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Following Old Paths or Shaping New Ones in Natura 2000 Implementation? Mapping Path Dependency in Instrument Choice

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ABSTRACT *This article reviews the influence of two specific European Union (EU) laws, the Birds and Habitats Directives, on the choice of national policy instruments by Member States. Both Directives leave the choice for policy instruments to manage the sites designated under the Directives to the Member States. Using path dependency as a leading concept, this article analyses the continuity or changes in policy instruments due to the implementation of the Directives in 15 countries. This article shows that the tendency to use existing instruments to implement EU policy is limited, as in almost all countries new instruments were developed. Yet, states do tend to choose instruments from their pre-dominant policy instrument mix and preferred implementation style to address the management requirements of the Directives. Additionally, in Central and Eastern European countries where the implementation of EU policy coincided with a process of transition to a market economy, new instruments were introduced outside the existing implementation style. The introduction of new policy instruments is the result of historical turns, domestic pressure and a shift to new modes of governance. National case studies are needed to shed more light on the interaction between EU policy and domestic factors during the process of instrument choice.*

KEY WORDS: Path dependency, Natura 2000, policy instruments, conservation management, policy implementation, EU legislation, instrument choice, nature conservation

Introduction

As part of its ambitious goal to halt the loss of biodiversity, the European Union (EU) developed the network of Natura 2000 sites, which at present covers approxi-

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mately 18.4% of the European territory (European Commission, 2014). After the phase of site designation, all Member States are now in the challenging phase of organizing the management of the sites.

In order to derive lessons for future policy development, it is important to consider how they address this challenge and whether they are using their existing planning, financial and regulatory instruments to manage the Natura 2000 sites, are adapting these or developing new ones. The requirement to designate Natura 2000 sites stems from two European Directives, the Birds Directive (79/409/EEC)¹ and the Habitats Directive (92/43/EEC). Contrary to some other directives, the two Directives do not prescribe the use of specific policy instruments. The Birds Directive only states that measures need to be taken without providing any guidance on which policy instruments to apply. The Habitats Directive suggests a wide array of instruments for implementation from which Member States can choose freely.

Available literature on the effect of EU policy on national policy suggests that Member States prefer to follow their existing national repertoire of institutional procedures and organizational forms (Kirk, Reeves, & Blackstock, 2007; Knill, 2001; Lenschow, Liefferink, & Veenman, 2005). It is not often that a policy choice is made that breaks with established rules, procedures and policy instruments. This phenomenon in public policy is referred to as 'path dependency' (Davis & North, 1971; Lipset & Rokkan, 1967; Pierson, 2000). However, descriptive studies on the implementation practice of Natura 2000 in EU Member States show that some countries have developed new policy instruments although there is no obligation to do so (Kruk, De Blust, Van Apeldoorn, Bouwma, & Sier, 2010). At first glance, this seems to contradict mainstream and empirically grounded theories explaining the influence of EU law on national administrations. Given the cost (in social, political or economic terms) associated with the development of new policy instruments, this behaviour would not be expected (Howlett & Rayner, 2006). Therefore, one may wonder whether the instrument choice made by these Member States is an exception to the 'path dependency rule', or that the majority of the Member States have indeed changed their policy instrumentation. Therefore, the question this article addresses is whether Member States tend to use their existing instruments, that is, show path-dependent behaviour when implementing the Birds and Habitats Directives. Based on the results of this study, more general conclusions on instrument choice by Member States under the influence of EU policy are formulated.

In policy instrument choice, the monitoring and enforcement of policy instruments plays a role (Tosun, 2012). The expected level of compliance to new regulations as well as costs of enforcement might determine the choice for regulation versus other instruments. However, as this article deals with the initial choice of governments for policy instruments, the issue of monitoring and enforcement is not elaborated further.

This article is structured as follows. After a presentation of the relevant theories, the key hypothesis for this article is presented. This article then tests this hypothesis through an analysis of policy instrument choices for the management of Natura 2000 sites in 15 Member States. Following the presentation of the results, the discussion puts the findings in a broader context of path dependency research.

Policy Instrument Choice, Europeanization and Policy Change

In order to develop a hypothesis about whether EU policy influences the choice of Member States at the level of policy instruments, we combine insights from three fields of research: studies on instrument choice, on policy change including path dependency and Europeanization studies. In so doing, this article takes a historic institutional viewpoint on policy instrument development. Policy instruments are defined as the tools at the disposal of the government to implement their policy objectives (Bemelmans-Videc & Rist, 1998; Howlett, 1991). However, policy instruments are part of a larger framework of established governance modes and policy regime logics (Howlett, 2009). The historical policy context has shaped the present policy instrument mix and will influence its further development. As such, this article pays less attention to sociological arguments explaining the selection process of policy instruments (Dolowitz & Marsh, 2000; Hall, 1993).

The literature describes a broad array of policy instruments and typologies (Bemelmans-Videc & Rist, 1998; Bressers & O'Toole Jr, 1998; Gunningham, Grabosky, & Sinclair, 1998; Salamon, 2002) such as legal and regulatory instruments, economic and fiscal instruments as well as policy instruments based on information, communication or agreement (Lascombes & Le Gales, 2007). One of the major challenges in assessing policy instrument change is that policy instruments are multifaceted. This has resulted in a multitude of typologies using different ordering principles (Salamon, 2002).

In this study, a distinction is made between *individual instruments*, *types of instruments* and *policy instrument mix*. *Individual instruments* are detailed in a law or particular regulation, such as a subsidy, tax, planning system or certification standard. In the existing classifications, individual instruments are grouped in different *types* based on a particular analytical perspective. Each type consists of 'families' of individual instruments sharing similar characteristics. As a result, the variety within a type can still be high. Consequently, only major changes of instruments will result in a shift of an instrument from one type to another type. We opted for the classification as presented by Vedung (1998). This typology distinguishes three types of instruments based on their coercive nature, being (1) legal and regulatory instruments, (2) economic instruments and (3) information instruments and communication-based instruments.²

A *policy instrument mix* is a combination of individual policy instruments applied within a particular policy field, which may belong to different types of instruments. Existing instrument choice theories assume that administrators can choose from a wide variety of policy instruments to implement a specific policy and adapt them over time to improve policy implementation (Gunningham et al., 1998; Salamon, 2002). In practice, their choice is often limited by the historically determined policy context (Baldwin & Black, 2008; Howlett, 2009; Van Gossum, Arts, & Verheyen, 2010). Often, the choice for particular policy instruments follows more general governance patterns in a country such as the type of state–society relations, the level of state intervention or the importance attached to the law (Lenschow et al., 2005). Recently, much attention has been paid to agreement-based policy instruments. Several authors have suggested that these instruments result from a shift to new modes of governance (Eliadis, Hill, & Howlett, 2005; Jordan, Wurzel, & Zito, 2003; Pierre, 2000; Salamon, 2002). Although the extent of the shift is debated, the shift itself has been generally

acknowledged (Jordan, Wurzel, Zito, & Bruckner, 2003; Kohler-Koch & Rittberger, 2006; Rhodes, 2007).

Besides generic national governance systems or governance modes, the socio-economic development also has been proposed to influence policy instrument choice, particularly in the field of the environment. Also in Europeanization literature, the socio-economic development of Member States has been used to explain the response to EU policy (Holzinger, Knill, & Arts, 2008; Lenschow et al., 2005; Liefferink, Arts, Kamstra, & Ooijevaar, 2009). Bulmer and Padgett (2005) provide another explanation by underlining the importance of policy transfer in the EU. States, which were Members of the EU when the Directive was drafted, were able to influence the EU policy to include or reflect their own policy goals and instrumentation, thus limiting the need to revise their instruments.

Over time, governments usually develop a preference for specific policy instruments and a specific policy mix to implement their policy (Bressers & O'Toole Jr, 1998; Howlett, 2009; Jordan et al., 2003). Howlett (2009) has introduced the term 'implementation style' to describe this process. 'An implementation style is usually composed of a combination, or mix, of substantive and procedural instruments, at minimum two' (Howlett, 2009, p. 81). Despite this preference for a specific implementation style, changes to policy instruments may occur during the recurrent process of policy instrument selection. Hall (1993) defined different sorts of changes: at the level of settings, at the level of the type of instruments and at the level of the goals underlying the policy instruments. Changes at the level of settings usually refer to small incremental changes, for instance the maximum permissible concentration of a toxic substance. Changes regarding the type of instruments may, for instance, involve a shift from regulatory instruments to voluntary ones. Changes at the level of policy goals, finally, may impact both the level of settings as well as the type of instruments applied.

Based on Hall's definition of instrument change, the EU through its policy may influence settings, types of instruments or underlying goals. Although EU directives, according to the EU Treaty, set common goals and leave the choice of means to achieve them to the Member States, in practice, this can also involve the prescription of certain policy instruments (Jordan & Adelle, 2012; Jordan & Liefferink, 2004) and even settings. Furthermore, the EU may not set legal requirements but promote the use of particular policy instruments, such as market-based instruments or voluntary agreements (Jordan et al., 2003).

The influence of the EU on the policy instrument choice of Member States has not received much scholarly attention so far. The majority of the existing studies on the influence of EU law on the policies of the Member States have focused on the stage of formal transposition (Börzel, 2000; Falkner, Hartlapp, & Treib, 2007; Haverland & Romeijn, 2007; Mastenbroek, 2005; Treib, 2014). Only a few case studies for individual countries and for a limited number of policy fields on the practical side of implementation of EU-law exist (cf. Kirk et al., 2007; cf. Knill & Tosun, 2009; Treib, 2014).

Nevertheless, Europeanization studies provide important insights on how Member States might respond to EU influence. In general, Member States prefer to follow their existing national repertoire of institutional procedures and organizational forms (Knill, 2001; Lenschow et al., 2005). In case of binding requirements, often Member States struggle to implement EU policy. Various

explanations have been provided for this delay in implementation such as institutional misfit (Bailey, 2002; Börzel, 2000; Heritier et al., 2001; Knill & Lenschow, 1998; Liefferink & Jordan, 2005), domestic power struggles (Dimitrova & Steunenberg, 2000; Treib, 2003) or domestic norms, beliefs or attitudes (Falkner et al., 2007). Implementing a policy that requires breaking with established rules, procedures, policy instruments or ideology proves difficult.

Many of the explanations for the alleged lack of change provided in instrument choice literature and Europeanization literature are derived from historical institutionalism. Institutions, being the formal or informal rules, procedures, routines, norms and conventions, are often seen as relatively persistent features shaped by historical processes and events. This view has merged with arguments on the occurrence of path dependency in public policy (Pierson, 2000). In public policy research, path dependency is commonly used to describe a situation where the present policy choice is shaped or constrained by institutional paths that result from choices made in the past (Torfing, 2009). Following the 'punctuated equilibrium' model by Baumgartner and Jones (1993), policies are marked by periods of continuity in which path-dependent tendencies are dominant and periods of substantial policy change that occur as a result of particular events, such as catastrophes or revolutions. Proponents of path dependency in policies argue that institutions do not only distribute power unevenly across social groups, but also play a major role in retaining this distribution and thus limit change (Hall & Taylor, 1996; Pierson, 2000).

In a recent review, Torfing (2009) highlighted several challenges that the concept of path dependency is facing in policy studies. Amongst others, Torfing (2009) points out the difficulty of finding coherence and stability in a policy path which in itself is already dynamic and heterogeneous. As most policies are implemented using a variety of policy instruments, this inevitably leads to a complex policy path with a multitude of instruments. So, the question one should ask is not which path is followed, but which paths (in plural) are followed?

More recently, scholars have argued that institutional change might not only come about by abrupt change (as outlined in the punctuated equilibrium model) but due to an incremental process resulting in gradual change or transformation (Mahoney & Thelen, 2010; Streeck & Thelen, 2005). Such a gradual change follows from the observation that institutions are negotiated arrangements between different coalitions of actors and that, due to a process of continuous renegotiation, shifts in the balance of power may occur. Four broad models of gradual but nevertheless transformative change have been distinguished; displacement, layering, conversion and drift. Displacement is marked by the removal of existing rules and the introduction of new ones over a longer period. Layering occurs when new rules are introduced on top of or alongside existing ones. Conversion occurs when existing rules are interpreted differently due to their strategic redeployment. Drift happens when shifts in the environment lead to a change of the impact of existing rules. Which model of gradual change occurs depends amongst others on the political context and, in particular, the options it provides for actors to block or promote change (Mahoney & Thelen, 2010). Europeanization studies also underline the influence of domestic actors on the implementation process of EU policies and the opportunities domestic 'veto players' have to influence policy change (Dimitrova & Steunenberg, 2000; Treib, 2003). Policy change, therefore, is dependent on whether the political context allows actors to create sufficient domestic pressure to promote change.

So what can we conclude regarding the variables leading to path dependency in policy instrument choice? Based on the existing literature, the choice for particular instruments is determined by socio-economic development and overall patterns of governance. Path-dependent behaviour can be expected in situations in which *historical turns*, for instance of an economic or political kind, are absent, prevalent institutions continue to affirm the existing power relations between involved actors and the political or economic context does not provide disadvantaged actors with opportunities to exert *domestic pressure* to change institutions in their favour. Stability in the existing power relations does not only concern the relationship amongst different non-state actors, but the relationship between state and society too. Stability in the relationship between state and society may express itself at the level of the national governance systems or within a particular policy field. Specifically for policy instruments, this stability may express itself through the absence of policy instruments that mark a *shift towards new forms of governance*.

Path Dependency and the Influence of the EU on Policy Instruments

For policy instruments, path-dependent behaviour may become manifest at the three earlier identified levels: settings, types or goals. Member States may refrain from adapting the settings of their policy instruments to EU requirements or refrain from introducing policy instruments requested or promoted by the EU. They may also show a preference for a particular implementation style, whilst selecting policy instruments for implementation of EU policy. At the level of goals, they may refrain from adapting their policy to the goals set by the EU policy.

When focusing on instrument choice, an administration can make a number of choices when faced with the need to incorporate a new (EU) policy and no specific instrument is prescribed. Hypothetically, three different types of response can occur. *Firstly*, the administration can choose to use an existing instrument to address the new requirement ('follow the path'). Often, Member States have already developed policy instruments in the policy field to which the new EU policy applies. They may need to change the calibration levels or 'settings' of the instruments, but the instruments themselves remain the same (Hall, 1993). In this case, path-dependent behaviour occurs at the level of individual instrument. *Secondly*, the administration can decide that an existing instrument is useful for implementing the new policy, but that it does not and cannot address all the requirements of the new policy. Therefore, an additional instrument belonging to the same type, is required which is used alongside with an existing one ('broadening the path') (Howlett & Rayner, 2007; Jordan et al., 2003). This leads to an expansion of the number of individual policy instruments present in the policy instrument mix. Path-dependent behaviour does partly occur, as existing instruments and their settings are used, yet new policy instruments are added. *Finally*, an administration can decide that none of the available policy instruments is suitable for implementing the new EU policy and that a new instrument is warranted ('shaping a new path'). This new instrument might fit into the existing implementation style or constitute an entirely new type of instrument that can only be chosen because of an overall change in policy context (Hall, 1993). In this situation, no path-dependent behaviour at the level of policy instrument or setting occurs. When the new instrument

belongs to the type of instruments usually employed by the government in question, then path-dependent behaviour at the level of policy mix and implementation style still occurs.

The development of new instruments alongside existing ones ('broadening the path') or on top of them ('shaping a new path') can be seen as a process of *layering* as defined by Streeck and Thelen (2005).

The general hypothesis underlying this study is that in the absence of legal requirements, Member States will prefer to use pre-existing individual instruments to implement a new EU policy. The development of new policy instruments is unlikely, due to the embedding of policy instruments in existing institutional context and the cost associated with the development of alternatives. Furthermore, in order to maximize the cost-effectiveness of implementation, governments will consider the appropriateness of all relevant pre-existing individual instruments (Howlett & Rayner, 2007). To phrase our hypothesis in path dependency terms: *In the absence of an EU obligation for the adoption of a particular policy instrument, Member States will prefer to follow their available instrumental paths.*

Based on the outcome of our study, we will review possible explanatory factors for the occurrence of path dependency—or path formation—in policy instrument choice, as presented in the previous section (e.g. socio-economic development, historical turns, domestic pressure and (new) modes of governance). Studies on the selection of policy instruments in Europeanization studies are increasingly relevant as 'new generation' environmental directives provide more freedom in policy instrument choice (Knill & Liefferink, 2007; Schout, Jordan, & Twena, 2010). The success of EU policy then largely depends on the choice of appropriate policy instruments by Member States (Jordan, 1999). This study, therefore, aims to unravel the influence of EU policy on the choice of policy instruments by Member States in the absence of a legal requirement, focusing on the implementation of Natura 2000.

Mapping Path Dependency in Policy Instruments: The Case of Managing the Natura 2000 Network

Together the Birds Directive (79/409/EEC) and the Habitats Directive (92/43/EEC) form the cornerstone of European biodiversity policy. All Member States have transposed the requirements of both directives in their national laws. Besides changing national law, another obligation arising from the two Directives is the designation of Special Protection Areas (SPA) and Special Areas for Conservation (SAC), jointly referred to as Natura 2000 sites. In these sites, Member States have to ensure that the necessary management measures are taken in order to keep the species and habitats for which the sites were designated in, or to restore them to a favourable conservation status.³ The selection and designation of the sites is a process following clearly outlined criteria leaving little freedom for the interpretation of Member States. Member States that fail to designate enough sites are facing infringement procedures. Whereas the site selection and designation process itself is strictly regulated, the Directives grant Member States considerable freedom in how to arrange the necessary conservation measures within Natura 2000 sites. The text of the Habitats Directive provides the following guidance to Member States: *for special areas of conservation the Member States shall establish the necessary conservation measures involving, if need be,*

appropriate management plans specifically designed for the site or integrated into other development plans and appropriate statutory, administrative or contractual measures (Art. 6.1).

For unravelling the Member States' choice of policy instruments for managing Natura 2000 sites, a period of almost 20 years needs to be reviewed. The Habitats Directive was signed in 1992, but compliance has severely lagged behind (European Environment Agency, 2005). In some Member States, in fact, the decision on policy instruments for arranging the management of the sites has still not been taken or is being reviewed. The situation was further complicated by the accession of new Member States. Since the adoption of the Habitats Directive, a further 16 Member States have joined the EU.

To assess the influence of the Birds and Habitats Directives on national policy instruments, a comparison between the present policy instruments used to manage the Natura 2000 sites and policy instruments in place prior to the adoption of the Birds and Habitats Directives was made. Based on a literature review, an inventory was made of the various policy instruments used to arrange conservation measures for terrestrial⁴ areas in the 15 Member States reviewed.⁵ The inventory resulted in a grouping of policy instruments into three types.⁶ The following three types of policy instruments to implement the necessary conservation measures for Natura 2000 were distinguished:

- *Regulations prescribing or forbidding certain management practices in protected areas.* All countries have prohibitions on the killing of Natura 2000 species or the destruction of Natura 2000 habitats. Only a few countries have also forbidden certain management practices that do not immediately lead to habitat destruction but will have adverse effects indirectly (in the short or long term). A good example is the Hungarian regulation on grassland management (Hungarian Government, 2007) (Type 1, legal and regulatory).
- *Subsidies.* Since the mid-1980s, several Member States have developed subsidy schemes with private landowners to ensure that nature protection is taken into account in farming and forestry. As part of the 1992 reform of the Common Agricultural Policy (CAP), specific measures to protect the environment ('agri-environmental measures') became obligatory (Primdahl, Peco, Schramek, Andersen, & Onate, 2003) (Type 2, economic).
- *Management planning.* Prior to Natura 2000 site designation, all EU Member States already had a national system of protected areas. For many of these sites, a management planning system was already in place. There is a considerable overlap between the newly designated Natura 2000 sites and the existing national protected areas (Type 3, information/communication).

The inventory identified four other policy instruments which have the potential to arrange conservation measures for species and habitats, being water management plans, hunting plans, forestry management plans and voluntary measures (e.g. codes of conduct). After the first step of the assessment, they were excluded although for different reasons. Water management plans were excluded as the EU Water Framework Directive (2000/60/EC) specifies that water management plans are obliged to consider the management requirements for Natura 2000. Neither the development of the plans nor the inclusion of Natura 2000 requirements is a national choice. The hunting plans, forest management plans and voluntary measures were

excluded as the literature review showed that in only two of the reviewed countries⁷ are these instruments independently used for attaining the Natura 2000 goals.

For all 15 Member States, through literature review and personal contacts (email and/or short interviews) with government officials of the Member States responsible for Natura 2000 implementation, an assessment was then made as to whether new policy instruments were introduced or whether pre-existing instruments were used for the management of Natura 2000. Based on this assessment, a path dependency score was assigned for the different types of policy instruments in each Member State.

For each type of policy instrument and each country, a score was determined as follows:

- *Score 1*: 'Following the path': no new instrument(s) have been developed; hence, one uses the pre-existing instrument(s). This situation is considered fully path-dependent.
- *Score 0.5*: 'Broadening the path': in addition to pre-existing instrument(s), a similar type of instrument has been developed and the instruments are complementary (used next to each other, but not replacing each other). This situation is regarded as partly path-dependent and partly path formation.
- *Score 0.25 or Score 0*: 'Shaping a new path': whilst reviewing the new policy instruments developed, we noticed two possible changes in policy instruments. The first change consists of the introduction of a new policy instrument in nature conservation policy *similar* to the instrument types already in use in the country under consideration, in the given policy field. The other change consists of an introduction of a policy instrument belonging to an instrument type *not* yet in use in the country, in the *given* policy field. Both responses can be considered as forms of 'shaping a new path' but as the introduction of a different type of policy instrument not yet in use signals a change in the implementation *style*, we want to distinguish them analytically. Two different scores were, therefore, developed:
 - (i) *Score 0.25*: A new policy instrument belonging to the same type of policy instrument as those already in place is developed. As such, the instrument does not lead to a change in the implementation style. It is specifically targeted to the new policy goal and implemented on top of pre-existing ones. This situation is considered as path-formative for the individual instrument, but path-dependent for the implementation style.
 - (ii) *Score 0*: No pre-existing instrument of this type was present in the country concerned, but it is newly developed. This situation is considered as path-formative both in terms of individual instrument as well as in terms of the implementation style.
- *Score -*: This instrument was not in use in the country nor is it introduced. In this situation, one cannot distinguish any form of path dependency.

Figure 1 presents a schematic overview of the assessment method.

The scoring has been determined based on the countries' policy decision about which specific instrument to use. We acknowledge that the actual implementation practice might be different from the formal decision, or that in

Figure 1. Assessment of path dependency in the use of policy instruments to manage Natura 2000 sites.

some countries implementation lags behind (European Environmental Bureau, 2011), yet we take the formal decision as our benchmark.

Based on the method described earlier, scores were calculated for the three types of instruments used to analyse how often the possible responses occur (Table 1). In Table 2, the scores are presented per country, thus indicating how path-dependent a country is in its use of pre-existing instruments. The total score for path dependency for each country was calculated by adding the individual scores of the types of instruments and dividing them by the number of assigned scores (number of times a score 0 or higher was given). Box 1 provides an example to explain the assignment of the scores as well as the calculation of the path dependency score for France.

Table 1. Overview of occurrence of the three path dependency responses

	Used to implement Natura 2000 requirements				Not used
	Following the path	Broadening the path	Shaping a new path		No path
	Score 1	Score 0.5	Score 0.25	Score 0	Score -
1. Management regulations	2	0	0	2	11
2. Subsidies	4	5	0	6	0
3. Management planning	4	4	5	2	0
Total number of responses	10	9	5	10	11
%	22.2	20.0	11.1	22.2	24.4

Table 2. Overview of the path dependency scores for each country for a given type of policy instrument

Countries	1. Management regulations	2. Subsidies	3. Management planning	Total score for path dependency	Region	Year of accession	GDP (Eu average = 100, Eurostat, 2013)	Institutional structure (liberal-pluralist, statist or neo-corporatist) based on Lenschow et al. (2005).
UK	–	1	1	1.00	NWE	1973	109	Liberal-pluralist
Slovenia	–	0.5	1	0.75	CEE	2004	84	Statist*
Estonia	1	0	1	0.67	CEE	2004	67	Statist*
Czech republic	1	0	0.5	0.50	CEE	2004	80	Statist*
Denmark	–	1	0.25	0.63	NWE	1973	125	Neo-corporatist
Finland	–	0.5	0.5	0.50	NWE	1995	115	Neo-corporatist
The Netherlands	–	1	0.25	0.63	NWE	Founder	131	Neo-corporatist
Sweden	–	1	0.25	0.63	NWE	1995	126	Neo-corporatist
Latvia	0	0	1	0.33	CEE	2004	58	Statist*
France	–	0.5	0.25	0.38	SWE	Founder	107	Statist
Greece	–	0.5	0	0.25	SWE	1981	79	Statist
Ireland	–	0.5	0	0.25	NWE	1973	127	Liberal-pluralist
Lithuania	–	0	0.5	0.25	CEE	2004	62	Statist*
Hungary	0	0	0.5	0.17	CEE	2004	66	Statist
Poland	–	0	0.25	0.13	CEE	2004	65	Statist

Notes: Columns 2–4: Score 1, no new instrument(s) have been developed; the pre-existing instrument has been used. Score 0.5, in addition to pre-existing instrument(s), a new one has been developed, both are used. Score 0.25, the pre-existing policy instrument is not used because a new one belonging to the same type has been developed. Score 0, no pre-existing instrument of this type was available but a new one has been developed. Score –, no pre-existing instrument was present nor has a new one been developed. Column 6: CEE, Central and Eastern Europe; SWE, South Western Europe; NWE, North-Western Europe. Column 9: Statist*, some CEE countries were not included in the study of Lenschow et al. (2005)—they are considered to be statist (situation: 1 December 2012).

Box 1. Example of the calculation of path dependency scores for France

Type 1: *Management regulations*. In France, no regulations for conservation measures existed nor were introduced because of Natura 2000. The score assigned is '–'.

Type 2: *Subsidies*. France already had pre-existing agri-environmental schemes for management in place which is now used to implement the required conservation measures for Natura 2000. In addition, new contracts for forest and other non-agricultural areas have been developed specifically targeting Natura 2000 sites (Eurosite, 2009; Journal officiel de la République Française, 2008; Snethlage et al., 2012). As new instruments have been introduced but pre-existing ones also remain in use the score assigned is 0.5.

Type 3: *Management planning*. Prior to Natura 2000, France already had a system of management plans for the various protected areas (Alphandery & Fortier, 2001; Code de l'Environnement, Decret nr. 2008-457). However, in order to arrange the management of Natura 2000 sites, France decided to develop a new system of management plans for all Natura 2000 sites called DOCOB. As a new planning system was introduced which was, however, similar to the pre-existing plans for protected areas in terms of the implementation style, the score assigned is 0.25.

The country path dependency score is calculated using the following formula:

$$\text{SUM (score type 1 + score type 2 + score type 3) / COUNTIF (T1, T2, T3} \geq 0).$$
Country score for France = $(- + 0.25 + 0.5) / 2 = 0.38$.

Results

Table 1 presents the number of the reviewed Member States that show one of the three responses ('following the path', 'broadening the path' or 'shaping a new path') for each type of policy instrument. The cells indicate the number of Member States that show a particular response. The last row indicates the sum of the three possible responses for all three types (15 countries $\times$ 3 types of policy instruments = 45 potential responses⁸).

The analysis shows that all three responses do occur in practice (see Table 1):

- *Following the path*: In 10 out of the 45 potential responses (22%), existing policy instruments are used without much adaptation. This response occurs for all three types.
- *Broadening the path*. In 9 out of the 45 potential responses (20%), additional instruments are developed which are used parallel to pre-existing ones. This response occurs for two types of policy instruments: management plans and subsidies.
- *Shaping a new path*. In 5 out of the 45 potential responses (11%), new instruments are introduced consistent with the implementation style (0.25). This response occurs in the type 'management planning'. Furthermore, in 10 out of the 45 potential responses, policy instruments are developed in countries outside the existing implementation style (score 0) (22%).

In 24% of the potential responses, no path dependency could be determined.

The results in Table 1 also show that management plans and subsidies are used in all countries. Regulations are used to a very limited extent. At the end of this section, we will further elaborate on possible explanations for the differences in responses.

Table 2 shows the scores of individual countries for overall path dependency in their use of pre-existing (types of) instruments. It shows two important trends.

Firstly, the analysis reveals that only 3 of the 15 countries show a predominance of path-dependent behaviour. The UK, Estonia and Slovenia have high average scores (>0.65), indicating an overall tendency not to change their pre-existing instruments. The other 12 countries largely pick and choose from pre-existing instruments, combined with developing new ones, most of them similar to the types of instruments already in place. In fact, all countries with the exception of the UK develop either new (score 0.25, 0) or additional instruments (score 0.5).

Secondly, the introduction of individual instruments belonging to new types (score 0) has occurred mostly in countries such as Central and Eastern Europe.

The results presented in Tables 1 and 2 allow a consideration of the extent to which countries are showing path-dependent behaviour in their choice of instruments. In fact, this depends on whether one considers the matter at the level of implementation style or at the level of individual instruments. The development of individual instruments belonging to new types of instruments is moderate to low (score 0 = 22%). Hence, administrators show path-dependent tendencies by choosing instruments which are already part of the pre-existing implementation style. Only some Central and Eastern Europe countries are (partly) deviating from the existing implementation style by introducing totally new economic instruments which they did not apply before.

Apparently, the requirement to adequately manage the Natura 2000 sites has not led to a change in the overall implementation style. This finding is in line with existing theories on instrument choice and path dependency underlining that in specific policy fields particular implementation styles persist and that change is often limited by decisions taken in the past (Baldwin & Black, 2008; Howlett, 2009; Van Gossum et al., 2010). However, if we look in more detail at the individual instruments, a different behaviour can be observed. Member States do develop new individual instruments for Natura 2000. Where pre-existing instruments were present, the two types of path formation occur frequently (20% broadening and 11% shaping new paths) and together (31%) even dominate path-dependent behaviour (22% following the path). Apparently, in the reviewed countries, there were overriding reasons to change the individual instruments, despite associated costs.

We, therefore, conclude that the introduction of the Birds and Habitats Directives has, within the boundaries of existing implementation styles, initiated the development of new policy instruments by Member States. 'Path dependency' is *not* the overall trend.

Discussion

Firstly, we consider which possible explanations can be given for the observed path-shaping behaviour of individual Member States.

We assumed that policy instrument choice would be influenced by socio-economic development and governance modes. Given the patterns in Table 2,

the choice for a particular policy instrument mix at the country level does not suggest a discernible relationship with the level of socio-economic development, the predominant governance mode of the reviewed countries or the length of EU membership. We expected that path-dependent behaviour would dominate in situations in which *historical turns* (e.g. *economic or political*), *strong domestic pressure* and/or *a shift to new modes of governance* are absent (see Section 2). Vice versa, we may expect the occurrence of path formation at the level of policy instruments in the presence of one (or more) of these factors.

The radical political changes in Central and Eastern Europe in 1989 and the following transition of the former communist countries in Central and Eastern Europe to a market economy were historic events. The transition led to a major paradigm shift in policy, amongst other things with regard to reinstitution of land-owner's rights. For many of those countries, the implementation of EU policy coincided with a reshaping of their national policies and institutions after the communist period (Brusis, 2002; Knill & Tosun, 2009; Sarapuu, 2011). This change in the overall policy context enabled the development of new types of policy instruments (e.g. economic instruments targeting private landowners) outside the existing policy style in Central and Eastern Europe. For Member States lacking a proper nature conservation policy, the joining of the EU may also have been a historic event and explain the occurrence of path formation. Examples are countries such as Greece and Ireland in which nature conservation policy was not well developed prior to the introduction of Natura 2000 (Apostolopoulou & Pantis, 2009).

Besides the occurrence of historical events, path formation in situations of apparent institutional stability might also be explained as a result of coalitions exerting considerable domestic pressure (Mahoney & Thelen, 2010; Streeck & Thelen, 2005). We argue that the two Directives increased the governmental influence in privately owned areas in several Member States. Private owners and businesses raised objections to this increased governmental control over their affairs. Attempts by actors to alter the delineation of sites designated or contest the interpretation of the protection regime of the Directive were unsuccessful due to the low level of discretion in interpretation of the two Directives. But the government did rely on the co-operation of these actors for arranging the management of the sites. Under the domestic pressure exerted by these actors, new policy instruments were developed in order to increase the room for interpretation at the site level or to allow financial compensation. This perspective on the influence of crucial actors on institutional change reflects some of the previous criticism of path dependency literature by underlining the need to pay more attention to agency (Sarigil, 2009).

Domestic pressure as the main catalyst for the development of a new instrument definitely holds, for instance, for France and the Netherlands where a coalition of actors emerged that lobbied for a new planning instrument to address the management challenge of Natura 2000 (Alphandery & Fortier, 2001; Beunen, Van Assche, & Duineveld, 2013; Nederlandse Overheid, 2003).

The path formation for contractual arrangements might also be explained by domestic pressure. Since the introduction of Natura 2000, landowners and managers in different European countries have asked for financial compensation for limitations to their business associated with the Natura 2000 designation (European Commission, 1998; Eurosite, 2009). In several EU countries, this has led to the development of subsidies that are only available for Natura 2000 areas (e.g.

Hungary, Poland and France). In addition, environmental NGOs have lobbied for more funding for the management of Natura 2000 (Lee, 2003; WWF, 1999). Hence, domestic pressure to change instruments within the existing implementation style is a likely explanation in countries where the implementation of Natura 2000 created much resistance and where actors were able to exert considerable pressure.

A last explanation for path shaping is that a change in instruments for managing Natura 2000 sites might have been influenced by a shift towards *new modes of governance* in environmental protection, thus changing the relationship between the state and society. During the initial phase of Natura 2000 site designation in the late 1990s, a trend towards new modes of governance in nature conservation was still largely absent. The overall governance approach of the majority of national administrations was to limit the involvement of private and local actors in nature conservation policy (European Environmental Bureau, 2011; Rauschmayer, Van den Hove, & Koetz, 2009). Yet, since the designation, the call for new modes of governance has become apparent. The plea for the involvement of local actors representing different interests in site management became ever more vocal (CEPF, 2009; Court of Accounts of France, 2008; ECNC, 2010; European Commission, 1998) and several of the new instruments indeed aim at increasing the participation of local actors. A proactive choice for new instruments based on new governance insights within administrations does, therefore, in our view also explain path formation, for instance in countries such as France, the Netherlands and Denmark.

To sum up, we surmise that in many of the Western European countries, path formation resulted from a combination of domestic pressure and the shift to new modes of governance. However, in many of the Central and Eastern European countries, the historical turn from communism to a market economy and the subsequent joining of the EU seems the most likely cause for path formation. Overall, the changes in policy instrumentation are the results of gradual processes of change as well as of more abrupt ones associated with historical events. Additional cases studies on the instrument choice of individual governments will be required in order to find out exactly how these change processes work out in practice.

Conclusions

This study was undertaken to establish if countries, whilst implementing EU policy but in the absence of an EU obligation for particular policy instruments, show path-dependent behaviour in their choice of policy instruments. Overall, the tendency is the opposite of path-dependent behaviour, at least at the level of individual policy instruments. Most countries develop new instruments for site management, either within their national implementation style, or even outside their previously preferred style.

Yet, at the level of the implementation *style*, one could argue that path dependency *does* exist: most of the countries that actually develop new instruments do so in line with their pre-existing style of policy instrumentation, for instance by adding a new form of management planning to an old one. The Central and Eastern European countries in which the shift from a communist to a market economy also led to the development of market-based instruments outside their national implementation style are an exception to this. Based on the

outcomes of this study, we, therefore, need to rephrase our initial hypothesis as follows: *In the absence of an EU obligation for a particular policy instrument, Member States do not necessarily prefer to follow the available instrumental paths, but they prefer to follow the existing implementation style.* Particularly in countries in which the nature conservation policy domain is well established, the implementation of EU policy triggers a process of instrument design within the existing implementation style. Over time, this process can result in gradual transformation of institutions through layering (Mahoney & Thelen, 2010; Streeck & Thelen, 2005). The occurrence of the process of layering of policy instruments in this particular situation, characterized by the high level of enforcement of the two EU Directives in combination with the potentially strong pressure by crucial actors such as site owners and users, is in line with the conditions required for layering suggested by Mahoney and Thelen (2010). In our case, it led to an expansion of the number of individual policy instruments present in the policy instrument mix, particularly by instruments that increase the influence of affected non-state actors. Similar behaviour by EU Member States can be expected during the implementation of other EU Directives and might be taken into account during the revision of existing directives or the developing of new ones. This behaviour might, therefore, be taken into account as a factor during the revision of existing, or the development of new directives.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes

1. In the Habitats Directive, the term 'Natura 2000' is used for the first time. It also encompasses the special protection areas under the Birds Directive.
2. Ringeling (2002) describes that 'new planning' instruments as developed in Western Europe have as their main objective to stimulate communication between the state, public sector and broader society.
3. Sites also need to be protected against the adverse effects of new plans and projects developed within or in the vicinity of the site. An assessment is obligatory in these cases. This aspect is excluded from the article.
4. The instruments for marine areas sites were excluded, as the discussion on the designation and management of the marine sites is still ongoing in most EU Member States.
5. Luxembourg, Cyprus, Croatia, Malta, Bulgaria, Slovakia and Portugal have been excluded due to lack of information. Austria, Germany, Belgium, Italy and Spain were excluded due to their federal or semi-federal structure in which the decision on policy instruments for Natura 2000 management is allocated at the regional level. A review of these states would have to analyse the situation for each region. The UK was included as the devolution of Scotland and Wales occurred in 1998.
6. The typology is based on the study of Vedung (1998).
7. In several countries, Natura 2000 management plans, forestry plans and hunting plans apply to the same territory. In these cases, the forestry and hunting plans need to adhere to the management requirements as stipulated in the Natura 2000 management plans. In Slovenia, this layering of plans does not occur and forest management plans and hunting plans are used directly to implement Natura 2000 management requirements (Bibic, 2008). In France, a Natura 2000 Charter can be signed by private owners making them eligible for a tax exemption.
8. We refer to potential responses as it is also possible that an instrument was not in use in the country and it is also not introduced to implement Natura 2000 (score -). In this situation, one cannot distinguish any form of path dependency.

References

- Alphandery, P., & Fortier, A. (2001). Can a territorial policy be based on science alone? The system for creating the Natura 2000 network in France. *Sociologia Ruralis*, 41, 311–328. doi:10.1111/1467-9523.00185
- Apostolopoulou, E., & Pantis, J. D. (2009). Conceptual gaps in the national strategy for the implementation of the European Natura 2000 conservation policy in Greece. *Biological Conservation*, 142, 221–237. doi:10.1016/j.biocon.2008.10.021
- Bailey, I. (2002). National adaptation to European integration: Institutional vetoes and goodness-of-fit. *Journal of European Public Policy*, 9, 791–811. doi:10.1080/13501760210162366
- Baldwin, R., & Black, J. (2008). Really responsive regulation. *Modern Law Review*, 71, 59–94. doi:10.1111/j.1468-2230.2008.00681.x
- Baumgartner, F., & Jones, B. (1993). *Agendas and instability in American politics*. Chicago: University of Chicago Press.
- Bellemans-Videc, M. L., & Rist, R. C. (1998). *Carrots, sticks & sermons: Policy instruments and their evaluation*. New Brunswick: Transaction.
- Beunen, R., Van Assche, K., & Duineveld, M. (2013). Performing failure in conservation policy: The implementation of European Union directives in the Netherlands. *Land Use Policy*, 31, 280–288. doi:10.1016/j.landusepol.2012.07.009
- Bibic, A. (2008). *Natura 2000 site management programme. Operational program (2007–2013)*. Ljubljana: Ministry of the Environment and Spatial Planning, Republic of Slovenia. Retrieved from http://www.natura2000.gov.si/uploads/tx_library/NATURA_ANG_2008.pdf
- Börzel, T. A. (2000). Why there is no 'southern problem'. On environmental leaders and laggards in the European Union. *Journal of European Public Policy*, 7, 141–162. doi:10.1080/135017600343313
- Bressers, H. T. A., & O'Toole Jr, L. J. (1998). The selection of policy instruments: A network-based perspective. *Journal of Public Policy*, 18(3), 213–239.
- Brusis, M. (2002). Between EU requirements, competitive politics, and national traditions: Re-creating regions in the accession Countries of Central and Eastern Europe. *Governance*, 15, 531–559. doi:10.1111/1468-0491.00200
- Bulmer, S., & Padgett, S. (2005). Policy transfer in the European Union: An institutionalist perspective. *British Journal of Political Science*, 35, 103–126. doi:10.1017/s0007123405000050
- CEPF. (2009). *A joint NATURA2000 workshop with the EU commission. Implementation of the legislation from a forest owner perspective*. Brussel: Author. Retrieved from http://www.cepf-eu.org/vedl/Natura2000%20Workshop_proceedings.pdf
- Court of Accounts of France. (2008). *Report on implementation of the Natura 2000 network in Europe*. Paris: Cour des Comptes.
- Davis, L. E., & North, D. C. (1971). *Institutional change and American economic growth*. Cambridge: Cambridge University Press.
- Dimitrova, A., & Steunenberg, B. (2000). The search for convergence of National Policies in the European Union: An impossible quest? *European Union Politics*, 1, 201–226. doi:10.1177/1465116500001002003
- Dolowitz, D. P., & Marsh, D. (2000). Learning from abroad: The role of policy transfer in contemporary policy-making. *Governance*, 13, 5–23. doi:10.1111/0952-1895.00121
- ECNC. (2010). *Summary workshop report conflict management in the Natura 2000 network*. Tilburg: Author. Retrieved from http://ec.europa.eu/environment/nature/natura2000/management/docs/report20LOT_Task203_workshop_sum.pdf
- Eliadis, F. P., Hill, M. M., & Howlett, M. P. (2005). *Designing government: From instruments to governance*. Montreal: McGill-Queen's University Press.
- European Commission. (1998). *Natura 2000 and people: A partnership*. Proceedings of a conference held in Bath (UK) on 28–30 June 1998. Brussels: Author.
- European Commission. (2014, July). *Natura 2000 Barometer – update December 2013* (Natura 2000 Newsletter Number 36). Brussels: Author.
- European Environment Agency. (2005). *The European environment: State and outlook 2005*. Luxembourg: Office for Official Publications of the European Communities. Retrieved from http://www.eea.europa.eu/publications/state_of_environment_report_2005_1
- European Environmental Bureau. (2011). *Where there is a will there is a way*. Brussels: Author. Retrieved from <http://www.eeb.org/EEB/?LinkServID=5CC039F5-5056-B741-DBFACCB777CA4E16>
- Eurostat. (2013). *Key figures on Europe. Pocketbooks 2013 digest of the online Eurostat figures*. Luxembourg: Publications Office of the European Union.

- Eurosite (Ed.). (2009). *A review of 24 best cases studies*. Den Bosch: Author. Retrieved from http://ec.europa.eu/environment/nature/natura2000/management/docs/report%20LOT3_Task%202-Best_cases.pdf
- Falkner, G., Hartlapp, M., & Treib, O. (2007). Worlds of compliance: Why leading approaches to European Union implementation are only 'sometimes-true theories'. *European Journal of Political Research*, 46, 395–416. doi:10.1111/j.1475-6765.2007.00703.x
- Gunningham, N., Grabosky, P., & Sinclair, D. (1998). *Smart regulation; designing environmental policy*. Oxford: Clarendon.
- Hall, P. A. (1993). Policy paradigms, social-learning, and the state – the case of economic policy-making in Britain. *Comparative Politics*, 25, 275–296. doi:10.2307/422246
- Hall, P. A., & Taylor, R. C. (1996). Political science and the three new institutionalisms. *Political Studies*, 44, 936–957.
- Haverland, M., & Romeijn, M. (2007). Do member states make European policies work? Analysing the EU transposition deficit. *Public Administration*, 85, 757–778. doi:10.1111/j.1467-9299.2007.00670.x
- Heritier, A., Kerwer, D., Knill, C., Lehmkuhl, D., Teutsch, M., & Douillet, A. (2001). *Differential Europe: New opportunities and restrictions for policymaking in the member states*. Lanham: Rowman & Littlefield.
- Holzinger, K., Knill, C., & Arts, B. (2008). *Environmental policy convergence in Europe: The impact of international institutions and trade*. New York: Cambridge University Press.
- Howlett, M. (1991). Policy instruments, policy styles, and policy implementation – national approaches to theories of instrument choice. *Policy Studies Journal*, 19, 1–21. doi:10.1111/j.1541-0072.1991.tb01878.x
- Howlett, M. (2009). Governance modes, policy regimes and operational plans: A multi-level nested model of policy instrument choice and policy design. *Policy Sciences*, 42, 73–89. doi:10.1007/s11077-009-9079-1
- Howlett, M., & Rayner, J. (2006). Understanding the historical turn in the policy sciences: A critique of stochastic, narrative, path dependency and process-sequencing models of policy-making over time. *Policy Sciences*, 39, 1–18. doi:10.1007/s11077-005-9004-1
- Howlett, M., & Rayner, J. (2007). Design principles for policy mixes: Cohesion and coherence in 'New Governance Arrangements'. *Policy and Society*, 26(4), 1–18. doi:10.1016/s1449-4035(07)70118-2
- Hungarian Government. (2007). *Regulation on the management of Natura 2000 grasslands*, Governmental regulation 269/2007 – X 18 C.F.R. (2007).
- Jordan, A. (1999). The implementation of EU environmental policy: A policy problem without a political solution? *Environment and Planning C-Government and Policy*, 17, 69–90. doi:10.1068/c170069
- Jordan, A., & Adelle, C. (2012). *Environmental policy in the EU: Actors, institutions and processes*. New York: Routledge.
- Jordan, A., Wurzel, R., Zito, A. R., & Bruckner, L. (2003). European governance and the transfer of 'new' environmental policy instruments (NEPIs) in the European Union. *Public Administration*, 81, 555–574. doi:10.1111/1467-9299.00361
- Jordan, A., Wurzel, R. K. W., & Zito, A. R. (2003). New instruments of environmental governance: Patterns and pathways of change. *Environmental Politics*, 12, 1–24.
- Jordan, A. J., & Liefferink, D. (2004). *Environmental policy in Europe: The Europeanization of national environmental policy*. London: Routledge.
- Journal officiel de la République Française. 2008. N°0280 du 2 décembre 2008, p. 18363
- Kirk, E. A., Reeves, A. D., & Blackstock, K. L. (2007). Path dependency and the implementation of environmental regulation. *Environment and Planning C-Government and Policy*, 25, 250–268. doi:10.1068/c0512j
- Knill, C. (2001). *The Europeanization of national administrative traditions*. Cambridge: Cambridge University Press.
- Knill, C., & Lenschow, A. (1998). Coping with Europe: The impact of British and German administrations on the implementation of EU environmental policy. *Journal of European Public Policy*, 5, 595–614. doi:10.1080/13501769880000041
- Knill, C., & Liefferink, D. (2007). *Environmental politics in the European Union. Policy-making, implementation and patterns of Multi-level governance*. Manchester: Manchester University Press.
- Knill, C., & Tosun, J. (2009). Post-accession transposition of EU law in the new member states: A cross-country comparison. *European Integration Online Papers-Eiop*, 13. doi:1810.1695/2009018
- Kohler-Koch, B., & Rittberger, B. (2006). Review article: The 'Governance turn' in EU studies. *Journal of Common Market Studies*, 44, 27–49. doi:10.1111/j.1468-5965.2006.00642.x
- Kruk, R. W., De Blust, G., Van Apeldoorn, R. C., Bouwma, I. M., & Sier, A. R. J. (2010). *NATURA 2000; Information and communication on the designation and management of Natura 2000 sites; Main Report 2:*

- Organizing the management in 27 EU Member States* (p. 98). Wageningen: Alterra. Retrieved from <http://www.flanders.be/en/publications/>
- Lascoumes, P., & Le Gales, P. (2007). Introduction: Understanding public policy through its instruments – From the nature of instruments to the sociology of public policy instrumentation. *Governance*, 20, 1–21. doi:10.1111/j.1468-0491.2007.00342.x
- Lee, R. (2003). *An analysis of the effects of Structural Fund spending on the environment for the mid-term evaluation and review of Structural Fund interventions 2000–2006*. Brussels: BirdLife International European Community Office.
- Lenschow, A., Lieferrink, D., & Veenman, S. (2005). When the birds sing. A framework for analysing domestic factors behind policy convergence. *Journal of European Public Policy*, 12, 797–816. doi:10.1080/13501760500161373
- Lieferrink, D., Arts, B., Kamstra, J., & Ooijevaar, J. (2009). Leaders and laggards in environmental policy: A quantitative analysis of domestic policy outputs. *Journal of European Public Policy*, 16, 677–700. doi:10.1080/13501760902983283
- Lieferrink, D., & Jordan, A. (2005). An ‘ever closer union’ of national policy? The convergence of national environmental policy in the European Union. *European Environment*, 15, 102–113. doi:10.1002/eet.377
- Lipset, S. M., & Rokkan, S. (1967). *Cleavage structures, party systems and voters alignment: Cross-national perspectives*. New York: The Free Press.
- Mahoney, J., & Thelen, K. (2010). *Explaining institutional change: Ambiguity, agency, and power*. New York: Cambridge University Press.
- Masterbroek, E. (2005). EU compliance: Still a ‘black hole’? *Journal of European Public Policy*, 12, 1103–1120. doi:10.1080/13501760500270869
- Nederlandse Overheid. (2003). *Tweede Kamer Amendement 28 171 Nr. 30*.
- Pierre, J. (2000). *Debating governance*. Oxford: Oxford University Press.
- Pierson, P. (2000). Increasing returns, path dependence, and the study of politics. *American Political Science Review*, 94, 251–267. doi:10.2307/2586011
- Primdahl, J., Peco, B., Schramek, J., Andersen, E., & Onate, J. J. (2003). Environmental effects of agri-environmental schemes in Western Europe. *Journal of Environmental Management*, 67, 129–138. doi:10.1016/s0301-4797(02)00192-5
- Rauschmayer, F., van den Hove, S., & Koetz, T. (2009). Participation in EU biodiversity governance: How far beyond rhetoric? *Environment and Planning C-Government and Policy*, 27, 42–58. doi:10.1068/c0703j
- Rhodes, R. A. W. (2007). Understanding governance: Ten years on. *Organization Studies*, 28, 1243–1264. doi:10.1177/0170840607076586
- Ringeling, A. B. (2002). Chapter 21. European experience with tools of government. In L. M. Salamon (Ed.), *The tools of government: A guide to the new governance* (pp. 585–600). New York: Oxford University Press.
- Salamon, L. M. (2002). *The tools of government: A guide to the new governance*. New York: Oxford University Press.
- Sarapuu, K. (2011). Post-communist development of administrative structure in Estonia: From fragmentation to segmentation. *Transylvanian Review of Administrative Sciences*, 54–73. Retrieved from <http://rtsa.ro/tras/index.php/tras/article/viewFile/243/237>
- Sarigil, Z. (2009). Paths are what actors make of them. *Critical Policy Studies*, 3(1), 121–140. doi:10.1080/19460170903158214
- Schout, A., Jordan, A., & Twena, M. (2010). From ‘Old’ to ‘New’ Governance in the EU: Explaining a diagnostic deficit. *West European Politics*, 33, 154–170. doi:10.1080/01402380903354205
- Snethlage, M., Delbaere, B., Fernandez, P., Garcia, L., Ferreira, M., & Kaandorp, M. (2012). *Sectoral experience with Natura 2000*. Tilburg: ECNC Group. Retrieved from <http://www.ecnc.org/projects/nature-and-society/sectoral-experience-with-natura-2000/>
- Streeck, W., & Thelen, K. (2005). *Beyond continuity: Explorations in the dynamics of advanced political economies*. Oxford: Oxford University Press.
- Torring, J. (2009). Rethinking path dependence in public policy research. *Critical Policy Studies*, 3, 70–83. doi:10.1080/19460170903158149
- Tosun, J. (2012). Environmental monitoring and enforcement in Europe: A review of empirical research. *Environmental Policy and Governance*, 22, 437–448. doi:10.1002/eet.1582
- Treib, O. (2003). Die Umsetzung von EU-Richtlinien im Zeichen der Parteipolitik: Eine akteurszentrierte Antwort auf die Misfit-These. *Politische Vierteljahresschrift*, 44, 506–528. doi:10.1007/s11615-003-0096-y

- Treib, O. (2014). Implementing and complying with EU governance outputs. *Living Reviews in European Governance*, 9(1). Retrieved from <http://www.livingreviews.org/lreg-2006-1>
- Van Gossum, P., Arts, B., & Verheyen, K. (2010). From “smart regulation” to “regulatory arrangements”. *Policy Sciences*, 43, 245–261. doi:10.1007/s11077-010-9108-0
- Vedung, E. (1998). Policy instruments; typologies and theories. In M. L. Bemelmans-Videc, R. C. Rist, & E. Vedung (Eds.), *Carrots, stick and sermons* (pp. 21–59). New Brunswick, NJ: Transaction.
- WWF. (1999). *NATURA 2000 – opportunities and obstacles*. Vienna: Author.