalization of the party system	-0.2379	0.2571	0.2354	-0.3043	-0.5226	0.6377	-0.6377	0.136	0.6401	1						
Problem pressure in policy field	0.1602	-0.1036	-0.0244	0.1818	0.1106	-0.0788	0.0788	-0.112	-0.1319	-0.2059	1					
National debt	0.0005	0.2627	0.2422	0.0124	-0.3218	0.3993	-0.3993	-0.1247	0.1649	0.3667	0.0188	1				
Political constraints	0.0552	-0.1325	-0.1352	0.0791	0.0751	0.1953	-0.1953	-0.1043	0.0188	0.0166	0.0837	0.0559	1			
time	0.6565	0.3622	0.397	0.6395	0.4176	-0.0252	0.0252	-0.0392	0.1239	0.1612	0.0159	0.159	0.0499	1		
t2/10	0.625	0.338	0.3886	0.6134	0.4028	-0.0209	0.0209	-0.0718	0.1055	0.1395	0.0272	0.1436	0.0533	0.9681	1	
t3/100	0.5757	0.307	0.3639	0.5731	0.3745	-0.0162	0.0162	-0.0911	0.0872	0.1221	0.0346	0.1381	0.0596	0.9171	0.9863	1

## Methods of estimation and robustness tests

Since we are interested reform probabilities and have binary dependent variables, we estimate probit regression models to evaluate the hypotheses. Due to the data's multilevel structure (reforms per year, nested in four sectors in thirteen countries) we use multilevel models (Steenbergen and Jones 2002), specifically the multilevel mixed-effects probit regression estimator in Stata (Rabe-Hesketh and Skrondal 2012; Stegmueller 2013). Our variables vary mostly at the country level and not between policy fields. Therefore, we collapse the multilevel structure into 52 country/policy fields, four in each country, which allows us to estimate more effective models. To correctly interpret the results, we clustered the standard errors at the country level. Our estimates are robust to alternative logit and complementary loglog estimators. We show the probit estimators as these models seem to fit the data best.

The results of our analysis do not change if we estimate separate models that only contain the variables relevant for a single scenario. As our dataset is based on 13 countries, biased estimation of country effects could be a problem (Bryan and Jenkins 2016). To deal with this problem, we also estimate our models as linear probability models and apply Satterthwaite's sample correction strategy (Elff et al. 2020). In addition, we "jackknifed" countries, i.e., removed countries one-by-one and re-estimated the model to see whether single countries particularly drive the results (van der Meer et al. 2010). The findings are largely robust to these checks.

Estimating each scenario separately

Table S4: Two-level multilevel regression estimates (standard errors clustered at country level in parentheses)

	Scenario 1					Scenario 2		Scenario 3			
	PI	AC	PI	AC	AC	PI	AC	PI	AC	PI	AC
Domestic agencification	0.043*** (0.015)	-0.004 (0.026)									
European agencification	0.207*** (0.052)	0.176 (0.109)									
Domestic agencies' agenda-setting capacity			0.199** (0.081)	-0.139 (0.120)							
Domestic agency autonomy					0.001 (0.085)	0.153*** (0.034)	-0.006 (0.103)				
EU-agency autonomy					0.462 (0.338)	0.761*** (0.178)	0.460 (0.338)				
Head of gov. control over ministers						0.015 (0.043)				0.044 (0.053)	
Autonomy of Minister from cabinet							-0.011 (0.041)				-0.005 (0.049)
Fractionalization of the party system								-0.487 (0.434)	-0.114 (0.651)	-0.251 (0.508)	-0.086 (0.840)
Multiparty government								0.026 (0.071)	0.051 (0.133)	0.030 (0.073)	0.052 (0.134)
Strength of left parties in government								0.063** (0.026)	0.060* (0.034)	0.059** (0.025)	0.059* (0.035)
Problem pressure in policy field	-0.090*** (0.030)	-0.072* (0.037)	-0.100*** (0.038)	-0.068* (0.036)	-0.081** (0.036)	-0.103*** (0.031)	-0.082** (0.036)	-0.083** (0.036)	-0.084** (0.033)	-0.084** (0.035)	-0.085** (0.033)
National debt	-0.001 (0.001)	0.000 (0.001)	-0.000 (0.001)	0.001 (0.001)	0.000 (0.001)	0.001 (0.002)	0.000 (0.001)	-0.000 (0.001)	0.001 (0.001)	0.000 (0.001)	0.001 (0.001)
Political constraints	-0.405 (1.101)	-0.399 (0.588)	-0.599 (1.233)	-0.567 (0.650)	-0.373 (0.574)	-0.371 (1.120)	-0.335 (0.579)	-0.505 (1.082)	-0.497 (0.563)	-0.360 (1.172)	-0.481 (0.550)
time	0.180*** (0.048)	0.061 (0.056)	0.164*** (0.051)	0.062 (0.057)	0.055 (0.055)	0.165*** (0.059)	0.054 (0.056)	0.167*** (0.052)	0.059 (0.055)	0.162*** (0.054)	0.058 (0.054)
t2/10	-0.079** (0.032)	0.013 (0.031)	-0.065* (0.034)	0.021 (0.031)	0.016 (0.031)	-0.066 (0.041)	0.017 (0.032)	-0.060* (0.035)	0.015 (0.030)	-0.057 (0.036)	0.016 (0.030)
t3/100	0.011* (0.006)	-0.008 (0.005)	0.008 (0.006)	-0.009* (0.005)	-0.008 (0.006)	0.009 (0.008)	-0.008 (0.006)	0.007 (0.007)	-0.008 (0.005)	0.007 (0.007)	-0.008 (0.005)
Constant	-1.949** (0.915)	-1.706*** (0.604)	-1.449 (1.010)	-1.736*** (0.629)	-1.695*** (0.551)	-1.803* (0.950)	-1.720*** (0.550)	-1.536 (0.979)	-1.785** (0.731)	-1.891 (1.226)	-1.811** (0.825)
Variance Sector/Country	0.028** (0.013)	0.015 (0.013)	0.035*** (0.013)	0.014 (0.010)	0.013 (0.013)	0.030** (0.014)	0.013 (0.013)	0.029** (0.012)	0.007 (0.012)	0.030** (0.012)	0.007 (0.013)
AIC	1683.28	1270.72	1687.18	1268.66	1233.65	1606.47	1235.59	1686.29	1265.95	1687.45	1267.94
BIC	1737	1325	1736	1317	1287	1665	1294	1746	1325	1752	1333
Observations	1619	1619	1619	1619	1550	1550	1550	1615	1615	1615	1615

Significance levels: \* p<0.1 \*\* p<0.05 \*\*\* p<0.01

## Linear probability models

Table S5: Three-level linear probability models (standard errors clustered in parentheses) for single scenarios

	Scenario 1					Scenario 2		Scenario 3			
	PI	AC	PI	AC	AC	PI	AC	PI	AC	PI	AC
Domestic agencification	0.012** (0.005)	0.001 (0.004)									
European agencification	0.069** (0.030)	0.045* (0.024)									
Domestic agencies' agenda-setting capacity			0.066*** (0.025)	-0.023 (0.018)							
Domestic agency autonomy					0.006 (0.014)	0.042** (0.019)	0.006 (0.017)				
EU-agency autonomy					0.109* (0.064)	0.244*** (0.080)	0.108* (0.065)				
Head of gov. control over ministers						0.006 (0.014)				0.019 (0.017)	
Autonomy of Minister from cabinet							-0.001 (0.012)				-0.003 (0.013)
Fractionalization of the party system								-0.125 (0.143)	-0.019 (0.115)	-0.030 (0.170)	-0.001 (0.135)
Multiparty government								0.007 (0.031)	0.012 (0.025)	0.009 (0.032)	0.012 (0.026)
Strength of left parties in government								0.019** (0.007)	0.011* (0.006)	0.018** (0.008)	0.011* (0.006)
Problem pressure in policy field	-0.026** (0.013)	-0.008 (0.009)	-0.029** (0.013)	-0.008 (0.009)	-0.010 (0.010)	-0.029** (0.013)	-0.009 (0.010)	-0.025* (0.013)	-0.010 (0.009)	-0.025* (0.013)	-0.010 (0.009)
National debt	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.001)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.001)	0.000 (0.000)
Political constraints	-0.089 (0.193)	-0.027 (0.169)	0.001 (0.225)	-0.066 (0.163)	-0.035 (0.172)	-0.049 (0.207)	-0.019 (0.183)	-0.077 (0.201)	-0.062 (0.160)	0.022 (0.219)	-0.042 (0.170)
time	0.023** (0.011)	-0.001 (0.009)	0.017 (0.011)	-0.002 (0.009)	-0.001 (0.010)	0.018 (0.011)	-0.002 (0.010)	0.018* (0.011)	-0.002 (0.009)	0.016 (0.011)	-0.003 (0.009)
t2/10	-0.008 (0.007)	0.010 (0.006)	-0.003 (0.007)	0.012** (0.006)	0.010 (0.006)	-0.004 (0.008)	0.010 (0.006)	-0.002 (0.007)	0.011* (0.006)	-0.001 (0.007)	0.011* (0.006)
t3/100	0.001 (0.001)	-0.003** (0.001)	0.000 (0.001)	-0.003*** (0.001)	-0.003** (0.001)	0.000 (0.001)	-0.003** (0.001)	-0.000 (0.001)	-0.003*** (0.001)	-0.000 (0.001)	-0.003*** (0.001)
Constant	0.029 (0.163)	0.039 (0.142)	0.054 (0.188)	0.052 (0.137)	0.049 (0.143)	0.048 (0.183)	0.035 (0.150)	0.101 (0.183)	0.045 (0.147)	-0.084 (0.232)	0.021 (0.163)
Residual country	-21.443*** (5.654)	-3.579*** (0.588)	-3.200*** (0.792)	-3.711*** (0.688)	-3.596*** (0.664)	-4.278 (6.121)	-3.458*** (0.584)	-3.956* (2.129)	-3.754*** (0.736)	-3.450*** (0.966)	-3.609*** (0.629)
Residual policy	-2.833*** (0.288)	-3.828*** (1.061)	-2.854*** (0.312)	-3.819*** (1.049)	-3.719*** (0.928)	-2.810*** (0.310)	-3.721*** (0.931)	-2.846*** (0.309)	-3.943*** (1.312)	-2.863*** (0.316)	-3.944*** (1.315)
Residual variance	-0.890*** (0.018)	-1.075*** (0.018)	-0.890*** (0.018)	-1.075*** (0.018)	-1.068*** (0.018)	-0.893*** (0.018)	-1.068*** (0.018)	-0.888*** (0.018)	-1.075*** (0.018)	-0.889*** (0.018)	-1.075*** (0.018)
AIC	1831.39	1221.60	1827.09	1213.14	1193.99	1752.92	1202.96	1836.04	1220.28	1843.26	1229.15
BIC	1896	1286	1886	1272	1258	1822	1272	1906	1290	1819	1305
Observations	1619	1619	1619	1619	1550	1550	1550	1615	1615	1615	1615

Significance levels: \* p<0.1 \*\* p<0.05 \*\*\* p<0.01

Table S5: Three-level linear probability models (standard errors clustered in parentheses) for the combination of different scenarios

	PI	AC	PI	AC	PI
Domestic agencification	0.013** (0.006)	0.002 (0.005)			
European agencification	0.055* (0.032)	0.039 (0.024)			
Head of gov. control over ministers	0.013 (0.016)		0.005 (0.015)		0.016 (0.018)
Autonomy of Minister from cabinet		-0.002 (0.013)		-0.002 (0.014)	
Domestic agency autonomy			0.067*** (0.022)	0.019 (0.020)	
EU-agency autonomy			0.206** (0.081)	0.085 (0.065)	
Domestic agencies' agenda-setting capacity					0.073*** (0.028)
Multiparty government	0.016 (0.032)	0.010 (0.027)	0.049 (0.035)	0.021 (0.030)	0.019 (0.033)
Strength of left parties in government	0.017** (0.008)	0.010 (0.006)	0.024*** (0.008)	0.011* (0.007)	0.019** (0.008)
Fractionalization of the party system	0.022 (0.170)	-0.000 (0.140)	0.017 (0.167)	0.042 (0.147)	0.084 (0.181)
Problem pressure in policy field	-0.026* (0.013)	-0.008 (0.009)	-0.026* (0.013)	-0.009 (0.010)	-0.028** (0.013)
National debt	0.000 (0.000)	0.000 (0.000)	0.001 (0.001)	0.000 (0.000)	0.000 (0.001)
Political constraints	0.011 (0.214)	-0.012 (0.175)	-0.082 (0.202)	-0.030 (0.180)	0.045 (0.230)
time	0.020* (0.011)	-0.002 (0.009)	0.017 (0.011)	-0.002 (0.010)	0.015 (0.011)
t2/10	-0.007 (0.007)	0.010 (0.006)	-0.005 (0.008)	0.010 (0.006)	-0.003 (0.007)
t3/100	0.001 (0.001)	-0.003** (0.001)	0.001 (0.001)	-0.003** (0.001)	0.000 (0.001)
Constant	-0.157 (0.229)	-0.005 (0.171)	-0.013 (0.212)	-0.015 (0.170)	-0.117 (0.243)
Residual country	-3.691** (1.593)	-3.510*** (0.567)	-5.306 (24.449)	-3.492*** (0.597)	-3.203*** (0.775)
Residual policy	-2.811*** (0.296)	-3.964*** (1.354)	-2.827*** (0.308)	-3.943*** (1.383)	-2.845*** (0.308)
Residual variance	-0.892*** (0.018)	-1.076*** (0.018)	-0.895*** (0.018)	-1.068*** (0.018)	-0.891*** (0.018)
AIC	1850.15	1244.73	1758.21	1215.75	1843.68
BIC	1936	1331	1844	1301	1924
Observations	1615	1615	1546	1546	1615

Significance levels: \* p<0.1 \*\* p<0.05 \*\*\* p<0.01

Jackknife estimates for multilevel mixed-effects models

Table S6: Country jackknife three-level probit models (standard errors clustered in parentheses) for single scenarios

	Scenario 1					Scenario 2		Scenario 3			
	PI	AC	PI	AC	AC	PI	AC	PI	AC	PI	AC
Domestic agencification	0.043** (0.019)	-0.005 (0.035)									
European agencification	0.207*** (0.063)	0.170 (0.121)									
Domestic agencies' agenda-setting capacity			0.199* (0.107)	-0.139 (0.159)							
Domestic agency autonomy					0.001 (0.112)	0.153*** (0.046)	-0.006 (0.139)				
EU-agency autonomy					0.462 (0.380)	0.761*** (0.203)	0.460 (0.397)				
Head of gov. control over ministers						0.015 (0.066)				0.044 (0.082)	
Autonomy of Minister from cabinet							-0.011 (0.057)				-0.005 (0.070)
Fractionalization of the party system								-0.487 (0.498)	-0.114 (0.842)	-0.251 (0.610)	-0.086 (1.137)
Multiparty government								0.026 (0.083)	0.051 (0.171)	0.030 (0.089)	0.052 (0.179)
Strength of left parties in government								0.063* (0.031)	0.060 (0.042)	0.059* (0.030)	0.059 (0.044)
Problem pressure in policy field	-0.090** (0.038)	-0.064 (0.050)	-0.100* (0.049)	-0.068 (0.047)	-0.081 (0.051)	-0.103** (0.047)	-0.082 (0.053)	-0.083 (0.052)	-0.084** (0.039)	-0.084 (0.053)	-0.085* (0.044)
National debt	-0.001 (0.002)	0.000 (0.002)	-0.000 (0.002)	0.001 (0.002)	0.000 (0.002)	0.001 (0.002)	0.000 (0.002)	-0.000 (0.002)	0.001 (0.002)	0.000 (0.002)	0.001 (0.002)
Political constraints	-0.405 (1.845)	-0.291 (0.805)	-0.599 (1.990)	-0.567 (0.866)	-0.373 (0.759)	-0.372 (1.883)	-0.335 (0.789)	-0.505 (1.786)	-0.497 (0.760)	-0.361 (1.980)	-0.481 (0.723)
time	0.180*** (0.051)	0.060 (0.064)	0.164*** (0.054)	0.062 (0.064)	0.055 (0.061)	0.165** (0.063)	0.054 (0.063)	0.167** (0.055)	0.059 (0.064)	0.162** (0.057)	0.058 (0.063)
t2/10	-0.079** (0.034)	0.014 (0.036)	-0.065* (0.036)	0.021 (0.036)	0.016 (0.034)	-0.066 (0.043)	0.017 (0.036)	-0.060 (0.038)	0.015 (0.035)	-0.057 (0.039)	0.016 (0.035)
t3/100	0.011 (0.006)	-0.008 (0.006)	0.008 (0.007)	-0.009 (0.006)	-0.008 (0.006)	0.009 (0.008)	-0.008 (0.006)	0.007 (0.007)	-0.008 (0.006)	0.007 (0.007)	-0.008 (0.006)
Constant	-1.949 (1.471)	-1.803** (0.761)	-1.449 (1.580)	-1.736** (0.777)	-1.695** (0.669)	-1.803 (1.570)	-1.720** (0.682)	-1.536 (1.506)	-1.785* (0.912)	-1.891 (1.942)	-1.811* (1.014)
Constant Country	0.000 (0.000)	0.010 (0.023)	0.000 (0.000)	0.000 (0.019)	0.000 (0.017)	0.000 (0.000)	0.000 (0.014)	0.000 (0.000)	0.000 (0.008)	0.000 (0.000)	0.000 (0.011)
Constant Policy	0.028* (0.015)	0.007 (0.018)	0.035** (0.015)	0.014 (0.019)	0.013 (0.017)	0.030* (0.014)	0.013 (0.016)	0.029* (0.015)	0.007 (0.013)	0.030* (0.015)	0.007 (0.012)
AIC	1683.28	1272.20	1687.18	1270.66	1235.65	1606.47	1237.59	1686.29	1267.95	1687.45	1267.94
BIC	1737	1331	1736	1325	1294	1665	1302	1746	1333	1752	1333
Observations	1619	1619	1619	1619	1550	1550	1550	1615	1615	1615	1615

Significance levels: \* p<0.1 \*\* p<0.05 \*\*\* p<0.01

Table S7: Country jackknife three-level probit models (standard errors clustered in parentheses) for the combination of different scenarios

	PI	AC	PI	AC	PI
Domestic agencification	0.042** (0.014)	-0.006 (0.032)			
European agencification	0.176** (0.078)	0.143 (0.141)			
Head of gov. control over ministers	0.029 (0.076)		0.008 (0.072)		0.032 (0.081)
Multiparty government	0.050 (0.096)	0.022 (0.159)	0.157 (0.131)	0.056 (0.138)	0.075 (0.103)
Strength of left parties in government	0.053* (0.029)	0.053 (0.043)	0.075** (0.032)	0.055 (0.044)	0.060* (0.028)
Fractionalization of the party system	-0.075 (0.625)	-0.105 (1.100)	-0.123 (0.781)	0.048 (1.336)	0.065 (0.862)
Autonomy of Minister from cabinet		-0.002 (0.078)		-0.008 (0.076)	
Domestic agency autonomy			0.214*** (0.065)	0.028 (0.141)	
EU-agency autonomy			0.632** (0.232)	0.351 (0.436)	
Domestic agencies' agenda-setting capacity					0.211** (0.096)
Problem pressure in policy field	-0.090* (0.047)	-0.073 (0.048)	-0.097 (0.058)	-0.082* (0.044)	-0.096 (0.054)
National debt	-0.001 (0.002)	0.001 (0.002)	0.002 (0.003)	0.001 (0.002)	-0.000 (0.002)
Political constraints	-0.264 (1.975)	-0.312 (0.768)	-0.429 (1.775)	-0.326 (0.902)	-0.455 (2.080)
time	0.176*** (0.053)	0.060 (0.064)	0.166** (0.061)	0.051 (0.058)	0.161** (0.056)
t2/10	-0.078** (0.035)	0.014 (0.037)	-0.072 (0.042)	0.016 (0.036)	-0.067 (0.038)
t3/100	0.011 (0.007)	-0.008 (0.006)	0.010 (0.008)	-0.008 (0.006)	0.009 (0.007)
Constant	-2.236 (1.860)	-1.855* (1.020)	-1.934 (1.763)	-1.916* (1.071)	-1.846 (2.030)
Constant Country	0.000 (0.000)	0.003 (0.010)	0.000 (0.000)	0.000 (0.006)	0.000 (0.000)
Constant Policy	0.027* (0.013)	0.004 (0.011)	0.025 (0.015)	0.005 (0.011)	0.031* (0.016)
AIC	1677.54	1265.92	1595.18	1228.80	1681.51
BIC	1742	1331	1659	1293	1746
Observations	1615	1615	1546	1546	1615

Information on structural equation models (SEM)

Table S8: Descriptive statistics for additional variables used in the SEM

Variable	Obs	Mean	Std. Dev.	Min	Max
Count policy integration reform (since 1980)	1,820	3.282418	3.563053	0	20
Count policy integration reform (since 1980)	1,820	2.128022	2.391019	0	11
Policy integration reform t-1	1,820	.2186813	.4134655	0	1
Administrative coordination reform t-1	1,820	.1379121	.3449025	0	1

Table S9: Descriptive statistics for additional variables used in the SEM

	Linear SEM	General SEM Model DV PI	General SEM Model DV AC
Policy integration reform			
Administrative coordination reform	0.071** (0.030)	0.152*** (0.020)	
Time since 1980	0.016*** (0.005)	0.015*** (0.003)	0.017*** (0.003)
(Time since 1980)2	-0.006*** (0.002)	-0.005*** (0.001)	-0.006*** (0.001)
Count admin. coord. reform (since 1980)	-0.009 (0.008)	-0.014** (0.007)	-0.006 (0.007)
Count policy integration reform (since 1980)	0.051*** (0.006)	0.051*** (0.005)	0.051*** (0.005)
Administrative coordination reform t-1	0.040** (0.017)	0.040 (0.040)	0.039 (0.037)
Policy integration reform t-1	0.020 (0.013)	0.022 (0.016)	0.019 (0.017)
Constant	0.004 (0.020)	0.004 (0.022)	0.004 (0.022)
Administrative coordination reform			
Policy integration reform	0.058*** (0.014)		0.108*** (0.018)
Time since 1980	0.014*** (0.003)	0.015*** (0.002)	0.013*** (0.002)
(Time since 1980)2	-0.005*** (0.001)	-0.005*** (0.001)	-0.005*** (0.001)
Count admin. coord. reform (since 1980)	0.051*** (0.009)	0.051*** (0.004)	0.051*** (0.004)
Count policy integration reform (since 1980)	-0.006* (0.003)	-0.003 (0.004)	-0.008** (0.003)
Administrative coordination reform t-1	-0.012 (0.018)	-0.010 (0.031)	-0.014 (0.033)
Policy integration reform t-1	-0.022* (0.013)	-0.021 (0.018)	-0.023 (0.017)
Constant	-0.004 (0.015)	-0.004 (0.011)	-0.004 (0.011)
Variance policy integration	0.146*** (0.006)	0.146*** (0.008)	0.148*** (0.007)
Variance administrative coordination	0.105*** (0.008)	0.106*** (0.008)	0.104*** (0.007)
Observations	1820	1820	1820

\* p<0.1 \*\* p<0.05 \*\*\* p<0.01

## Bibliography:

- Armingeon, Klaus, Christian Isler, Laura Knöpfel, David Weisstanner, and Sarah Engler. 2017. *Comparative Political Data Set 1990-2014*. University of Bern: Institute of Political Science.
- Béland, Daniel, and André Lecours. 2005. "Federalism, Nationalism, and Social Policy Decentralisation in Canada and Belgium." *Regional and Federal Studies* 17 (4):404-15.
- Bryan, Mark. L., and Stephen P. Jenkins. 2015. "Multilevel Modelling of Country Effects: A Cautionary Tale." *European Sociological Review*, 32 (1): 3-22.
- de Francesco, Fabrizio. 2012. "Diffusion of Regulatory Impact Analysis Among OECD and EU Member States." *Comparative Political Studies* 45 (10):1277-305.
- Elff, Martin, Jan Paul Heisi, Merlin Schaeffer and Susumu Shikano. 2019. "Multilevel Analysis with Few Clusters: Improving Likelihood-based Methods to Provide Unbiased Estimates and Accurate Inference." *British Journal of Political Science*, forthcoming.
- Gilardi, Fabrizio. 2010. "Who learns from what in Policy Diffusion Processes?" *American Journal of Political Science* 54 (3):650-66.
- Jordan, Andrew, and Andrea Lenschow. 2010. "Environmental Policy Integration: A State of the Art Review." *Environmental Policy and Governance* 20 (3):147-58.
- Jordana, Jacint, David Levi-Faur, and Xavier Fernández i Marín. 2011. "The Global Diffusion of Regulatory Agencies: Channels of Transfer and Stages of Diffusion." *Comparative Political Studies* 44 (10):1343-69.
- Henisz, Witold J. 2000. "The Institutional Environment for Economic Growth." *Economics and Politics* 12 (1):1-31.
- Hooghe, Liesbet, Gary Marks, Arjan H. Schakel, Sandra Chapman-Osterkat, Sara Niedzwiecki, and Sarah Shair-Rosenfield. 2016. *Measuring Regional Authority. Volume I: A Postfunctionalist Theory of Governance*. Oxford: Oxford University Press.
- Levi-Faur, David. 2011. "Regulatory networks and regulatory agencification: towards a Single European Regulatory Space." *Journal of European Public Policy* 18 (6):810-29.
- Maggetti, M. (2009). The role of independent regulatory agencies in policy-making: a comparative analysis. *Journal of European Public Policy*, 16(3), 450-470.
- Maggetti, Martino, and Koen Verhoest. 2014. "Unexplored aspects of bureaucratic autonomy: a state of the field and ways forward." *International Review of Administrative Sciences* 80 (2):239-56.

- Painter, Martin, and B. Guy Peters. 2010. "Administrative Traditions in Comparative Perspective: Families Groups and Hybrids." In *Tradition and Public Administration*, ed. M. Painter and B. G. Peters. New York: Palgrave Macmillan, 19-30.
- Rabe-Hesketh, Sophia, and Anders Skrondal. 2012. *Multilevel and Longitudinal Modeling Using Stata*. College Station: STATA Press.
- Schiller, Christof. 2016. *The Politics of Welfare State Transformation in Germany. Still a Semi-sovereign State?* Milton Park & New York: Routledge.
- Schmidt, Manfred G. 1996. "When Parties Matter: A Review of the Possibilities and Limits of Partisan Influence on Public Policy." *European Journal of Political Research* 30 (2):155-83.
- Steenbergen, Marco R, and Bradford S Jones. 2002. "Modeling Multilevel Data Structures." *American Journal of Political Science* 46 (1):218-37.
- Stegmueller, Daniel. 2013. "How many Countries for Multilevel Modeling? A Comparison of Frequentist and Bayesian Approaches." *American Journal of Political Science* 57 (3):748-61.
- Teorell, Jan, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Anna Khomenko, and Richard Svensson. 2017. *The Quality of Government Standard Dataset*. University of Gothenburg: The Quality of Government Institute.
- Tsebelis, George. 2002. *Veto Players: How Political Institutions Work*. Princeton: Princeton University Press.
- van der Meer, Tom, Manfred Te Grotenhuis, and Ben Pelzer. 2010. "Influential cases in multilevel modeling: a methodological comment." *American Sociological Review* 75(1): 173-178.
- Wonka, Arndt, and Berthold Rittberger. 2010. "Credibility, Complexity and Uncertainty: Explaining the Institutional Independence of 29 EU Agencies." *West European Politics* 33 (4):730-52.