

Fink, Simon; Ruffing, Eva; Maschlanka, Luisa; Lüken genannt Klaßen, Hermann

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Self-enforcing path dependent trajectories? A comparison of the implementation of the EU energy packages in Germany and the Netherlands

Simon Fink 

Institute of Political Science, Georg-August-Universität Göttingen, Göttingen, Germany

Eva Ruffing, Luisa Maschlanka

Institute of Social Sciences, Osnabrueck University, Osnabrück, Germany

Hermann Lüken genannt Klaßen 

Institute of Political Science, Georg-August-Universität Göttingen, Göttingen, Germany

Abstract

Since the 1990s, the EU has attempted to create a common electricity market. However, EU legislators are unsatisfied by the results. We argue that differentiated implementation of directives over time creates path dependencies that entrench national differences. The actor constellation of parties and incumbent operators at the beginning of the liberalization path determines how well countries implement liberalizing directives. The implementation, in turn, changes the actor constellation for the next directive, increasing or decreasing the institutional power of incumbents. We illustrate our argument analyzing the implementation of the first three energy market packages in Germany and the Netherlands. Both countries had similar electricity markets at the beginning of market liberalization, but their actor constellation was slightly different. German implementation gradually strengthened vertically integrated utilities, while Dutch implementation dismantled these utilities through unbundling. These paths became self-reinforcing, counteracting European harmonization efforts.

Keywords: Energy policy, path dependency, policy implementation.

1. Introduction

The creation of a European internal market is an important aim of European integration. Whereas in some fields attempts to build a common market have been successful (e.g., in foodstuffs or technical goods), we see constant market-making initiatives in other sectors.

The European electricity market stands out, as four *EU Energy Packages* have aimed to create a European electricity market (Meeus, 2020). Given the uneven starting conditions, there has been considerable progress since the 1990s, but the Agency for the Cooperation of Energy Regulators (ACER) consistently highlights that markets are still national (ACER, 2022). From the perspective of the European Commission, energy market directives did not deliver the outcomes the Commission had anticipated (Commission of the European Communities, 2007). Consequently, each new energy market directive is followed by another directive, trying to address obstacles that previous directives did not address. This pattern of ongoing market-making suggests that implementation problems persist.

We argue that path dependence of national implementation can explain why recurring harmonization efforts using directives deliver less harmonization than anticipated. In terms of the path dependence mechanisms outlined by Mahoney (2000), we argue that power and preferences of actors are central to path emergence and reproduction. The implementation of the first directive in a field is *influenced by* the prevailing actor constellation, but also

Correspondence: Hermann Lüken genannt Klaßen, Institute of Political Science, Georg-August-Universität Göttingen, 37073 Göttingen, Germany. Email: hermann.lueken-genannt-klassen@uni-goettingen.de

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changes the actor constellation for further implementation rounds. For our case, the *institutional power* of incumbent operators is of particular importance (Busemeyer & Thelen, 2020). Delegation of quasi-public functions, such as ensuring energy provision, to private actors leads to an “asymmetrical dependence of the state on the commitment of private business actors” (Busemeyer & Thelen, 2020, p. 448), thereby granting them institutional power and changing the actor constellation. This changed actor constellation, in turn, influences implementation of the following directives. Thus, small differences of the actor constellation at the time of the implementation of the first directive create endogenous path dynamics. In the long run, these dynamics entrench national differences and counteract European harmonization efforts.

We illustrate our argument comparing the implementation of the first three electricity market packages in the Netherlands and Germany. Both were coordinated market economies (CMEs) with similar electricity market structures at the beginning of harmonization. But their actor constellation was different: The German path was influenced by the preferences of vertically integrated utilities, the path of the Netherlands by government ideological preferences. Following a self-reinforcing logic, German implementation gradually *strengthened*, Dutch implementation gradually *dismantled* vertically integrated utilities. In the long run, the persistence of strong integrated utilities was detrimental to an effective implementation of the energy market directives in Germany.

Our article contributes to several discussions. *First*, we highlight the difficulties of electricity market integration. Each generation of scholarship assesses the strategies and successes of the Commission in electricity market integration (Eikeland, 2011; Eising, 2003; Oberthür & von Homeyer, 2023; Schmidt, 1998). But each generation of scholarship also starts with the diagnosis that the preceding energy market packages did not deliver the outcomes the Commission had hoped for. *Second*, we explain these difficulties using path dependence. The two CMEs Netherlands and Germany started liberalization with similar preconditions. Nevertheless, both chose different implementation paths, with Germany maintaining its coordinated governance of the sector and the Netherlands transforming to liberal market rules. These implementation paths cannot convincingly be explained using partisan preferences: In both cases, various coalitions were responsible for implementing the three energy market packages. However, both cases show remarkable consistency over time instead of shifts according to party preferences. According to our analysis, institutional power of private actors (Busemeyer & Thelen, 2020) overrides partisan preferences in policy implementation. Thus, *third*, we contribute to the debate on the causes of differentiated implementation (Fink & Ruffing, 2017; Zhelyazkova et al., 2024), demonstrating why differentiated implementation persists over time.

The article is structured as follows. In the *second* part, we give an introduction into the policy field. In part *three*, we develop our analytical framework. *Fourth*, we discuss the research design. *Fifth*, we trace the implementation pathways in Germany and the Netherlands. Part *six* concludes.

2. The policy field

In 1991, the European Commission tabled a directive proposal, based on the premise that an internal electricity market requires the dismantling of monopolies and harmonized regulation. The major issues were: *access to the electricity grid*, *unbundling*, and the *establishment of a national regulatory authority (NRA)* (Meeus, 2020).

In terms of *access to the grid*, Directive 96/92/EC left it to the Member States to introduce *regulated third-party access*, *negotiated access*, or the *Single Buyer procedure*. With *regulated third-party access*, suppliers have a right of access on the basis of a published tariff. Under *negotiated access*, they negotiate access conditions with the grid operators. In the *Single Buyer model*, the Single Buyer (the national electricity company) buys electricity from producers at a price similar to its own price (Hancher, 1998). With the second package, the default was set to regulated third-party-access.

The second package (Directive 2003/54/EC and Regulation 1228/2003) required Member States to install an *independent energy regulatory authority*. In the third package, its independence requirements were tightened and its powers increased.

Unbundling requirements for utilities have become more stringent. Whereas the first electricity directive prescribed a separation of *accounts*, the second package required *legal unbundling*. The third package (Directive 2009/72/EC, Regulations 714/2009 and 713/2009) required a fully independent transmission network operator.

Member States could also opt for an Independent System Operator (ISO) or an Independent Transmission Operator (ITO). Both do not require ownership unbundling, but are subject to stronger regulatory oversight.

Regarding the establishment of *European-level institutions*, the packages gradually replaced voluntary coordination with formal organizations like ENTSO-E (for the transmission system operators, TSOs) or ACER (for the NRAs) (Rangoni, 2019). Table 1 summarizes the first three packages.

The usual interpretation of the process is that the Commission allied with actors in favor of liberalization and gradually pushed supranational market-making (Eikeland, 2011). Indeed, the energy market packages restrict national discretion, harmonize regulation, and confer competencies to supranational bodies. The idea of the Commission is that especially unbundling generates a “level playing field” on which competition emerges (Commission of the European Communities, 2007).

The series of directives can be also seen as indicative that the Commission is not as successful in its market-making attempts as it had hoped for. To be sure, progress has been made since the 1990s, with liberalization steps dismantling entry barriers for competitors (Eikeland, 2011). However, in the memoranda motivating each new directive, the Commission diagnoses ongoing implementation problems of the old directives (Commission of the European Communities, 2007) and tries to remedy these problems using more sophisticated forms of administrative integration (Jevnaker, 2015).

The aims and problems of the integration of an European energy market can be nicely traced throughout the recitals of the consecutive energy packages: In the first energy package, Council directive 96/92/EC, member states only gave the starting shot for market integration, stating in recital 5 that “the internal market in electricity needs to be established gradually.” In the second package, directive 2003/54/EC—Council and Parliament stated that “significant contributions towards the creation of an internal market for electricity” have been made (recital 1), but called for “rapid work” and a “detailed timetable for the achievement of accurately defined objectives with a view to gradually but completely liberalizing the energy market” (recital 3), with the main obstacles being persistent differences between member states (recital 5). In the third package, directive 2009/72/EC reiterated that significant contributions an internal market in electricity have been made, but that the four freedoms guaranteed

Table 1 Evolution of EU Energy Packages on the liberalization of electricity markets

	First EU Energy Package • Directive 96/92/EC	Second EU Energy Package • Directive 2003/54/EC • Regulation 1228/2003	Third EU Energy Package • Directive 2009/72/EC • Regulation 714/2009 • Regulation 713/2009
Access to the grid	Negotiated or regulated third-party-access or single buyer access procedure Authorization or tendering procedure for new capacity Market opening for large-scale customers	Regulated third-party-access Authorization procedure (tendering procedure) Timetable for market opening: 2004: nonhousehold; 2007: all customers	Regulated third-party-access Authorization procedure; criteria for emission reduction (tendering procedure) Timetable for market opening
Unbundling	Unbundling of accounts	Legal unbundling Exceptions for closed systems and with up to 100,000 users	Three unbundling models Ownership Unbundling (OU), Independent System Operator (ISO), Independent Transmission Operator (ITO) DSOs: legal unbundling; exceptions
Energy Regulatory Authority	Independent dispute settlement body ensures grid access	Establishment of energy regulator, minimum criteria: independence from electricity industry, approving/fixing terms and conditions for grid operation and tariffs (tariff methodology)	Independence of energy regulators of market + politics; adding duties + powers: developing terms/conditions and tariff methodology, if SOs fail; facilitate cross-border cooperation; report to national level, ACER, EC

by the treaties can only be realized in a “fully open market” (recital 3), and that current rules do not provide for a well-functioning internal market (recital 7). In directive 2019/944/EU, legislators reiterate in an almost notorious recital 3, that significant contributions toward the creation of an internal market have been made, but add that “[w]ith a view to *creating an internal market for electricity* [emphasis added], Member States should foster the integration of their national markets and cooperation among system operators at Union and regional level, and incorporate isolated systems that form electricity islands that persist in the Union” (recital 7).

This short tour through the legal acts reveals that though there has been significant progress toward a European internal market for electricity, the current state of the internal energy market falls short of the aims not only of the Commission, but also of the Parliament and the Council, mainly because differences between member states persist. The decision-makers are therefore in a “Come so far but got so far to go” situation.¹

Coming from an integrationist angle, existing research asked how the supranational actors (in particular the Commission) managed to “come so far,” acting strategically and playing an iterative game (Eikeland, 2011).

Coming from a policy analysis angle we ask why the implementation falls short of the legislators aims and there is still such a long way ahead. To be fair, a full harmonization might not be necessary for a *basic form* of market integration, as the Central American example shows,² and directives can only be a first step toward harmonization, as they deliberately leave room for member states to adapt. However, as the recitals mentioned earlier show, the aim of all actors is an ambitious market integration with considerable cross-border trade, and the directives are supposed to offer the framework for this ambitious market making.

Thus, the aim of this article is not to pass a normative judgment whether the electricity market is integrated or not. Instead, the aim of this article is to elucidate why there are divergent pathways of implementation that persist over multiple directives.

3. Literature review and analytical framework

The starting point to explain implementation of European directives is *Europeanization research*. Europeanization research studies how European directives interact with domestic policies and actor constellations. A well-known argument is that domestic conflict over the implementation of a directive determines the speed and quality of implementation, and powerful national actors can adapt the implementation of directives to fit their preferences. That is, power and preferences of domestic actors are central to explain implementation (Mastenbroek & Kaeding, 2006).

Most of these studies are case studies of the implementation of single directives at one point in time (one actor constellation—directive—implementation triad in Fig. 1). As our puzzle is the long-term effect of successive directives, we extend this argument over time. We hence use theories of *path dependence*. Path-dependent systems are characterized by cause-effect circuits, whereby effects become the causes for subsequent effects becoming causes once again (Rixen & Viola, 2014, p. 307). Typical features of path dependence are the importance of *sequence*, *initial contingency* and *lock-in*. Accordingly, the path is determined by choices made early in the process. Through increasing returns, these choices are amplified, increasing the stability of a path (Pierson, 2000).

We use path dependence to explain the *lack of regulatory harmonization of domestic implementation of the energy market directives*. The main part of our argument is on the domestic level of Figure 1.³ Our argument is that the domestic actor constellation of policy implementation evolves as a reactive sequence over time (Skjærseth, 2018). The actor constellation at t1 influences how a country implements a European directive. The implementation of the directive then changes the actor constellation for implementing the next directive at t2. Domestic power relations change, some actors or strategies are privileged, other actors loose power, and the costs and benefits of policies change.

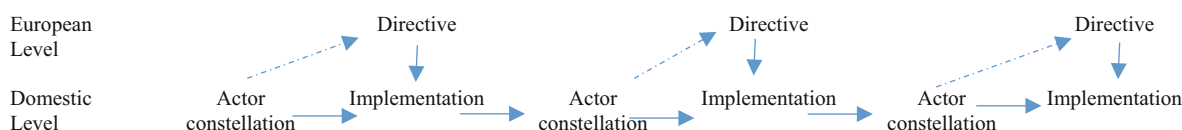


Figure 1 Theoretical argument (abstract version).

Thus, we need to specify the domestic actor constellation, define our notion of power, and the elements of policy implementation that have an impact on the power relations between domestic actors.

Central to the actor constellation in the electricity sector are *government parties*, *incumbent producer companies*, and the *companies operating the transmission grid*.

Government parties are the main decision-making actor of domestic implementation. Formally, parliaments pass the laws that transpose European directives into national law, but in western democracies, most of the preparatory work is done in government ministries that are controlled by parties. Thus, party preferences influence implementing laws (Treib, 2014).

However, governments may be dependent on the *institutional power* (Busemeyer & Thelen, 2020) of *generator and transmission companies*. Companies acquire institutional power if they produce public goods, that is, they gain leverage over government policies because governments are dependent on their continuing provision of these public goods. The more vital the public good function of companies is for an economy, the more unified companies are in their position, and the less governments can step back in to provide these public goods themselves, the larger the institutional power of companies (Busemeyer & Thelen, 2020).

Busemeyer and Thelen (2020) use the example of the role of companies in vocational training; however, for companies producing and transmitting electricity, the public good argument is equally applicable. Provision and distribution of electricity is a core infrastructure on which the economic well-being of a country depends. Moreover, companies in this field generate many jobs and considerable tax revenue for governments. Thus, *generator and transmission companies are assumed to be the main actors using institutional power*.

Institutional power can be self-reinforcing if governments over time lose the capacity to step back into the delivery of the public good, and the role of business becomes taken for granted (Busemeyer & Thelen, 2020, p. 456). Additionally, with rising institutional power, the instrumental power of companies may also increase, and their lobbying efforts become more effective.

The relation between implementation and institutional power is that implementation decisions increase or decrease the institutional power of companies. For the electricity market, this connection is clearly visible: All elements of the energy market packages outlined in Table 1 concern the extent to which energy companies are entrenched in domestic economies and can threaten governments that they cannot fulfil their public goods function anymore (e.g., ensure security of supply): *Liberalization* of access to the grid determines how much competition there is for electricity production, that is, the extent to which large producers have institutional power due to their oligopolistic position. *Unbundling* concerns the question to what extent production and distribution of electricity is located in one company that can speak to government with one voice. *Regulation* concerns the question to what extent governments can curb the institutional power of companies.

Figure 2 summarizes our theoretical argument for the case of energy market directives. We expect that power relations between governments, incumbent producers, and grid companies influence the implementation of the first energy market package. According to path dependence arguments, even small power differentials can have a large effect, setting into motion self-reinforcing dynamics. The implementation decisions taken at this step then change the power distribution for the implementation of the next directive, according to the self-reinforcing logic in the same direction as the path taken at the beginning of the process. For example, if the implementation of the

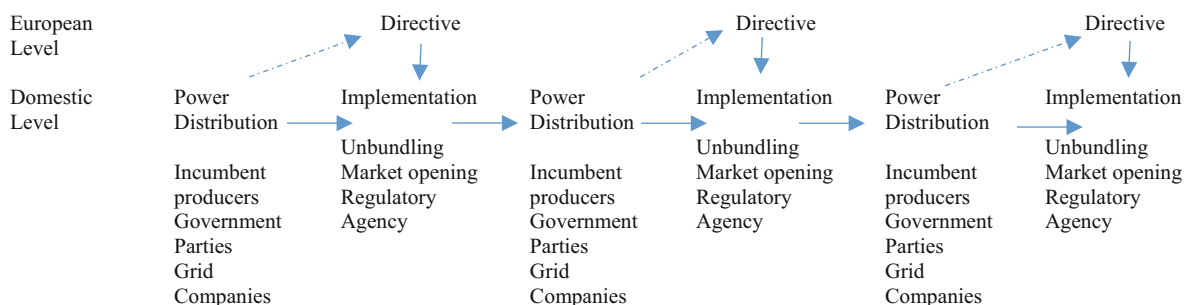


Figure 2 Theoretical argument (concrete version).

first directive strengthens incumbent producers, they will be in a better position to also influence implementation of the second directive.

Thus, we are interested in *domestic implementation paths*, defined by domestic power relations. One could argue that domestic implementation paths are too narrow a conceptual focus, as they are automatically embedded in supranational liberalization paths, with the Commission as an automatic watchdog over national implementation. However, we think that a conceptualization of the Commission as exogenous to the domestic implementation paths is warranted. If we follow the argument of Rixen and Viola (2014, p. 309) who differentiate between endogenous and exogenous variables impacting on paths, “[v]ariables are exogenous to an institution when they are not controlled or determined by that institution, but they may nevertheless affect its development.” In our case, the institution in question is the domestic implementation path. The exogenous “variable” is the role of the Commission. The Commission is most likely *influenced* by domestic implementation paths—for example, drafting new directives or initiating infringement procedures—but there is no automatic relationship between domestic paths and Commission actions in the sense of “controlled or determined.” Instead, the Commission strategically chooses to use its powers, following broader considerations than only domestic implementation paths (Kelemen & Pavone, 2022).

It is important to demarcate our argument from competing accounts of domestic implementation and European integration.

Many studies use path dependence to explain *deepening* integration: The Commission has a longer time horizon and pursues an incremental integration agenda that member states can hardly reverse, because of lock-in effects (Pierson, 1996). For European energy policy, many authors make similar arguments about the long-term strategy of the Commission, incrementally expanding its competences, and gradually hardening governance instruments (Eberlein, 2008; Jevnaker, 2015; Schoenefeld & Knodt, 2021).

In contrast, we highlight the persistence of national implementation paths. These domestic paths may or may not correspond to the regulatory agenda of the Commission. In any case, they are dependent on, and reinforcing, domestic power relations. Implementing policies that may have been possible at earlier points in time are less feasible at later points in time. Thus, *differentiated implementation*, rather than harmonization, will be the outcome, even if successive directives try to induce harmonization.

4. Case selection and research design

4.1. Case selection

To substantiate our argument that path dependent changes of the actor constellation explain why the European energy market is not as integrated as European actors hoped for, we need cases that are similar before the first energy market package.

We choose *Germany* and the *Netherlands* as most similar cases. Both are *parliamentary democracies* with *corporatist* interest intermediation. In both, *coalition governments* are the norm. Germany is a federal state. For energy policy, this also holds for the Netherlands, as provinces and municipalities have a strong role, owning many of the utilities (Arentsen et al., 1997). The *capacity of the bureaucracy* is high in both countries (Falkner et al., 2007). At the beginning of liberalization, both countries relied on *fossil fuels*. Additionally, both countries had an almost identical *level of concentration in electricity production*, most electricity suppliers were *vertically integrated*, and both are classified as CMEs (Hall & Gingerich, 2009). Table 2 summarizes these similarities in terms of political and administrative variables, while Table 3 provides an overview of economic variables and market conditions.

5. Analysis: Implementation paths in Germany and the Netherlands

5.1. The status quo before the first energy market package

5.1.1. Germany

At the beginning of the liberalization path, the German actor constellation was dominated by the preferences of the *vertically integrated utilities*, who hoped to increase their market share through liberalization. German *parties* did not have unified preferences, so the preferences of the big utilities prevailed.

Table 2 Overview over political and administrative context variables before implementation of the First EU Energy Package

Country	Germany	The Netherlands
Political system	Parliamentary democracy	Parliamentary democracy
Internal division of competences	Federal structure, strong <i>länder</i> , strong municipalities (decentralized and federal state)	Unitary state, strong central government, weaker provinces and municipalities (semi-federal state)
Party ideology	Conservative/liberal (until 1998) social-democratic/green (1998–2002)	Social democratic/Right-/Left-Liberal (1994–2002)
Regulatory tradition	Corporatist	Corporatist, “poldermodel”
Variety of capitalism	CME	CME
Capacity of bureaucracy	High	High

Table 3 Overview over economic variables (energy sector) before the implementation of the First EU Energy Package

Country	Germany	The Netherlands
Market structure at national level	High concentration: nine vertically integrated companies Concentration level in production in 1994: 0.13	High concentration: four vertically integrated companies Concentration level in production in 1994: 0.15
Market structure at regional/municipal level	900 distribution system operators, vertically integrated companies on the regional level and municipal plants	43 Distribution system operators, mostly vertically integrated companies
Ownership structure	Mostly private (27 percent public)	Public (provinces and municipalities, 100 percent)

Source: Own illustration, data from Midttun (1997).

The *vertically integrated utilities* were confined in their expansion opportunities due to *demarcation and concession contracts* (Midttun, 1997, pp. 238–240). *Demarcation contracts* were agreements between supply companies to limit themselves to specified areas. *Concession contracts* were between municipalities and utilities, and gave the latter a monopoly to supply the former for a concession fee.

These vertically integrated utilities were influential, because they already had considerable economic and institutional power: In the early 1990s, nine vertically integrated companies at the national level were responsible for 80 percent of electricity generation (Schmidt, 1998, p. 186). These companies were subject to cross-ownerships, leading to a market concentration in the hands of three companies: RWE, PreussenElektra, and Bayernwerk that also governed the grids. Already under the old regulatory system, the information asymmetry between the companies and the formal regulator, the ministry was high, leading to a de facto self-regulation by the industry (Renz, 2001, pp. 90–92).

Their main opponents were the 900 utilities “*Stadtwerke*,” that were responsible for modest 11 percent of electricity generation. Only 57 local utilities were owned by vertically integrated companies, making them the only independent actor in electricity supply (Renz, 2001, pp. 69–72). The municipalities profited from the old system, because of the priority access to their consumers, and the concession fees (Eberlein, 2001, p. 358). Therefore, the municipalities preferred strong unbundling prior to market opening to reduce the economic and institutional power of the vertically integrated utilities.

Until the 1980s, the preferences of the local utilities and the vertically integrated utilities were aggregated in the VDEW (Vereinigung Deutscher Elektrizitätswerke), the association of the electricity utilities. However, the consensus began to erode once the vertically integrated utilities saw liberalization as an opportunity to penetrate the supply areas of local utilities (Eberlein, 2001, p. 362). The association of the large utilities, the DVG (Deutsche Verbundgesellschaft) formed a coalition with large industrial consumers. Together, they pressured the

Economics Ministry (Bundeswirtschaftsministerium, BMWi) to support reciprocal liberalization *without strong unbundling requirements*. They were successful because of their institutional power, and because German parties did not have a unified position (Kungl, 2018, p. 461; Midttun, 1997, p. 246). Thus, the change of position of the BMWi was not only due to policy learning (Eising, 2003) or threats by the European Commission (Schmidt, 1998), but due to the institutional power of the vertically integrated utilities.

5.1.2. The Netherlands

The Dutch actor constellation in the early 1990s resembled the coordinated German system. However, in the Netherlands, party-political preferences pointed toward liberalization. Especially the unbundling of vertically integrated companies was high on the agenda, and government preferences prevailed.

The structure of the *utilities* was similar to Germany: The four biggest companies EPZ, EPON, UNA, and EZH cooperated in the SEP (Samenwerkende Elektriciteitsproducenten) (Arentsen et al., 1997). The SEP was responsible for import and export of electricity, and set the electricity price. Through a cost pooling system, electricity prices were almost uniform (Koster, 1998). In 1993, the three biggest companies had a market share of 80 percent in production (Arentsen et al., 1997).

However, in contrast to Germany, Dutch *parties* had clear preferences for restructuring the sector. The 1989 Electricity Act of the Lubbers government (Lubbers II 1986–1989, CDA [Christen-Democratisch Appèl] and VVD [Volkspartij voor Vrijheid en Democratie]) sought to promote competition and preserve coordination. Electricity distribution and production were separated. Distribution companies and industrial consumers could choose their supplier (Koster, 1998). Distribution companies could install small cogeneration plants up to 25 MW, and even more, if they established joint ventures with consumers (Arentsen et al., 1997). To ensure coordination, a 10-year forecast became mandatory. With these small steps, the coordinated logic of the electricity sector began to erode.

The system established in 1989 did not work well (Van Damme, 2005). *First*, the cost pooling system prevented switching. *Second*, the bigger provincial distributors bought smaller distributors, increasing concentration. They also formed joint ventures with industrial consumers to build production capacities, and decentralized generation doubled to 23 percent of total generation in 1995. Consequently, regional producers lost track of decentralized capacity, and their forecast became inaccurate.

When the discussions about the EU energy market began in the Netherlands, the Dutch had a regulatory system halfway between coordination and liberal market. The actor constellation already had become heterogeneous, with the distribution companies challenging the status quo, and the utilities losing their institutional power.

The government decided to push for liberalization (Dutch Government, 1995). The points addressed were, *first*, the legal unbundling of network operation from electricity production, covering the distribution and transmission networks. For the transmission network, a new organization should be established, being a subsidiary of the SEP. *Second*, an independent regulatory authority should ensure nondiscriminatory access to the grid. *Third*, production and trade of electricity should become deregulated, and cost pooling should be abandoned. *Fourth*, the demand-side market should be opened, starting with industrial consumers. *Finally*, the Minister van Economische Zaken (MEZ) should exercise regulatory oversight by determining end-user prices until full competition was achieved.

The *government* in 1995 was a coalition of the social democratic PvdA, the right-liberal VVD and the left-liberal D66. Even though the coalition included social democrats and had a broad ideological range (see also Fig. 4), its goal was to stimulate growth through deregulation. Thus, the Dutch government was in favor of the electricity market reform as envisaged by the European Commission (Dutch Government, 1995, p. 27).

The Dutch actor constellation was characterized by the weak and divided utilities, which diminished their institutional power and allowed the government to find allies for its unbundling agenda. The *four regional production companies* feared that liberalization would undermine their market share. Producers favored going back to the system of central planning (Arentsen et al., 1997). However, producers had already lost institutional power due to the 1989 Electricity Act, and the emergence of distribution companies as important market players. The *distributors*, owned by municipalities and provinces, had heterogeneous preferences. As a result of the Electricity Act (1989), distributors gained economic power, which they used to circumvent the producers. Some of them assumed that they could bargain for better conditions in a liberalized market. Those that were not completely

unbundled were skeptical of a liberalized market. They preferred to cooperate with local producers to preserve each other's market share (Arentsen et al., 1997). *Industrial consumers* were in favor of a liberalization; however, they also benefited from the existing regulation. They could bargain for low electricity prices, and they could install generation capacity, which the distribution companies were obliged to purchase (Arentsen et al., 1997).

5.1.3. *The status quo ante in comparison*

The main difference of the actor constellation between the two countries was the party-political preference at the beginning of energy market reforms. The German government had no clear preference, whereas the big utilities had a unified position and preferred liberalization with little unbundling. The Dutch government had a liberalization agenda that envisioned unbundled companies competing under regulation. The Dutch utilities, in turn, were weaker than their German counterparts and had more divergent preferences. This decreased their institutional power, as they could not orchestrate collective action. Early liberalization attempts in Germany therefore strengthened the institutional power of the big utilities, which became even more important for German energy production than before. On the other hand, early unbundling attempts in the Netherlands weakened the institutional power of Dutch utilities: Distributors became more important to the detriment of producers.

5.2. The implementation of the first energy market package

5.2.1. *Germany*

The implementation of the first EU Energy Package set Germany on its path of electricity market integration: The institutional power of vertically integrated utilities—already strong in the initial actor constellation—was further strengthened by the combination of weak unbundling, negotiated third-party access, and the opening of retail markets. The municipalities were the “losers,” as they could not prevent the opening of their markets.

The German government was a coalition of the liberal FDP and the Christian democratic CDU/CSU. Germany implemented the first EU electricity directive with the *Energiewirtschaftsgesetz* (EnWG) of 1997 (Renz, 2001, p. 200). Even though this coalition is located on the liberal end of the German political spectrum—especially the FDP emphasized the virtues of unbundling and competition in its 1994 manifesto—on nearly all issues on which the government had leeway, it implemented EU rules to suit the preferences of the big utilities.

First, the vertically integrated utilities preferred *full retail access* to have access to consumers. The BMWi supported this attempt to abolish the demarcation contracts. German parties were internally heterogeneous on the issue. This was especially the case for the SPD and the CDU, due to their interlocks with municipal utilities (Renz, 2001, p. 191). As a result, Germany became one of only five countries which completely opened its market (Eberlein, 2001, p. 361).

As a consequence of the emphasis on scaling effects and the creation of “national champions,” the BMWi issued special permissions for the merger of big utilities against the veto of the federal cartel office. This led to a duopoly structure, where RWE and E.ON controlled more than 80 percent of the market (Colli et al., 2014; Kungl, 2018, p. 174). Länder and municipalities sold many of their shares in energy companies. Consequently, the number of big utilities shrunk to four: EnBW, E.ON, RWE, and Vattenfall. These consolidated utilities then used their market power to deter competitors. Using their windfall profits, RWE and E.ON bought many Stadtwerke and other electricity companies.

RWE, E.ON, and EnBW also used their profits to internationalize their operations. In terms of the institutional power framework, especially RWE and E.ON became “national champions” that were vital for electricity supply and the economic interests for Germany at large, with corresponding economic power and political clout.

Second, concerning *third-party access to the grid*, the institutional power of vertically integrated utilities was reproduced by negotiated access rather than regulated access. Together with big industrial consumers, they pressured the BMWi to allow this form of self-regulation that strengthened incumbent actors (Culpepper, 2010). Eventually, Germany was the only country opting for negotiated access (Ruffing, 2014). In practice, negotiated access was implemented by association agreements between the BDI, the VDEW, and the VIK,⁴ and therefore as a form of self-regulation of the sectoral actors. This self-regulation, in turn, strengthened the institutional power of the large utilities. These agreements benefited big utilities and industrial consumers, and only slowly opened the market for household consumers (Eberlein, 2001, pp. 371–372), effectively creating large hurdles for competitors (Kungl, 2018, p. 168).

Third, *unbundling* requirements were weak. The Green Party, municipalities and new market entrants were the only advocates of unbundling (Renz, 2001, pp. 185, 191). Hence, production, transmission and distribution were only unbundled in administrative terms. Cross-subsidization between the monopolies and the competitive sectors was still possible, and utilities could grant privileged access to their subsidiaries. Especially E.ON and RWE used this to deter competitors by cross-subsidizing lower electricity prizes. Additionally, they had considerable institutional power as they were responsible for network development and were thus informed of all investment plans by their competitors (Kungl, 2018, p. 109).

Fourth, as Germany had not introduced a *regulatory agency*, the regulatory effort had been ill-equipped to prohibit the vertically integrated utilities from abusing their market power (Eberlein, 2001, p. 359). The cartel office was overwhelmed dealing with the reported abuses (Eberlein, 2001, p. 359). Almost all new suppliers that tried to enter the German market in this time were unsuccessful and went bankrupt (Eberlein, 2001, pp. 371–372; Eising, 2003; Kungl, 2018, p. 168).⁵

The initial actor constellation gained a self-reinforcing logic due to the implementation of the first energy market package, with vertically integrated utilities expanding into European markets, and becoming more important economically (Clifton et al., 2010, p. 1003; Colli et al., 2014). Thus, even if the German government had wanted to reverse course and stringently unbundle its utilities, the economic costs would have been high by now, as the well-being of the utilities was strongly associated with the well-being of the whole economy. The German government was almost completely dependent on the big utilities for providing the public good energy supply, granting them huge institutional power. In particular, the *sequence* of steps mattered: First the market was opened, while unbundling efforts remained weak. In accordance with path dependence arguments, the initial situation did not pre-determine the path, but one set of actors gained institutional power, making it more likely that they would succeed in upcoming implementation rounds.

5.2.2. The Netherlands

The Dutch government already had started unbundling utilities before the first energy market package, and thus changed the domestic actor constellation. There were little actors left that would oppose unbundling. The Electricity Act (1998) laid the foundations for restructuring the energy sector. In contrast to Germany, on nearly all issues that allowed leeway, the Dutch government chose to encourage competition to the detriment of the institutional power of vertically integrated utilities (Van Damme, 2005).

First, the Electricity Act introduced *legal unbundling* for the transmission and distribution network and the operation of the transmission grid was entrusted to the newly founded, state-owned *TenneT*, introducing a powerful player with considerable institutional power to the actor constellation. Originally, the Dutch government planned to task a subsidiary of the SEP with the operation of the grid; however, due to disagreements between the four producing companies, the SEP fell apart. This also meant an end to the plans of the government to facilitate the establishment of one big Dutch energy producing company being able to compete on global markets (Tieben et al., 2013; Van Damme, 2005).

Second, in terms of *third-party network access*, the Electricity Act prohibited network operators to discriminate against electricity producers (Ministry for Economic Affairs and Climate, 2020).

Third, the *demand-side market* was opened in a step-wise process. From 1998 onward, industrial consumers could choose their electricity supplier, while the middle segment and households could do so from 2002 and 2004 onward (Stellinga, 2012), in order to protect consumers from an immature market environment. In response, about 20 new companies entered the market (Van Damme, 2005).

Fourth, to govern network access, the Netherlands introduced *strong regulation*. Access to the grid was monitored by the energy regulator (Dienst uitvoering en toezicht Energie, DTe). The DTe was also responsible for approving network tariffs. To prevent an increase of electricity prices, the Electricity Act stipulated that prices in 2000 should not be higher than in 1996 (Van Damme, 2005). Thus, after 2000 the DTe, which in 1999 became part of the Dutch Competition Authority (NMa, Energiekamer), engaged in *ex ante* regulation of tariffs and became an addressee for large consumers and new independent suppliers.

These reforms led to a *fifth* issue: Government was divided about the question whether network operators should be *privatized*. Some municipalities and provinces wanted to sell their distribution networks. The Finance

Ministry led by the VVD supported privatization, the MEZ (PvdA) was sceptical (Stellinga, 2012). In the end, the Electricity Act left it open whether privatization should happen, but gave the MEZ a veto over privatizations.

These policy changes were the *result* of the changes of the actor constellation that had already started in 1989. Government parties supported liberalization, and industrial consumers and distributors hoped to obtain lower electricity prices. Producers had lost their political influence, and were divided. Particularly after the failure of creating one Dutch energy producer, the government dropped this strategy and focused strongly on cost effectiveness and competition (Tieben et al., 2013). In terms of arguments about the importance of sequences (Pierson, 2000), not only were the initial conditions slightly different, but also the *sequence* of steps was different: Germany opened the market before establishing regulatory oversight and unbundling, hence *strengthening* the incumbents. The Netherlands established unbundling and regulatory oversight before opening the market, leaving room to correct the market, hence *weakening* the incumbents.

However, according to a path-dependent logic, these policy changes also further *changed* the actor constellation: Market liberalization was followed by a wave of privatizations and foreign takeovers in the Dutch energy sector, despite the MEZ veto (Van Damme, 2005).

To summarize, the Dutch government used the implementation of the first electricity directive to pursue its liberalization agenda. While legal unbundling of the distribution system operators and stringent regulatory oversight were integral parts of this agenda, the lack of unity among Dutch producing companies meant that the transmission system operator became fully independent from producing companies and the establishment of a level-playing field the central goal of the government's energy policy. Since the creation of a global player in energy production was no longer an "option on the table," in the follow-up, most Dutch electricity production and supplier companies were bought by foreign companies. Without stakes in establishing a national champion in electricity production, the creation of TenneT allowed for a consumer-oriented policy. Therefore, the state conferred much institutional power to TenneT, the transmission company, and aligned Tennets interests with its liberalization agenda.

5.2.3. *The implementation of the first energy market package in comparison*

The degree of unity among utilities in the two countries led to a different implementation of the first electricity market package. The German government protected its vertically integrated utilities, further strengthening their institutional power. The Dutch government did not. Most Dutch energy producers were sold to foreign companies, changing the Dutch actor constellation, as there were hardly any "Dutch" energy production companies left. On the other hand, a strong Dutch transmission company emerged with TenneT, and many independent supplier and generator companies entered the market. The Dutch actor constellation changed, with little institutional power left for the energy production companies, but considerable institutional power conferred to TenneT. Two CMEs that had entered the European liberalization effort with relatively similar structures were put on different paths, due to the different actor constellation and the different sequence of implementation steps.

5.3. The implementation of the second energy market package

5.3.1. *Germany*

The implementation of the first electricity market package in Germany changed the German actor constellation. In the self-reinforcing logic of path dependence, the vertically integrated utilities were the winners of the implementation of the first package, and used their power to shape implementation of the second package. Although the utilities were forced to operate in a stricter regulatory environment, they could exploit their institutional power to strengthen their domestic position. In comparison to the implementation of the first package, the government coalition had changed to social democrats (SPD) and greens. The SPD was receptive to protecting core industries anyway. The green party did not have a market-liberal profile. However, for the energy market, the greens saw more competition in the sector as a way to accelerate the ecological transformation.

The actor constellation pitted the vertically integrated utilities and the BMWi against a coalition of *Länder*, *Stadtwerke*, energy intensive industry, newcomers, consumer organizations, and the green party. However, as the vertically integrated utilities had remained virtually untouched by the implementation of the first package, they had expanded their market power, and could repel regulatory intervention.

The institutional power of the vertically integrated utilities became visible in the German implementation of access to the network and unbundling requirements: The second electricity directive eliminated the option of negotiated third-party access to the network due to pressure by almost all member states and the Commission making a regulatory authority on the EU level practically mandatory. However, the German energy minister still defended negotiated access even after the dysfunctionality of the system was apparent even to former beneficiaries like big industrial consumers (Handelsblatt, 2003).

The draft of the implementing law was informed by the preferences of the big utilities (Berglund, 2009, p. 156). The BMWi had close contacts to E.ON and RWE, which were considered national champions. Thus, the draft by the BMWi reflected the minimum requirements of EU legislation (Grashof, 2007).

To fulfil the minimum requirement of legal *unbundling*, vertically integrated companies had to organize the different parts of their business as legally distinct organizations. Ownership unbundling was seen as detrimental to the success of such companies on the international level (Bohne, 2011).

Another conflict concerned *regulatory oversight* over the sector: *Industrial consumers* were afraid of rising electricity prices; however, they were also sceptical of state regulation. The majority of the *Länder*, the *Stadtwerke*, the energy intensive industry, newcomers, consumer organizations, and the Green party pressured for regulatory oversight (Berglund, 2009, pp. 156–167). The fact that the implementing law had to pass the Bundesrat gave this coalition leverage. Approval from the Bundesrat could not be obtained without *ex ante* regulation (Berglund, 2009, p. 158). However, the degree of regulatory control remained modest. As *regulatory agency* for the sector, the BNetzA was founded. However, its independence reflected only the minimum requirements of the energy market package (Grashof, 2007; Lüken Genannt Klaben & Maschlanka, 2022), and the concrete content of its regulations was influenced by the preferences of the big utilities, on whose expertise it was dependent (Adamek & Otto, 2008).

In sum, German implementation followed the minimal lines allowed by the directive. The outcomes were an isolated German market, discriminatory practices by the incumbents, and rising electricity prices (Commission of the European Communities, 2007).

5.3.2. The Netherlands

As the Netherlands had over-fulfilled the requirements of the first energy market package, the actor constellation had changed. Following the path taken with the implementation of the first energy package, the effect of Dutch liberalization was to further reduce the Dutch governments' interest in electricity *production*, but to maintain its involvement in the *operation of the network*. There were no Dutch vertically integrated energy production companies that could lobby against unbundling. In contrast, TenneT had emerged as a powerful player whose preferences aligned with government preferences. It became an vital actor for the Dutch energy market with considerable institutional power (Busemeyer & Thelen, 2020). In principle, the Dutch government still had the option to abandon TenneT and reorganize energy distribution. But the costs for such a policy change would have been high. The implementation of the second energy market package reflected this actor constellation.

As there was little reason to protect national producers, the Dutch government wanted to ensure *non-discriminatory access to the network*. Hence, the independence of the energy regulator was strengthened by making the NMa *de jure* independent from the government (van Veen, 2014).

Attention now turned to the *ownership unbundling* of distribution companies, which was without precedent even compared to forerunner countries like the UK (Künneke & Fens, 2007). This illustrates the changed actor constellation and the power shifts that had occurred due to the implementation of the first package.

The distribution companies, NUON, Essent, Eneco, and Delta, opposed unbundling, using a telltale institutional power argument: They argued that they needed to keep their structure to fulfil public interest goals. Also, trade unions feared that unbundling and subsequent privatization could cause job losses (Stellinga, 2012).

Despite the criticism, government proposed the law on independent network operation (Wet Onafhankelijk Netbeheer, WON). The law prescribed ownership unbundling for transmission and distribution networks, and conferred all networks of 110 kV or higher to TenneT (Stellinga, 2012). The WON prompted unbundling and mergers. In 2006, the incumbent producers consolidated their position with Vattenfall, RWE and Eneco accounting for 82 percent of total energy generation (Pomp & Shestalova, 2007). The number of distribution companies dropped to seven.

To summarize, the Dutch government pursued its unbundling agenda. As the previous liberalization had removed almost all Dutch energy generating companies from the actor constellation by transforming them essentially into foreign subsidiaries, the Netherlands had no national energy producers to protect. Institutional power shifted to the transmission company, TenneT, whose interests were aligned with the Dutch government not only through ownership, but also through the fact that TenneT provided the backbone of the Dutch government's plans to create a level playing field.

5.3.3. *The implementation of the second energy market package in comparison*

The main issues in the implementation of the second energy market package in Germany were regulated third-party access and the creation of the BNetzA. These issues had already been settled in the Netherlands. The paths that had been started with the implementation of the first energy market package were further consolidated. German policy was influenced by the preferences of vertically integrated utilities, that emerged with strengthened institutional power from the implementation of the first energy directive. In the Netherlands, the implementation of the first energy package had removed the utilities from the actor constellation and left the country with a highly diversified actor constellation in energy production, and institutional power vested in the transmission company TenneT. Thus, the Netherlands focused on market-creation and a strong role of the state in transmission and distribution of electricity.

5.4. The implementation of the third energy market package

5.4.1. *Germany*

The implementation of the third energy market package reflected the power of the vertically integrated utilities. They had used the weak implementation of the second package to increase economic and political leverage (Clifton et al., 2010).

However, by now, the European Commission had emerged as a player in energy policy and was ready to challenge utilities and member states directly (Eikeland, 2011; Herranz-Surrallés et al., 2020). From the perspective of the Commission, the market power of vertically integrated companies was a main obstacle for competition. Germany had been a major opponent of unbundling, demanding discretion for its big utilities (Goldirova, 2007), and defending self-regulation (Council of the European Union, 2008, p. 6). German companies were seen as major culprits (Commission of the European Communities, 2007), and the Commission opened competition law proceedings against E.ON. Only when E.ON sold its grid to TenneT, did the Commission close the case (Eikeland, 2011, p. 253).

There are two interpretations of the Commission's role: On the one hand, one could see its intervention as the logical consequence of the supranational integration path. German implementation had slowly accumulated to a point where the Commission's use of competition law was inevitable. Following this interpretation, the German path was not sustainable to begin with, and the question was only when the Commission step in. However, as indicated in the theory section, we see the role of the Commission as exogenous to the domestic path. Recent research shows that the Commission is not an "automatic" guardian of the treaties, but uses its powers strategically and according to the political climate (Kelemen & Pavone, 2022).

In any case, the strategic choice of the Commission was to use competition law, re-locating the conflict to the legal arena in which the institutional power of E.ON was less than in the domestic arena. How "sticky" the domestic path was became apparent in the public anger of the German energy minister who continued to negotiate in favor of E.ON, while E.ON had already changed its position due to the pressure of the European Commission.

The third directive was transposed in August 2011. In principle, the now-governing coalition of FDP and CDU/CSU had a market-liberal agenda. However, due to the institutional power of incumbent electricity companies, this did not translate into major reform of the electricity sector. Even under the impression of the E.ON competition case, Germany tried to protect its national champions in the implementation.

With regard to *third-party access to the grid*, Germany failed to implement the requirements regarding the independence of the BNetzA, which led to an infringement procedure. In particular, the European Commission criticized that the BNetzA lacked the power to independently set network access tariffs because of the tight legislative provisions diminishing its discretion (Pitruzzella, 2021).

Germany allowed all three *unbundling* options. Even the less stringent options were only partially implemented and were allegedly not compliant with European law (Commission of the European Communities, 2018). The question of unbundling is an ongoing conflict between the BNetzA and the Commission. In a *first* case, TenneT bought the network of E.ON (Eikeland, 2011). The certification should have taken place by 2012, but was not finished until 2015. Up until then, E.ON was not unbundled. In a *second* example, RWE's daughter Amprion was ITO-unbundled with RWE becoming a minority shareholder. The BNetzA saw no problems, while the Commission argued that there was no separation of employment programs, access to data and accounting, and therefore an implementation deficit.

To summarize, the vertically integrated utilities resisted unbundling and regulation, and could do so because the path taken with the implementation of the first package left them with considerable power, that increased in a self-reinforcing fashion. German utilities had become some of the largest players in the EU (Clifton et al., 2010), and had become too economically important to impose heavy obligations on them.

In line with path dependence, the major instance of policy change—the vertically integrated utilities selling their transmission grids—did not emerge from *within* the domestic German path, but by the Commission successfully moving the conflict to the legal arena, where the institutional power of German utilities was less useful.

5.4.2. The Netherlands

The implementation of the second energy market package reinforced the incentives of the Dutch government to unbundle the operation of the network from other activities. TenneT had by now become a major European player with considerable institutional power, on which the Dutch government depended to achieve its economic aims. Although the provisions of the third energy package were in favor of ownership unbundling of network operation activities from generation and supply, Member States could choose less strict unbundling options—Germany did just that. However, by now the Dutch liberalization path also collided with supranational rules—but in contrast to Germany who was criticized for *not* implementing European rules, the Netherlands had to insert amendments that upheld the *stricter* rules applying in the Netherlands.

Since the third EU Energy Package strengthened the independence of national regulatory authorities, the Netherlands had to exclude the NMa Energiekamer from certain provisions in the Framework Law on ZBOs, most importantly from Art. 22 that would have allowed the MEZ to overrule individual decisions made by the agency. Independent oversight over *access to the network* should thus be guaranteed.

The 2010 amendment to the Electricity Act confirmed the ownership *unbundling* model and the prohibition of privatization. This meant that the distribution companies Delta and Eneco that were still vertically integrated were not allowed to be privatized as long as they owned part of the distribution network (Stellinga, 2012). In effect, the Dutch government used the prohibition of privatization as a bargaining chip to induce unbundling.

To summarize, the Dutch implementation of the third energy package followed the endogenous Dutch path that had started with the implementation of the first energy package. This path required unbundling, and the Netherlands went beyond the requirements of the third energy package to preserve the chosen path of unbundling and market-making.

5.4.3. The implementation of the third energy market package in comparison

The implementation of the third energy market package in Germany and the Netherlands illustrates the endogenous logic of the paths: Germany implementation of the previous packages strengthened the vertically integrated companies. Only a shift of the arena—the Commission's use of competition law—altered the path. Still, Germany continued to implement the third energy package in ways least damaging to its incumbent utilities. In the Netherlands, unbundling had gained a self-reinforcing logic, and the Dutch government over-implemented EU unbundling rules. In the long run, we can also see how two coordinated market economies reacted to European liberalization impulses. Germany by and large maintained the coordinated character of the sector, with strong ties between government and the vertically integrated utilities (Colli et al., 2014). The Netherlands, in contrast, gradually transformed the sector into a liberal governance logic. However, in both cases the governments were dependent on major players that had considerable institutional power because they provided public goods: In Germany the big utilities, in the Netherlands the transmission operator TenneT. This led to an implementation that reflected these actors' preferences. Altering these paths would have come with high costs. Therefore, Germany

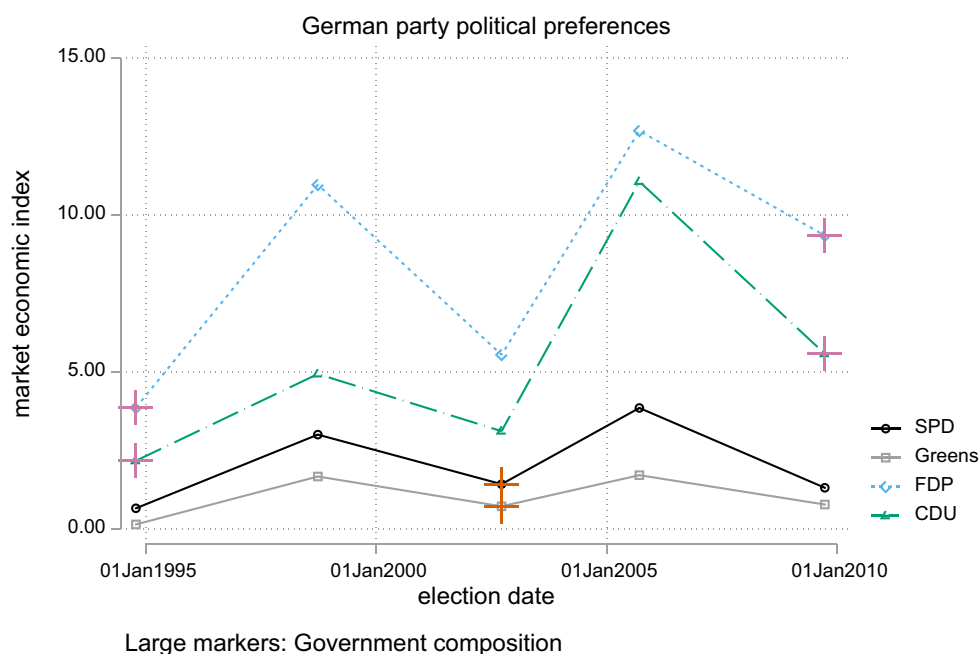
Table 4 Implementation results in Germany and the Netherlands in comparison

	Third-party access	Unbundling
Germany	Weak independence of the regulator in setting the rules (infringement procedure)	Minimal unbundling (infringement procedure)
The Netherlands	Full independence of the regulator	Full ownership unbundling, rules to some extent stricter than required by EU law

stuck to the path as closely as possible, even after the Commission's intervention. Table 4 summarizes the main differences between Germany and the Netherlands after the implementation of the third energy package.

Table 5 summarizes the crucial effects and causes of the different implementation paths. In Germany, domestic generators dominated the market and accumulated institutional power. In the Netherlands, foreign investors took over generators and suppliers, leaving TenneT as the actor with close connection to the Dutch government and corresponding institutional power. The Dutch pathway is targeted toward consumer welfare, and the higher switching rate indicate that this might work; however, whether this actually leads to better market outcomes is another question.

Finally, Figures 3 and 4 delineate our institutional power argument against a partisan difference hypothesis. The figures show the development of party-political preferences in the two countries over time, using the market economy index from the MARPOR dataset (Lehmann et al., 2022). The measure indicates the proportion of quasi-sentences in party manifestos that are devoted to market liberalization. We see that already the first implementation step cannot easily be reconciled with a partisan difference hypothesis: On the one hand, the Dutch coalition contained the rather market-liberal VVD. On the other hand, the Dutch coalition had a large ideological span and contained the social democrats, while the German coalition combined the two more market-liberal parties FDP and CDU/CSU.⁶ Implementation of the second and third package in the Netherlands matches a partisan difference hypothesis: Different, but consistently more liberal coalitions engaged in market-making. However, in Germany, we should observe shifting implementation patterns if liberalization was only a matter of partisan preferences. The German coalition that implemented the first energy market package contained the FDP that emphasized the dismantling of monopolies in its manifesto.⁷ However, as discussed, German implementation

**Figure 3** Party-political preferences in Germany in the observation period.

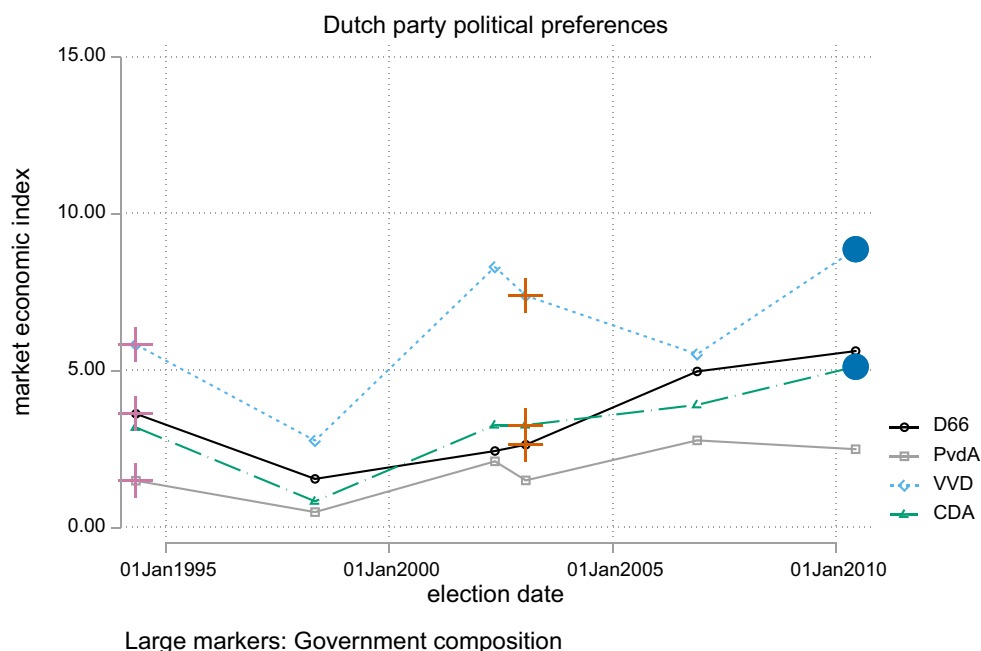


Figure 4 Party-political preferences in the Netherlands in the observation period.

Table 5 Overview over economic development (energy sector) during the implementation of the three energy market packages

	Germany	The Netherlands
Largest generator accounts for X percent of production	2005: 34 percent	2005: 25 percent
Trends of foreign ownership	<p>RWE and E.ON (together >50 percent of generation capacity) not bought by foreign investors</p> <p>1999: HEW, VEAG, Bewag bought by Vattenfall</p> <p>2000: EnbW 25 percent shares bought by EDF</p>	<p>Generators</p> <p>1999: UNA (26 percent of generation capacity) bought by Reliant</p> <p>1999: EZH (12 percent) bought by E.ON</p> <p>1999: EPON (33 percent) bought by Electrabel</p> <p>2009: EPZ (6 percent) and Essent (23 percent) bought by RWE</p>
Market structure at regional/municipal level	Of the 900 distribution system operators, at least 130 distribution companies got bought by the big utilities	<p>Distribution</p> <p>2009: Essent bought by RWE</p> <p>2009: Nuon bought by Vattenfall</p> <p>2019: DELTA bought by Vattenfall</p> <p>2020: Eneco bought by Mitsubishi</p>
Switching rate	Under 5 percent five years after market opening	Over 10 percent one year after market opening

protected the large incumbents, a course that was continued by the SPD/Greens coalition. Especially puzzling for a partisan thesis is the FDP/CDU/CSU coalition that implemented the third energy market package. This coalition was elected on a market-liberal policy agenda (comparing Figs 3, 4). With nearly the same ideological

composition as the corresponding Dutch coalition). Nevertheless, this coalition did not implement the third package in a market-making way. According to our interpretation, this pattern—two ideologically similar coalitions that implement the same package in a different way—is due to the different paths of implementation that started with the implementation of the first package, and the changing institutional power of energy companies.

6. Conclusion and discussion

The creation of an internal electricity market is a constantly unfinished project, with each directive falling short of the Commission's ambitions, necessitating a follow-up directive.

This pattern can be explained by *path dependence*. Domestic actor constellations determine how countries use their leeway in implementing European law. The ensuing differentiated implementation changes the actor constellation for the implementation of further directives, strengthening or weakening the institutional power of market actors. Thus, even though iterated rounds of directives induce harmonization, differentiated implementation creates a counter-force pushing countries along diverging trajectories.

Comparing Germany and the Netherlands, we argue that both countries started in the 1990s with similar energy markets. However, at the beginning of market liberalization, the Dutch government pursued a liberalization agenda emphasizing unbundling of energy companies and regulatory oversight. Consequently, the Dutch implementation remained close to the EU model or went beyond it. Especially unbundling is important, as it changed the actor constellation: The vertically integrated utilities disappeared as political actors, and institutional power shifted to the transmission company TenneT. The German government, in contrast, implemented the first energy package in a way that strengthened vertically integrated utilities and therefore the institutional power of market incumbents: Market opening came first, regulatory oversight and unbundling were weak. This allowed the utilities to expand internationally, a strategy encouraged by the government. The implementation of subsequent energy market packages was then shaped by this actor constellation: Vertically integrated companies successfully fended off unbundling requirements. Only after the Commission threatened them with competition law, they backed down.

Thus, our explanation focuses on the path dependencies generated by the implementation of European directives. In our reading, the power and preferences of the actors—especially incumbent utilities and governments—mattered for path generation and maintenance. Small differences of the actor constellation at the beginning of the process gradually became entrenched. There was not one big decision that set countries apart, but gradually it became costly to regulate the big utilities as they accumulated institutional power (in Germany), and beneficial to pursue unbundling of energy producers and increase the institutional power of the transmission company (in the Netherlands).

Equally important are the explanations we can rule out: Our analysis *first* casts doubts on technological explanations of the lack of liberalization of the electricity market (e.g., in comparison to telecommunications). The technological basics are the same for Germany and the Netherlands, nevertheless, those countries chose different liberalization paths. *Second*, our case studies can be read as a story of how two CMEs change due to Europeanization. We know that different varieties of capitalism react differently to European impulses (Četković & Buzogány, 2016). Our analysis shows that even two CMEs react differently to European liberalization efforts, suggesting that varieties of capitalism are not static (Colli et al., 2014). A *third* observation is that both paths were maintained despite government changes: In Germany, coalitions of the liberal FDP and the Christian democratic CDU, as well Greens and Social Democrats protected the incumbents. Similarly, various Dutch government coalitions pursued the market-making path. Crucially for our argument, the implementation of the third package happened under coalitions with very similar market-oriented ideological outlooks (based on their manifestos). However, the German government continued to protect its incumbents.

A comparative analysis of the implementation of the fourth energy market package is outside of the scope of this article, as the discussion in the Netherlands is still ongoing. However, the German implementation of the provisions of the fourth energy market package corroborates our arguments, as the path to preserve the market power of RWE and E.ON is kept, for example, using the full scope of possible derogations from unbundling requirements for storage facilities and charging stations for electric vehicles (Art. 7 and 11 EnWG). Recently, the

cartel office warned that RWE alone is too systematically relevant for the supply of Germany, which points to a new peak of institutional power.⁸ Conversely, the current state of Dutch discussions suggests that the market-making trajectory will be followed.

Our argument has implications for several debates. *First*, we show the limits of Europeanization and reveal the mechanisms behind differentiated implementation, a main desideratum of current implementation research (Zhelyazkova et al., 2024). The role of national implementation is currently under-appreciated. Beneath the harmonizing directives, national policy communities shape implementation, probably at odds with the overall harmonization agenda (Pircher et al., 2023; Pollex & Ruffing, 2023). All Member States have entered the liberalization of energy markets with distinct production structures, and probably implement energy law to suit their domestic interests. *Second*, we highlight different uses of path dependence in European studies. Currently, path dependence is used in two different ways: One school argues that path dependence is beneficial for an integration agenda, as the Commission has a longer time horizon and can incrementally expand its competences (Pierson, 1996). This is also true for the energy sector, as many studies demonstrate (Benson & Russel, 2015; Eikeland, 2011). However, path dependence is also at work in shaping the national implementation of directives. Thus, supranationalization may happen “between directives,” but it has to counteract a second form of path dependence, the divergent paths created by national implementation. In other policy domains, differences in implementation led to more unified integration in the next sequence in EU policy-making (Thatcher & Quesada, 2023) but in energy policy this was hardly successful. In policy domains, in which private actors are engaged into the delivery of public goods, their institutional power is decisive for this path. *Third*, our study demonstrates the value of a long-term perspective on the implementation of directives. In many policy fields, multiple iterations of directives attempt to harmonize policies. This does not necessarily mean that there is a clear path to integration. Instead, a focus on domestic implementation paths allows us to show how the sequence of decisions taken in the implementation of the early directives in a field creates domestic paths that are hard to change.

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Data availability statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Endnotes

¹ In analogy to the eponymous song by Elijah Kelley, Zac Efron, Queen Latifah, and Nikki Blonsky.

² https://trade.ec.europa.eu/access-to-markets/en/country-assets/euca_04_Renewable%20Energy%20sector%20in%20Central%20America.pdf.

³ Obviously, there is also a causal relation between the domestic power distribution and the directive, as domestic preferences are channeled through national governments that then negotiate the directive in the Council. However, our argument focuses on the domestic level and its resistance to change over time.

⁴ BDI: Federation of German Industries (Bundesverband der Deutschen Industrie); VIK: association of industrial energy and power industries (Verband der Industriellen Energie- und Kraftwirtschaft).

⁵ <https://www.econstor.eu/bitstream/10419/226911/1/WIK-Diskussionsbeitrag-Nr-297.pdf>.

⁶ If we compare the mean ideological score, the Dutch coalition that implemented the first package scores 3.64 and the German coalition 3.02. This difference does not hint at a Dutch coalition that was significantly more market-liberal, if we consider that the British Conservatives at that time consistently devoted more than 10 percent of quasi sentences in their manifestos to market liberalization.

⁷ FDP election manifesto 1994: Courage for more competition.

- ⁸ https://www.bundeskartellamt.de/SharedDocs/Meldung/DE/Pressemitteilungen/2022/17_02_2022_Marktmachtbericht.html.

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