The "business" of compliance

Benedetta Cotta

Thesis submitted for assessment with a view to
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Abstract

The dissertation aims at understanding and explaining the existence of variation in sustainable compliance with EU legislation in two similarly rule-taking countries. The cases under examination are Hungary and Poland which have experienced a similar historical background, similar environmental problems and have been subject to similar EU conditions and requirements for accession. Nevertheless, the EU Annual Progress Reports and the Tri-Annual Monitoring Reports showed a variation in their compliance with European environmental requirements. The existing literature has explained this divergence by taking a supply-side approach, focusing on those state actors and incumbents who could decide to supply compliance or not. In particular, researchers of compliance and of Europeanisation have focused on differences in capacity limitations or incentives to domestic actors. These supply-side approaches, however, do not seem to fully explain the existing divergence between the performances of Hungary and Poland nor do they sufficiently tackle the issue of "sustainable compliance" in the post-Accession period. In my analysis, I instead explain variation in sustainable compliance by exploring demand-side explanations. To this end, the thesis explores the hypothesis of demand for compliance emerging on the part of stakeholders who recognise its potential for profitability and, thus, influence its sustainability. Its starting point is the Tsebelis' study on stakeholders which describes them solely as "veto players" along the road to compliance; however, this analysis demonstrates that there is also another dimension to the influence they may have. I build my hypothesis around the existence of such factors as market incentives and pre-existing cooperative strategies that make compliance convenient for stakeholders. Moreover, I consider the role played by external assistance and the existence of alliances between external and domestic stakeholders to improve the overall compliance performance of less-regulated countries. The study proves the significance of market incentives and pre-existing cooperative strategies in fostering sustainable compliance while showing how the two strong explanatory variables are interlinked: compliance is not a "business" *per se*. It has a potential to be made a "good deal" via cooperative strategies among diverse stakeholders creating a win-win settlement.

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List of abbreviations

EU	European Union
CEE	Central and Eastern European
ECJ	European Court of Justice
PHARE	Poland and Hungary Assistance for Restructuring their Economies
CEFTA	Central European Free Trade Agreement
TFEU	Treaty on the Functioning of the European Union
EUROSTAT	European Statistical Office
NGOs	Non-Governmental Organisations
ISPA	Instrument for Structural Policies for Pre-Accession
SAPARD	Special accession Programme for Agriculture and Rural Development
PSIRU	Public Sector International research Unit
OKT	National Council on Environment (Hungary)
PROS	National Council on Environmental Protection (Poland)
OSZ	Polish Parliamentary Committee on the Environment Protection, Natural Resources and Forestry
TIRs	Transnational Integration Regimes
EC	European Community
EURATOM	European Atomic Energy Community
ECSC	European Coal and Steal Community
EEC	European Economic Community
PPPs	Public-Private-Partnerships
KAC	Central Environmental Fund (Hungary)
HUMUSZ	Waste Alliance
FKF	Waste-collecting company of the city of Budapest
HEPA	Hungarian Environmental Protection Act
OVAM	Public Waste Agency of Flanders
NIMBY	Not-In-My-Back-Yard
OECD	Organisation for Economic Cooperation and Development
EPR	Extended Producer Responsibility
MGYOSZ	Confederation of Hungarian Employers and Industrialists
KSZGYSZ	Association of Environmental Enterprises (Hungary)
IKSZ	Beverage Carton Environmental Services Association (Hungary)
CSAOSZ	Association of Packaging and Material Handling (Hungary)

ROs	Recovery Organisations
WEEE	Waste from Electronic and Electric Equipment
PEPA	Polish Environmental Protection Act
MPOs	Municipal Cleansing Companies (Poland)
PKE	Polish Ecological Club
DEFRA	Department for Environment Food & Rural Affairs of the UK
PIGO	Polish Chamber for Waste Management (Poland)
KIGO	National Chamber for Waste Management (Poland)
RIPOKs	Regional Municipal Waste Treatment Installations (Poland)
MPs	Members of Parliament
NFOSiGW	National Fund for Environmental Protection and Water Management
WFOSiGW	Regional Fund for Environmental Protection and Water Management
EKO-PAK	Polish Industrial Coalition Association for Environmentally Friendly Packaging
PNR	Packaging Recovery Note
NWMA	National Waste Management Agency (Hungary)
csQCA	Crisp set Qualitative Comparative Analysis
TAC	Technical Adaptation Committees

Introduction

On 1st May 2014, Hungary and Poland celebrated ten years as members of the European Union (EU). Since their formal application to the EU in 1994, both countries developed measures to approximate, adopt and implement European legislation and standards. This dissertation analyses the process of implementation of European environmental directives in Hungary and Poland: first as EU candidates and then as new EU Member States. It aims to understand the reason behind the variation in compliance of these two similarly rule-taking countries and, specifically, why their compliance performances differed in the sustainability of compliance after assuming Membership in 2004. Hungary and Poland have similar historical backgrounds in terms of Communist regimes, transition to a market economy and to democracy, and the EU accession process. As well, they share the facts of relatively weak administrative capacity and legislative framework as compared to the EU, and they were subject to similar conditions and requirements to become EU Members. However, the EU monitoring reports have told, in the more practical side of implementation, two different stories of compliance: Hungary gradually complying with EU environmental requirements from the first years of negotiation for accession and sustaining such performance after the achievement of EU Membership, while Poland only partially adopting and implementing the EU requirements after accession.

The existing literature has analysed variations in compliance by looking at supply-side explanations that focused on state actors and incumbents who, in presence of specific conditions, could decide whether or not to supply compliance. First, scholars have pinpointed differences in the pre-existing domestic capacity and administrative traditions. In particular, compliance managerial approach recognised a general propensity of states to comply but in presence of weaknesses in domestic administrative capacity they would not be able to adhere to the EU requirements. Similarly, Europeanisation scholars explained variation in compliance with the presence of different initial degrees of 'fit' between domestic and European rules, policies and processes. Furthermore, researchers of governance analysed the mechanism of 'policy coercion' and highlighted how, in presence of a difference between national and European administrative traditions, the typical rationality of national bureaucracies was to “protect traditional structures” (Knill and Lenschow, 2005, p. 585) by

"minimising changes to existing regulatory styles and structures" (Knill and Lenschow, 2005, p. 590). These approaches then expected that, in the presence of administrative capacity differences or misfit between domestic and European policies, processes and traditions, domestic change would have incurred high costs of adaptation, making compliance less likely.

Second, researchers highlighted the role of international incentives and threats in forestalling non-compliance. In particular, focusing on the international conditionality, governance scholars analysed the use of external resources as incentives to compliance. They then defined the mechanism of 'imposition' resulting from pressures exerted on organisations or countries due to resource interdependency between organisations or among countries, or to conditionality for accession set forth by international financial institutions such as the World Bank or the International Monetary Fund (Meseguer Yebra, 2003; Dolowitz and Marsh, 1996; Guler et al., 2002; Knill and Holzinger, 2005). Following a similar perspective, conditionality scholars explained compliance with the presence of strict conditions imposed by external actors, namely, the adoption of EU rules. They then explained the mechanism to achieve compliance as "by rewards"; that is, the incentive of rewards[1] conditional upon fulfilment of compliance encouraged state actors and politicians to comply. Given the similar EU membership leverage on the CEE countries, Pollack (2009) argued that "these findings raised the disturbing prospect that once the candidate countries had achieved their goal of EU membership, the Union would lose much of its leverage over those countries, which might be expected to relapse, failing to comply with either the EU's economic rules or its political ideas of democracy and the rule of law" (Pollack, 2009, p. 248 but the fear of compliance backslide was shared also by Grabbe, 2006; Epstein and Sedelmeier, 2008; Sasse, 2008).

In search for explanations for sustained compliance in the period when "the most powerful sanction instrument of the pre-accession phase – withholding membership – is no longer available" (Sedelmeier, 2008, p. 810), researchers have then looked at the EU sanctioning role for non-compliance. Already in the early-2000s, Tallberg specifically focused on the monitoring role of the European Commission and the deterrent role of the European Court of Justice (ECJ) through the infringement procedure. Following Tallberg, researchers studying the CEE post-Accession period expected that "the likelihood of continued post-accession compliance" varied "according to the extent to which the EU [was]

[1] Rewards for compliance consisted of assistance and institutional ties ranging from access to EU funds and commercial treaties to the achievement of EU Membership (Kelley, 2004; Schimmelfennig and Sedelmeier, 2005).

able to sanction (non-)compliance by its members" (Epstein and Sedelmeir, 2008, p. 797). The ECJ financial penalties, however, "take time to impose" (Epstein and Sedelmeier, 2008, p. 797); therefore, researchers expected "the EU8 to capitalize on the sanctioning gap that EU institutions face after enlargement" and "that good formal compliance is not followed by proper application and enforcement and a marked difference in the formal transposition of rules before and after accession" (Sedelmeier, 2008, p. 810).

Third, scholars have analysed the role played by stakeholders' preferences and cost-benefit calculations for compliance. Researchers of the regulatory approach considered the regulated entities as "rational economic actors that act to maximise profits" (Rechtschaffen, 1998). Therefore, according to cost-benefit calculations, the regulated entities complied with a given regulation "when the benefit of compliance exceed[ed] the costs of it" (Winter and May, 2001). Similarly to this argument, the compliance enforcement approach researchers stressed the role of the domestic incentive structure in influencing state actors' and incumbents' willingness to compliance. Thus, they emphasised that non-compliance performances originated from actors' cost-benefit calculations; therefore, they expected that high costs of compliance and substantial benefits otherwise would implicate low domestic compliance performances. In the pre-Accession period, the dimension of domestic costs was hypothesised within the "external incentive model" where high rewards (i.e. EU membership) and low – or tolerable – domestic costs influenced domestic compliance performances (Schimmelfennig and Sedelmeier, 2005 but on this point see also Pollack, 2009). Moreover, researchers feared that after the EU Accession, the altering of the cost-benefit ratio at the domestic level could create "the temptation to cheat once the overarching goal of membership had been achieved" (Pollack, 2009, p. 15).

Fourth, researchers highlighted the role played by transnational communication influenced by socialization mechanisms and knowledge transfer from external to domestic actors. According to social constructivists, ideas were conceived as "socially embedded" and represented "shared reference points" (Cini et al., 2006) while norms and social knowledge were constitutive of actor's identities (Cini et al., 2006); therefore, they considered "socially generated convictions and understandings" and "consensual knowledge" (Haas, 1998) as reference points in influencing compliance. In particular, Checkel (2001) refers to the role of social interaction in which "collective learning, internalization, and persuasion" are the dynamics producing compliance which occurs "through a redefinition of interests that takes place during the process of interaction itself" (Checkel, 2001, p. 556). Furthermore, researchers refer to the mechanism of emulation of institutional models which "only requires

agents looking for institutional designs outside their own realm to solve certain problems or to mimic the behaviour of their peers" (Börzel and Risse, 2014, p. 9). Hence, they hypothesised that the internalisation of international norms by the political elites and implementers through mechanisms of persuasion and social learning would positively influence compliance.

To recapitulate, these four supply-side hypotheses explained variation in compliance (including non-compliance) by pointing to weaknesses in pre-existing domestic capacity, EU incentives and sanctions, domestic cost-benefit calculations as well as international information exchange and communication. However, these hypotheses do not seem to fully explain the existing difference in the performances of Hungary and Poland nor do they sufficiently tackle the issue of "sustainable compliance" in the post-Accession period. In fact, the EU monitoring reports for the pre- and post-Accession compliance of Hungary and Poland highlighted similarities in the pre-existing domestic capacity weaknesses of Hungary and Poland despite the fact that their performances progressively and substantially differed over the period considered. Moreover, despite the absence of the EU conditionality incentive and the weak sanctioning role of the ECJ, Hungary improved its compliance performance in the post-Accession period. Furthermore, studies on the CEE post-Accession compliance seem also to suggest that cost/benefit calculations coupled with socialisation and learning processes alone do not fully explain the post-Accession performances of the CEE new Member States. In particular, Sedelmeier (2009) and Maniokas (2009) suggested that, in the post-Accession period, cost/benefit calculations cannot be deemed to sufficiently explain the sustained compliance of the CEE countries as they worked in combination with other domestic factors such as supportive governments, as well as strong interest groups and NGOs (Sedelmeier, 2009; Maniokas, 2009). Furthermore, Epstein (2008) and Sasse (2008) suggested that in absence of external incentives, the sustained compliance in the post-Accession period is primarily linked to recognition of the appropriateness of the EU norms by domestic actors who need to be involved in this process (Epstein, 2008; Sasse, 2008; on this point see also Jacoby, 2005).

This dissertation then moves on to explore mechanisms that rendered implementation compliance sustainable. Building upon a demand-side approach, it particularly analyses the demand for compliance emerging among stakeholders who, benefiting from compliance, influence its sustainability. The consideration of stakeholders is no novelty in itself; already in the past, supply-side researchers have included roles played by stakeholders in their analyses. George Tsebelis focused on the occurrence of policy changes in a political system

when the number of veto players in a country was low and when the differences in their political positions and in their ideological and identity positions were also low (Tsebelis, 1995; Tsebelis, 2002). Following Tsebelis' hypothesis on veto players, Europeanisation researchers analysed the link between compliance and the number of veto players having a say in the domestic policy-making process (Börzel and Risse, 2000; Featherstone and Radaelli, 2003; Héritier et al., 2001; Green Cowles et al., 2001). A grand majority of these studies, however, regarded the role of domestic stakeholders merely as veto players; thus, they implied that their only impact on compliance was a negative one. On this basis, they hypothesised that a high number of such players made compliance and policy changes less likely.

Challenging this negative connotation, this dissertation develops a demand-side theory that turns the 'veto player theory' on its head by stressing the potentially positive and essential contribution of commercial and societal actors. It then looks at the existence of two conditions under which stakeholders, with the capacity to hinder or support the supply of compliance by state actors, might decide to demand compliance from state actors. These conditions are the existence of market incentives and the presence of pre-existing cooperative strategies. In its analysis of the market incentives, this study hones in on international and domestic business actors which, in the presence of incentives arising from within the market, may benefit from complying with EU requirements thus becoming instrumental to the achievement of compliance. In its analysis of cooperative strategies, the study investigates the relationship between domestic state and non-state actors in the policy-making process, as well as the emergence of business collaboration between domestic and foreign private actors which assured stakeholders on the sharing of compliance costs. In addition to these two mechanisms, the dissertation explores the assistance provided by external actors to domestic actors, and the relationship between them. However, assistance is not considered here in terms of mere transfers of financial resources, technology and knowledge from the principals (i.e. the external actors) to the agents (i.e. the domestic actors). On the contrary, assistance is considered in terms of development of tasks which target multiple actors and help them to overcome implementation problems, thus making compliance sustainable over time.

Considering the three hypotheses of market incentives, pre-existing cooperative strategies and assistance alliances, this dissertation will demonstrate that Hungary and Poland were characterised by two distinct stories of compliance with European legislation. In particular, the empirical findings show that the better and sustained compliance performance of Hungary was influenced by the existence of economic actors with a dominant position on

markets and of a cooperative style of policy-making which also enhanced external assistance. As against this, Poland's partial and poorly sustained compliance was related to the existence of fragmented markets and a competitive style of policy-making which hampered the establishment of alliances between external and domestic actors and delayed the implementation of such assistance programmes.

I. The research design

In this dissertation, I analyse the process of implementation of public policies in Central and Eastern Europe in a comparative perspective. In particular, I compare two countries, namely Hungary and Poland, as an area study. Following Macridis and Cox (1953), Lijphart (1971), Moses and Knutsen (2007) and Tarrow (2010), through the area approach I maximise the comparability of my case studies and, clustering and parametrising the common characteristics of this area, I focus on the singular elements that could explain the divergence in the performances of the two countries under examination. The rationale behind the selection of the cases is a comparison of most similar cases. According to scholars, the "most similar systems" research design stems from the idea that "all cases share basic characteristics but vary with respect to some key explanatory factor[s]" (Moses and Knutsen, 2007, p. 98). Furthermore, systems characterised by common factors cannot be explained by these similarities but instead, controlling for these common characteristics, it is possible to analyse the elements that vary, whose presence or absence can be used to explain variation in the outcomes (Moses and Knutsen, 2007). In point of fact, until late the 1980s, Hungary and Poland were both governed by Communist regimes, single party political systems that promoted forced industrialization, especially of heavy industry, and collectivisation of agricultural land. Moreover, with the collapse of these regimes, Hungary and Poland were among the first to organise, at the national level, Round Table Talks on political and economic reforms between former Communist authorities and the political figures of the nascent post-Communist era[2]. As well, throughout the 1990s, these two countries underwent major political changes such as the adoption of new constitutional laws (in 1989 in Hungary

[2] For further details, see Elster J., *The Roundtable Talks and the breakdown of Communism,* The University of Chicago Press, 1996.

and in 1997 in Poland[3]) and the free elections, held in Hungary and Poland in 1989 and 1991 respectively. They also adopted similar structural measures to develop a private market economy, and stabilisation packages aimed at price liberalisation, liberalisation of domestic trade, restrictive monetary policies, definition of income policies, foreign trade liberalisation and balancing of the governments' budget (Lavigne, 1999).

After the collapse of the Communist regimes in most of the Central and Eastern European countries, the EU saw the possibility of further integrating Europe by enlarging its borders to ten candidate countries from the CEE region. This process was unique in that, for the first time, the EU dealt with candidates whose different economic, social, cultural and political features were palpably different that those that characterised the existing Member States (Poole, 2003). In light of these differences, the EU defined a number of conditions to guide the CEE candidates in the definition and implementation of the European *acquis communautaire* before formal accession to the EU. In particular, in 1993, the European Council meeting in Copenhagen stated that "Accession will take place as soon as an associated country is able to assume the obligations of membership by satisfying the economic and political conditions required." In brief, the CEE candidates were asked to align, transpose and harmonise their national legislation to that of the EU prior to their accession to the EU, with the Commission monitoring this process. Since 1989, Poland and Hungary were involved in the *Pologne et Hongrie Aide à la Réstructuration Economique* (hereafter PHARE) programme and, in 1991, they signed the European Agreements[4] with the EU. Since 1991, both countries were members of the Visegrad Group[5] and they have been part of the Central European Free Trade Agreement[6] (hereafter CEFTA) since 1996. Moreover, Hungary and Poland both applied for EU Membership in 1994, while in 1997 the EU Commission's Opinion[7] recognised these two countries as part of the five frontrunners[8] who could officially

[3] In Poland, during the Round Table Talks of 1989, was agreed a "rudiment of a Constitution" (Blondel et al., 2001) which amended the existing Constitution of 1952. In 1992, the *Sejm*, the lower Chamber of the Parliament, adopted a number of temporary measures that further revised the Constitutional law of 1952. Then, in 1997, after a number of proposals to change the Constitution, a new text was approved (Blondel et al., 2001).

[4] In particular, in the Europe Agreements were set the common political, economic and commercial objectives that formed the framework for implementation of the accession process. For further details, see Poole, 2003 and http://ec.europa.eu/enlargement/the-policy/process-of-enlargement/index_en.htm.

[5] For further details, see http://www.visegradgroup.eu/main.php folderID=941&articleID=3937&ctag=articlelist&iid=1.

[6] For further details, see Poole, 2003 and http://www.visegradgroup.eu/main.php?folderID=938.

[7] The Opinion of the European Commission on the CEE candidate countries' ability to cope with the EU *acquis* aimed at verifying the level of political and economic reforms, the screening of the three Copenhagen criteria and the overall readiness for formally starting the CEE negotiations for the accession to the EU.

[8] The other countries that officially started in 1998 the negotiations with the EU have been Cyprus, the Czech Republic, Estonia and Slovenia.

start negotiations for accession in 1998. Hungary and Poland then became EU Member States on 1 May 2004.

In order to explain the variation in Hungary's and Poland's compliance performances, I have chosen to concentrate on the environmental sector and specifically on waste management. Both countries experienced particular compliance difficulty in this sector due to almost non-existent legislation and enforcement structure at the time of the EU accession negotiations. Prior to the EU accession process, in fact, one scholar vividly described the environmental situation of Central and Eastern European countries as "eco-cide" (Krämer, 1986). This assessment reflected the highly polluted "hot spots" that were concentrated in the main industrialised areas, e.g. Katowice and Cracow provinces in Poland and Borsod county in Hungary (Pavlinek and Pickles, 2000; Hicks, 2006). Moreover, after the collapse of the Communist regimes in the late 1980s, the period of political and economic reforms that followed was marked by a rapid transition to consumerism that further deepened the environmental problems of the CEE countries (Hicks, 2006). To give a sense to the legislative challenge, I shall simply note that at the point of accession negotiations with the CEE candidate countries, the European environmental *acquis* was comprised of approximately three-hundred pieces of legislation; that is, eighty per cent of the overall EU legislation (interview 1). The process of approximation to the EU environmental legislation in the CEE countries, starting with the opening of the negotiations on the environmental Chapter in early 2000s, was a massive task for CEE candidates. Unsurprisingly, they asked to negotiate transitory periods for the adoption of specific environmental requirements (interview 2).

The European Union set the legislation on the waste sector along three paths: (1) horizontal legislation that established a framework for the management of waste including defining key waste concepts and principles; (2) EU legislation on the two treatment options of incineration and landfill, including targets for the management of treatment facilities; and (3) EU legislation on the various waste streams, setting dispositions for the collection of such wastes, as well as targets for their recovery, recycling and incineration[9]. In order to measure precisely the compliance performances of Hungary and Poland, I selected three European directives (and amended versions) related to the waste sector, namely the Waste Framework Directive (No. 75/442/ECC; No. 91/156/EEC; No. 2006/12/EC; No. 2008/98/EC), the Landfill Directive (No. 1999/31/EC) and the Packaging and Packaging Waste Directive (No.

[9] For further details on the legislation defined at the European level on the management and treatment of waste, see the report by the European Environmental Bureau, *EU Environmental Policy Handbook: A Critical Analysis of EU Environmental Legislation*, (eds.) Stefan Scheuer, 2005.

94/62/EC). I chose these three directives because they cover different aspects of EU waste legislation. Firstly, the Waste Framework Directive sets out the key waste definitions and the principles according to which waste should be treated and disposed, as well as the responsibilities for the management and the control of municipal solid waste. At the time of the EU accession negotiation these were non-existent or fragmented in Hungary and Poland. Secondly, the Landfill Directive covers the landfill treatment option, which, according to statistics was the most used option in Hungary and Poland since the early 1990s (Eurostat online website). Thirdly, the Packaging Waste Directive covers the packaging waste stream, which was almost non-existent and totally un-regulated during the Communist regimes. For both Hungary and Poland, the transition to a market economy also entitled the generation of a great deal of packaging waste, which required the definition of a detailed legislation (Hicks, 2006). Practical considerations also came into play in the choice of these directives as they all contain requirements that were strictly monitored in reports released by the European Commission.

Turning to environmental compliance, the waste management sector in Hungary and Poland was faced with a particularly difficult challenge in view of the drastic increase in waste that came in the wake of the free market opening and burgeoning consumerism of the 1990s. During the Communist times, the systems of collection and treatment of municipal and packaging waste of Hungary and Poland were operated by state-owned enterprises and there was a general lack of detailed rules on waste management. Soon after the collapse of the Communist regimes in Hungary and Poland, foreign and domestic private actors started to operate on the Hungarian and Polish waste markets. Nevertheless, the role played by these actors in the two countries differed significantly. Since the early 1990s, in Poland a plurality of domestic and foreign private actors were established and competed on the market for the management and treatment of municipal and packaging waste. These actors had the capacity to make voice in the domestic policy-making process but their high fragmentation did not facilitate cooperation with state actors in the implementation and sustainability of the waste requirements contained in the European legislation. Moreover, their high domestic fragmentation did not foster the development of externally induced cooperation in the form of knowledge-based and capacity-building European projects and initiatives aimed at improving the implementation compliance of Poland. Contrariwise, since the early 1990s, Hungary has experienced an active presence of private domestic and foreign actors which rapidly acquired a dominant position on the municipal and packaging waste markets by convincing their competitors on the need to cooperate for the implementation of European waste requirements.

Moreover, having the capacity to make voice in the domestic policy-making, these strong private actors cooperated in the definition and sustainability of implementing measures which complied with the European waste legislation. The cooperative policy-style between domestic state and non-state actors and between private stakeholders also facilitated the achievement of positive results from external assistance initiatives which further strengthened the Hungarian implementation compliance performance.

The period under consideration in this dissertation is the decade between the years 1999 and 2009. The year 1999 was selected because it marks the first screenings of legislation and capacity-building established in Hungary and Poland (as in the rest of the CEE candidate countries, Malta and Cyprus) released by the European Commission. These reports, also known as the Screening Reports, are considered as the milestone of the accession negotiations because they not only depicted the situation of the candidate countries at the point at which they began accession negotiations, but they also compared the national situations with the European legislations and standards, stipulating as well the specific measures to be undertaken in order to become EU members. The year 2009 was selected as the last year of analysis because it is the last year for which data contained in the Tri-Annual Monitoring Reports, which monitor the implementation of the European directives related to waste including the three Directives under examination in this dissertation were available.

Data on the compliance performances of Hungary and Poland were collected through in-depth semi-structured interviews and archival research that took place during several fieldwork missions in Brussels, Hungary and Poland between June 2011 and May 2014. I used cross-country data analysis and process-tracing to analyse the data on the performances of Hungary and Poland and to test the theoretical hypotheses. In the attempt to explain "outcomes in individual cases" (Mahoney and Goetz, 2006; Exadaktylos and Radaelli, 2009), this thesis adopts a 'causes-of-effect' approach and develops the analysis "by starting with cases and their outcomes and then moving backward toward the causes" (Mahoney and Goetz, 2006, p. 230). In other words, assuming an observed "systematic relationship between a cause and a particular outcome" it wishes to "scrutinize the nature of the process linking the independent to the dependent variable, thereby identifying the underlying causal mechanism" (Della Porta and Kaeding, 2008, p. 69 referring to the works of Elster, 1989 and Little, 1991). In order to assess the causal relevance of the empirical findings, the thesis adopts the process-tracing methodology. As researchers have pointed out, process-tracing is generally defined "by its ambition to trace causal mechanisms" (Beach and Pedersen, 2013, p. 1, but see also Bennett, 2008; Checkel, 2008; George and Bennett, 2005). In particular, the process-tracing

method has been reported to "identify the existence of causal relations, to go beyond correlation and evaluate causality empirically" (Dessler, 1991). It also "allows researchers to examine in detail the causal mechanisms and explain how specific variables interact" (Della Porta and Keating, 2008, p. 236) and "attempts to identify the intervening causal process – the causal chain and causal mechanism – between an independent variable (or variables) and the outcome of the dependent variable" (Beach and Pedersen, 2013, p. 1 quoting George and Bennett, 2005, p. 206). Process-tracing has then been defined as "the use of 'histories, archival documents, interview transcripts, and other sources to see whether the causal process a theory hypothesises or implies in a case is in fact evident in the sequence and values of the intervening variables in that case'" (Bennett and Checkel, 2015, p. 6 quoting George and Bennett, 2005, p. 6).

Process-tracing was chosen because it "seeks to make within-case inferences about presence/absence of causal mechanisms in single case studies" (Beach and Pedersen, 2013, p. 4). Following the four approaches to causality suggested by Brandy (2003) and considering causality as "a process involving the mechanisms and the capacities that lead from a cause to an effect" (Bennett and Elman, 2006, p. 457 quoting Brandy, 2003 and Mahoney, 1999), Bennett and Elman (2006) recognise that case-studies "have a relative advantage in the search for mechanisms and capacities" (Bennett and Elman, 2006, p. 457). As mentioned earlier, this thesis adopts a small-N research design based on the comparative analysis of two similar case studies. The use of process-tracing methodology in a small number of cases has then the advantage of allowing "inference about causal mechanisms within the confines of a single case or a few cases" (Bennett and Elman, 2006, p. 459). However, as Bennett and Elman (2006) suggest, "causation [in process-tracing] is not established through small-*n* comparison alone, but through uncovering traces of a hypothesised causal mechanism within the context of a historical case or cases" (Bennett and Elman, 2006, p. 459).

Researchers have highlighted a number of possible limitations in the case study analysis which may be overcome through process-tracing. First, when considering a small-N research design, researchers have emphasised the existing problem in the generalisability of the findings. Bennett and Checkel (2015) recognise that "case-study methodologists have argued that a hypothesis is strongly affirmed and might be generalizable if it explains a tough test case or a case [..] that it looked least likely to explain", but they also point out that it has been "ambiguous [..] whether these inferences should apply only to the case being studied, to case very similar to the one studied, or to a broader range of more diverse cases" (Bennett and Checkel, 2015, p. 13). To overcome this problem, this thesis adopts the process-tracing

methodology which has been recognised to help to clarify "the scope conditions under which a hypothesis is generalizable" (Bennett and Checkel, 2015, p. 13). In fact, researchers cannot have an idea *a priori* of whether the case under observation is generalisable until they elaborate a clear theory and by tracing the process "this theory can evolve inductively from close study of the case itself" (Bennett and Checkel, 2015, p. 13).

Second, focusing on few cases researchers may omit relevant variables from their analyses. However, Bennett and Elman (2006) argue that "all methods are vulnerable to omitting relevant variables and overlooking the attendant alternative explanations these variables offer" (Bennett and Elman, 2006, p. 470). Process-tracing, however, "can minimise the problems generated in the theory testing by the so called first mover advantage" that is, that researchers tend to "first interpret and explain the data through the lenses of one's favoured theory" (Checkel, 2005, p. 15). Process-tracing, however, allows researchers to trace "a number of theoretically predicted intermediate steps" (Checkel, 2005, p. 15) between the independent variables and the outcome of the dependent variable. This produces "a series of mini-checks" that push researchers "to think hard about the connection (or the lack thereof) between theoretically expected patterns and what the data say" (Checkel, 2005, p. 15). Furthermore, as Bennett and Checkel (2015) point out, it is important "to consider a wide range of alternatives despite the effort this entails" (Bennett and Checkel, 2015, p. 23). To this end, in addition to the three hypotheses derived from demand-side approaches, the thesis investigates four alternative explanations from supply-side approaches: (a) on the pre-existing capacity and administrative traditions, (b) on European incentives and threats, (c) on stakeholders' rational cost/benefit calculations and (d) on information exchange and communication. The first two alternative hypotheses are "quickly undermined by the evidence" while the last two "require deeper investigation" (Bennett and Checkel, 2015, p. 24) and are tested in the two empirical chapters through the process-tracing methodology.

Third, when focusing on causal inference, scholars have emphasised how case studies "can make only tentative conclusions on how much gradations of a particular variable affect the outcome in a particular case" (Bennett and Checkel, 2005, p. 25). In particular, scholars emphasise that "it is often not possible to resolve whether a causal condition identified as contributing to the explanation of a case is a *necessary* condition for that case, for the type of case that it represents, or for the outcome in general" (Bennett and Checkel, 2005, p. 27). Process-tracing, however, "enables strong causal inference to be made with regard to the presence of causal mechanisms in single cases [..] and in particular whether the individual parts of a whole mechanism are indeed present in the particular case" (Beach and Pedersen,

2013, p. 88). Building on Van Evera's (1997) four typologies to test predictions[10], researchers have emphasised how process-tracing can make valuable causal inference according to the combinations of necessary and sufficient conditions for accepting specific hypotheses and alternative explanations (Bennett, 2010; Collier, 2011). However, "whether a researcher can exclude all about one of the alternative explanations for a case depends on how the accessible evidence matches up with the proposed alternative explanations, not how many independent variables are considered or how many within-case observations are made" (Bennett and Elman, 2006, p. 459). As Bennett (2010) highlights, "what matters is the relationship between the evidence and the hypotheses, not the number of pieces of evidence" (Bennett, 2010, p. 219). Nevertheless, Bennett and Elman (2006) also point out that "case study methods have emerged […] as a useful but limited and potentially fallible mode of inference" (Bennett and Elman, 2006, p. 473).

In order to understand whether the three hypotheses derived from demand-side approaches are necessary and/or sufficient for the sustainable implementation compliance outcome, in addition to process-tracing, these hypotheses have been tested in a crisp-set Qualitative Comparative Analysis (csQCA) truth table presented in the concluding chapter (and further elaborated in Annex 2). In the words of Schneider and Wagemann (2012), in fact, csQCA operates in binary "where cases can either be members or non-members in the set" and therefore implies a membership score of either 0 or 1 (Schneider and Wagemann, 2012, p. 13). Moreover, they refer to QCA as "a research phase that aims at conduct a truth table" (Schneider and Wagemann, 2012, p. 91). Therefore, QCA "consists of the formal analysis of truth tables – the so-called logical minimisation – with the aim of identifying sufficient (and necessary) conditions" (Schneider and Wagemann, 2012, p. 91). In this way, it is then possible to evaluate whether the presence or absence of each of the three demand-side hypotheses matters for the final outcome of sustainable compliance.

[10] Van Evera elaborates four types of tests: 1) the hoop tests in which "predictions of high certitude and no uniqueness provide decisive negative tests" (Van Evera, 1997, p. 31) and therefore "they provide a necessary but not sufficient criterion for accepting the explanation" (Bennett, 2010, p. 210); 2) the smoking gun tests in which "predictions of high certitude and no uniqueness provide decisive positive tests" (Van Evera, 1997, p. 31) and therefore "they provide a sufficient but not necessary criterion for confirmation" (Bennett, 2010, p. 210); 3) the doubly-decisive test in which "predictions of high certitude and uniqueness provide tests that are decisive both ways" (Van Evera, 1997, p. 32) and therefore "they provide a necessary and sufficient criterion for accepting the hypothesis" (Bennett, 2010, p. 211); 4) the straw-in-the-wind test in which "most predictions have low uniqueness and low certitude, and hence provide tests that are indecisive both ways" (Van Evera, 1997, p. 32) and therefore "they provide neither necessary nor a sufficient criterion"(Bennett, 2010, p. 211).

II. The plan of the thesis

This dissertation aims to explain the observed variation in EU compliance and in its sustainability among two similarly rule-taking countries. In particular, the analysis focuses on the process of implementation of three European waste-related directives in Hungary and Poland in the decade between 1999 and 2009. The first chapter considers the research problem and clarifies the research questions, the key concepts and their operationalisation in relation to the three European directives under study, namely the Waste Framework, the Landfill and the Packaging and Packaging Waste directives. The second chapter explores the different theoretical approaches used to analyse the variation in compliance among EU Member States, introducing a distinction between supply- and demand-side approaches. In reviewing the existing debates in the literature, supply-side hypotheses linked to similarity in administrative capacity and traditions, European threats and incentives, cost/benefit calculations and exchange of information and knowledge are considered and four alternative explanations are elaborated. However, evidence shows that not all the hypotheses seem to sufficiently tackle the observed variation in the performances of Hungary and Poland. The chapter then explores demand-side approaches that focus on demands for compliance arising on the part of stakeholders. Hence, the theoretical framework elaborated in this dissertation focuses on three mechanisms; namely, the presence of market incentives, the existence of pre-existing cooperative strategies and the establishment of assistance alliances between external actors and domestic stakeholders. These three factors may have fostered the compliance strategies of specific stakeholders, as well as made sustainable the domestic changes occurring with EU requirement compliance.

The third and fourth chapters focus on Hungary and Poland. These two chapters study Hungary's and Poland's compliance in the municipal waste and packaging dimensions. The progress of the two countries are analysed through process-tracing methodology and follow a temporal division in three phases: firstly, from the *status quo* to the transposition of the EU requirements in the national legislation; secondly, from the transposition to the implementation of the national legislation; and thirdly, from the implementation to the sustainability of compliance. While in the Hungarian case the three phases in the municipal and packaging dimension are analysed, the Polish case was beset by problems that delayed the full implementation of the national legislation transposing the EU requirements, not yet achieved by the end of the decade under consideration.

The fifth chapter provides a comparative analysis of the empirical findings emerging from the study of the Hungarian and Polish cases. It also presents the contributions to the existing literature not only in shifting the focus of the analyses from non-compliance to compliance and from transposition to implementation of the EU directives, but also expanding the literature focusing on the sustainability of compliance in the post-Accession period and in the absence of EU membership conditionality. In studying the sustainability of compliance after the EU accession of Hungary and Poland, in fact, this dissertation considers the theory of 'increasing returns' according to which actors with a stake in the process of compliance may gain more from complying than from not complying with EU requirements. In particular, in the analysis of compliance with the European waste legislation of Hungary and Poland and its sustainability over time, this dissertation shows that when compliance is seen by the different stakeholders as a "business", with benefits accrued by them, they demand the full adoption and implementation of EU requirements. This happened in the presence of market incentives and cooperative strategies that influenced the stakeholders' profitability of compliance and determined the move from a situation of non-compliance to full compliance. In this sense, this dissertation contributes to the works of Tanja Börzel (2003), Liliana Andonova (2004), Börzel and Buzogány (2010) and Julia Langbein (2015). Moreover, this dissertation also demonstrated that the external assistance to Hungary and Poland was horizontal, multiplex and problem-solving oriented, further contributing to the work of Bruszt and McDermott (2011). Finally, it highlights the existing link between external assistance and cooperative strategies that enhance the outcomes of the external assistance, thus contributing to the studies of Bruszt, Stark and Vedres (Stark, Vedres and Bruszt, 2006; Stark and Vedres, 2006; Bruszt and Vedres, 2013).

Chapter 1
Variation in "implementation compliance" and in its sustainability

Over the years, European institutions have defined for and negotiated with EU Member States the key legislation and principles that governed the functioning of the EU. Different legal instruments have been used for the definition of the EU rules, requirements and targets in different policy fields (i.e. regulations, directives, decisions, recommendations and opinions). Within these instruments, regulations, directives and decisions are binding but while regulations and decisions are binding in their entirety and, in the former case, also directly applicable to all Member States, only the result of directives are binding, leaving to the Member States the freedom to choose application and enforcement instruments. The directives then are to be transposed into national legislative framework through national laws and implementing measures which might differ among the EU Member States.

While on the one hand the EU left to the Member States the leeway to choose among policy instruments for the adoption of the European directives at the national level, on the other hand, the European Commission, as the guardian of EU Treaties, was entrusted with the responsibility of ensuring that its members complied with the European requirements (Art. 17, paragraph 1, consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union). Therefore, the Commission monitors the EU Members' compliance and the transposition and implementation of EU directives, and Member States are obliged to report specific data and complete questionnaires in accordance with annual or multi-annual deadlines. The European Commission can also send letters asking for explanations of compliance when Member States do not notify it of the transposition of specific directives or do not adopt in a timely and accurate manner the requirements set out in them. Persistent problems might be referred to the ECJ[11].

[11] The starting of an infringement procedure is a long process. After the adoption of a new directive or target at EU level, the Member States have the obligation to notify to the Commission its transposition in the national legislation. If the Commission does not receive the notification or, if after the conformity checking of the national law there is still something missing, it sends to the Member state that is non-compliant or non-conforming a reasoned opinion asking explanations. The Member State can reply agreeing or disagreeing with the Commission and in this second case, the Commission sends back a letter of formal notice. If the problem still persists, then the Commission addresses the problem to the ECJ that formally starts an infringement procedure for non-compliance or non-conformity with the EU laws. For further details see, http://ec.europa.eu/environment/legal/law/procedure.htm.

In recent years, the transposition and implementation of European legislation among Member States has been a challenge for national authorities and both delays and differences in paths of compliance have been reported in monitoring documents developed by the European Commission. Among the European policy sectors, the implementation of environmental legislation has been particularly difficult for European Member States. The environment has, in fact, been the most identified sector within the European Commission's Infringements Annual Reports [12] since the end of the 1990s. Scholars analysing the implementation of environmental legislation among EU Members, too, have reported problems (Macrory, 1992; Jordan, 1999) associated with divergent EU Member compliance performance (Liefferink and Andersen, 1998; Börzel, 2001; Börzel, 2003; Knill and Lenschow, 2005; Liefferink et al., 2009).

The fact of diverging compliance performance among in the EU members has been hotly debated in the existing literature. For instance, the Europeanization literature adopting "top down" and "bottom up" dimensions has studied the impact of EU policy-making and legislation among Member States and also the role of Member States and domestic actors in influencing the European political and policy-making arena (Knill and Lehmkhul, 1999; Börzel and Risse, 2000; Radaelli, 2000; Green Cowles, Caporaso and Risse; 2001; Börzel, 2003; Radaelli, 2004; Vink, 2003; Jordan, 2005; Bulmer and Lequesne, 2005). This literature has also mentioned the problem of varying implementation performances regarding public policies (Haverland, 2000; Héritier et al., 2001, Falkner, 2003; Versluis, 2004; Knill and Liefferink, 2007) and, in some cases, of an "implementation deficit" of EU legislation in the Member States (Lampinen and Uusikylä, 1998; Knill and Lenschow, 2000; Nicolaides, 2001; Bursens, 2002; Knill and Liefferink, 2007; Graziano and Vink, 2007).

However, while studies on the fifteen members of the EU prior to the Enlargements of 2004 and 2007 covered a wide range of policy fields (for example, see Börzel, 2001; Börzel et al., 2007; Falkner et al., 2005; Haverland and Romeijn, 2007; Kaeding, 2006; Thomson, 2007) and different groups of countries (for example, see Börzel, 2003; Bursens, 2002; Liefferink et al, 2009), the analyses of the performances of the candidates and then members from Central and Eastern Europe have been fragmented between the pre- and the post-Accession periods (for example, see Schimmelfennig and Sedelmeier, 2005; Andonova, 2004; Falkner and Treib, 2008; Sedelmeier, 2008; Dimitrova, 2010). Moreover, scant attention has been given to the mechanisms that contributed to the sustainability of the CEE

[12] For further details on the environmental infringement statistics, see http://ec.europa.eu/eu_law/infringements/infringements_annual_report_en.htm.

countries' compliance for ‘on the ground’ implementation of the EU directives after their EU accession. In this dissertation, the performances of CEE countries are assessed in a more comprehensive way, through an examination of Commissions’ reports that monitored the implementation of EU directives over the period that runs from their candidacy to their membership in the EU. In particular, the dissertation analyses the compliance of Hungary and Poland with European environmental legislation and specifically with a number of requirements contained in three European directives concerning the sector of waste management.

The chapter is then structured as follows: in the first section the research problem of an existing variation in the compliance performances of Hungary and Poland and the key questions of the analysis is presented. The second section reviews the concepts of implementation and compliance as defined in the literature and in the official European documents. Moreover, the concept of *implementation compliance* as the key concept of this dissertation is defined. In the third section, the concept of implementation compliance is operationalised in accordance with the requirements set out in the three European directives concerning the waste management under examination in this dissertation; namely, the Waste Framework, the Landfill and the Packaging and Packaging Waste directives. Finally, in the fourth section, an overview of the compliance performances of Hungary and Poland regarding the three selected European waste-related directives is provided.

1.1 Defining the research problem and the research questions

Hungary and Poland share similar historical, economic and political backgrounds. Moreover, they developed similar environmental problems. The problematic environmental situation was exacerbated by choices made by the Communist regimes, which ruled in both countries from the end of the Second World War until the end of the 1980s. These regimes promoted forced industrialization in certain geographical areas, failed to define uniform environmental legislation and ignored the environment. This resulted in the development of highly polluted “hot spots” adjacent to the most industrialised areas of Northern Hungary in Hungary and Upper Silesia in Poland (Pavlinek and Pickles, 2000; Hicks, 2006). And, while since the early 1990s the democratic governments have begun to define specific environmental rules and

programmes and have restructured the environmental institutional settings, new pressures on the environment have resulted from the move to market economies and the phenomenon of consumerism (Hicks, 2006).

The EUROSTAT online database, which collects data on the amount of municipal and packaging waste management and treatment, offers some information on the initial similarity in the amount of municipal and packaging waste generated in Hungary and Poland[13]. In 1995, Hungary generated 460 kilograms per capita (hereafter, kg/capita) of municipal waste, with Poland generating 285 kg/capita (which corresponded to 4,752 thousand tonnes for Hungary and 10,985 thousand tonnes for Poland). Moreover, at the eve of EU Accession, in 2004, Hungary generated 84.5 kg/capita of packaging waste while Poland produced 89 kg/capita (which corresponded to 815 thousand tonnes for Hungary and 3,413 thousand tonnes for Poland). In spite of differences in the amount of waste generated, linked to the demography and the population density of the two countries, the European statistical data on municipal waste highlight a similar initial situation in Hungary and Poland in relation to its management and treatment[14]. In 2000, Hungary generated 4,552 thousand tonnes of municipal waste while Poland produced 12,226 thousand tonnes (EUROSTAT database); of these total amounts, Hungary collected 84% and landfilled 89,7% while Poland collected 87% and landfilled 90% (JRC Report, 2003). Additionally, a 2002 EUROSTAT report on the subject does not emphasise significant differences in the user charges established by Polish and Hungarian municipalities[15] for the management and treatment of municipal waste in the year 1999.

Since the collapse of the Communist regimes in the CEE countries, the EU has seen attempted to further integrate Europe by enlarging its borders to candidates from the CEE region. In turn, the CEE countries have considered a "Return to Europe"[16]. Thus, in 1994, Hungary and Poland were the first to apply for EU membership, with other CEE countries

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[13] Interviews have highlighted the low quality of the national waste data available for Hungary and Poland before 2004 and the Membership to the EU (interviews 74; 98; 99). Hence, it has been used the EUROSTAT online database (available at: http://ec.europa.eu/eurostat/data/database) as the source of the data on the amount of waste generated per capita by the two countries which cover the period between 1995-2009 (for municipal waste) and 1997-2009 (for packaging waste).

[14] Unfortunately, for packaging waste EUROSTAT provides only data on the amount of waste generated but does not break-down to collection and treatment of packaging waste.

[15] The Eurostat report titled "Municipal waste management in Accession countries" released in 2002 provide information on the amount of municipal user charges which corresponded to EUR 22-80 per tonne of waste generated in Poland and EUR 6,4 per capita of municipal waste generated in Hungary (Eurostat report, 2002, pages 12 and 30).

[16] The "Return to Europe" argument has been considered as the pillar on which the EU Membership of the CEE countries was framed (O' Brennan, 2012). This argument has also been widely debated by scholars (for a summary of the academic debates, see Iver B. Neumann, 'European Identity, EU Expansion, and the Integration/Exclusion Nexus', *Alternatives*, Volume 23, 1998, pp. 397-416).

following closely at the heels[17]. At the same time, due to differences between the CEE candidates and the fifteen EU Members, the EU stipulated a number of conditions to guide the former in the implementation of the European *acquis communautaire*. At the European Council of Copenhagen in June 1993, the EU defined the key conditions for membership concerning specific economic and political requirements[18] and, ultimately, the capacity to undertake the obligations of membership (Poole, 2003). This last criterion implied that candidates were obliged to take upon themselves the content, principles and objectives of the European Treaties as well as the legislation and the jurisprudence of the ECJ by the time of their EU accession. There would be no possibility of opting-out from specific requirements (Pogatsa, 2004).

As part of the process of accession to the EU which stipulated as key conditions the approximation and implementation of the EU *acquis*, the European Commission monitored the compliance performances of the CEE countries. Despite similar initial difficulties related to weak environmental capacity, infrastructures and legislation, the data from the Commission's monitoring reports emphasised notable variations in the CEE countries' performances. According to these reports, Hungary and Poland differently adopted and implemented a number of requirements contained in European directives concerning waste management. Hence, the European monitoring data discloses two distinct paths of compliance: Hungary which progressively implemented EU waste requirements since the pre-Accession period and sustained and even increased its compliance in the period of EU Membership; and Poland who achieving EU Membership adopted only partially and with delay EU waste requirements.

Despite shared starting conditions, then, Hungary and Poland appeared to have taken divergent roads with regards to the 'on the ground' implementation of European directives. There is a substantial body of literature on variation in EU Member States compliance performance. For instance, Europeanisation scholars have noted divergences in the implementation of European public policies among EU members who joined the EU before 2004 (Haverland, 2000; Héritier et al., 2001, Falkner, 2003; Versluis, 2004; Knill and Liefferink, 2007) and of low degrees of implementation of EU legislation at the domestic

[17] Hungary and Poland were followed in 1995 by Bulgaria, Estonia, Latvia, Lithuania, Romania and Slovakia in the application to the EU. Moreover, in 1996 applied the Czech Republic and Slovenia (for reference, see http://europa.eu/legislation_summaries/enlargement/2004_and_2007_enlargement/e50017_en.htm)

[18] In particular, the political criteria required the achievement of the stability of institutions guaranteeing democracy, rule of law, human rights and respect for and protection of minorities" (Poole, 2003) while the economic criteria required the establishment of a "functioning market economy and the capacity to cope with competitive pressures and market forces within the Union" (Poole, 2003).

levels (Lampinen and Uusikylä, 1998; Knill and Lenschow, 2000; Nicolaides, 2001; Bursens, 2002; Knill and Liefferink, 2007; Graziano and Vink, 2007). As well, scholars have explained the range of compliance performance among CEE countries through the mechanism of "compliance by reward" and thus through incentives. The achievement of EU membership has been well analysed as a reward for EU compliance. In a concern strongly linked to this incentive structure, these scholars feared a general compliance backslide once the CEE countries became members of the EU (Grabbe and Hughes, 1998; Grabbe, 1999; Grabbe, 2002; Kelley, 2004; Schimmelfennig and Sedelmeier, 2005).

But these fears did not come to fruition. EU monitoring reports on Hungary and Poland for the post-Accession period have shown instead that the performances of these two countries did not regress with EU accession, but in the case of Hungary improved thereafter. This dissertation thus aims at identifying which mechanisms were responsible for divergent compliance performances in two countries as similar as Hungary and Poland. The first research question addressed in this thesis, then, concerns differences in compliance and is formulated as follows: *Why is there variation in the process of implementation compliance among similarly rule-taking countries?* Furthermore, this dissertation aims at exploring the mechanisms which characterised the different performances of Hungary and Poland and specifically influenced the sustained performance of Hungary in the post-Accession period. As a corollary to the first research question, a second question is formulated as follows: *Which mechanisms influenced the sustained compliance of Hungary in comparison to Poland?*

1.2. Defining the key concepts

The adoption of EU legislation among the EU Member States has been intensively investigated. Scholars have adopted top-down and bottom-up perspectives to analyse the implementation of policies at the national level, distinguishing between the relevance of policy decisions and the role of centrally located actors (Sabatier, 1986; Matland, 1995; Treib, 2006) or focusing on the number of actors and the importance of the local level (Sabatier, 1986; Matland, 1995). A wide range of perspectives has been proposed and the empirical findings have been equally multifarious. Hartlapp and Falkner (2009) have noted that the chief problem in these divergent findings is the definition of the dependent variable; that is, the adoption of EU legislation at the domestic level. Indeed, there is no scholarly consensus on this topic (Hartlapp and Falkner, 2009). Researchers commonly use the concepts of "implementation" and "compliance" to define the process of adoption of EU legislation at the domestic level, but "often researchers simply are not talking about the same things" (Hartlapp and Falkner, 2009, p. 285).

1.2.1 The "implementation" concept in the EU documents and in the literature

The European Union considers the process of implementation of EU directives as a multi-phase process that takes place in a number of stages. As far as European legislation, directives must be implemented on the national level through national laws before they go into effect. Thus, every EU directive must be legally transposed and incorporated into a given country's national legislation, after which it must be applied and enforced. This process has been defined in a number of EU Commission's policy papers[19] and in documents addressed to the ten recent CEE candidates in their process of approximation to EU legislation and to European environmental legislation. An example is the "Guide to the Approximation of European Environmental Legislation[20]" of 1997 which, aiming at being a road map to EU environmental legislation, contained clear definitions of the phases to be followed by CEE

[19] For an example, see the Communication on implementing Community Environmental law of 1997.
[20] For details on the definitions, see http://ec.europa.eu/environment/archives/guide/annex4.htm.

candidates. In this document European Commission classified three main phases: transposition, practical application and enforcement of EU rules at the domestic level. The first phase of "transposition" required that candidates and EU Members "adopted or changed national laws, rules and procedures" in order to facilitate the full incorporation of all requirements contained in EU law into the national legal order (Guide to environmental approximation, 1997). According to the Guide, however, the transposition phase included not only "the reproduction of the words of a directive in national law", but also "any additional provisions, such as the amendment or repeal of conflicting national provisions necessary to ensure that the national law properly reflected the provisions of the EU directives (Guide to the environmental approximation, 1997). The second phase of "practical application" required candidates and members to "provide institutions and necessary budgets to carry out the laws and regulations" while the third phase of "enforcement" required candidates and members to "provide the necessary controls and penalties to ensure that the law was fully and properly complied with" (Guide to environmental approximation, 1997).

Unlike the EU documents, the existing literature distinguishes mainly between two phases: "transposition" and "implementation" of European directives among the Member States. The phase of "transposition" has been generally defined as the moment in which the EU directives are incorporated and literally transcribed into the national legislation (Cremona, 2012). This phase is the most-studies among the phases. Scholars have focused on the accuracy and timeliness of the adoption of EU directives by Member States, and have measured "transposition" by looking at the number of infringement procedures started by the European Court of Justice for non-conformity and/or non-compliance with EU requirements (among them, see Mastenbroek, 2003; Kaeding, 2006; Jensen, 2007; Thomson et al., 2007; Leiber, 2007; Versluis, 2007; Toshkov, 2008; Zhelyazkova et al., 2009; König et al, 2009; Thomson, 2010; König et al., 2012). Going beyond the cross-national analysis of infringement proceedings, scholars have also explored the extent to which national courts adopted the rulings or case laws of the European Court of Justice (for a detailed summary, see Conant IN Cremona, 2012).

There is greater academic confusion, however, regarding the definition of "implementation" which corresponds to the stage when national measures should be applied to concretely adopt EU directives' requirements at the national level (Prechal, 2005; Hartlapp and Falkner, 2009). Firstly, despite the distinction between "transposition" and "implementation", scholars have not always followed a coherent terminology in their studies often conflating the terms "implementation" and "transposition" (Prechal, 2005). Secondly,

unlike in EU documents, researchers looking at the application and enforcement of EU directives at the national level have not clearly distinguished between these two concepts but have generally referred to them as part of a single phase of "practical or administrative implementation", which follows the transposition of the EU legislation in national legislation (Versluis, 2004). Furthermore, until very recently, this stage was essentially neglected in the literature. This "paucity of research" (Cremona, 2012, p. 2) has been driven by mostly practical considerations. In fact, according to scholars, it has been difficult for qualitative analyses "to establish reliable and representative data on the application on the ground at a micro-level analysis" (Hartlapp and Falkner, 2008, p. 11). As well, with the development of quantitative studies on EU compliance, the phases of enforcement and application "have taken a back seat since there are simply no appropriate quantitative data for analysing the 'street-level' aspects on implementation" (Treib, 2006, p. 14). Only a few narrowly focused qualitative case studies on the application of the EU law by national courts or implementing authorities have distinguished and separately analysed the phases of transposition, application and enforcement covering specific policy sectors and directives (for example, see Falkner et al., 2004; Falkner et al., 2005; Falkner et al, 2008; Hille and Knill, 2006; Falkner et al., 2008; Falkner et al., 2007; Falkner and Treib, 2009).

1.2.2 The concept of "compliance" in the European documents and the literature

The second concept used to define the adaptation of EU legislation among Member States is "compliance". This too has been difficult to define at a European level and in the literature. Unlike the detailed definition of the implementation process, the European Union has not defined the concept of "compliance" and when searching for specific European documents released by the European Commission, the first documents resulting from a general research in the official European Commission web page consider compliance as linked to specific policy fields[21]. As against this, in the literature "compliance" has been defined by different approaches. The EU legal compliance literature has associated the concept of "compliance"

[21] For example, see the results displayed by the EU Commission website (http://ec.europa.eu/geninfo/query/resultaction.jsp?SMODE=2&ResultCount=10&Collection=EuropaFull&Collection=EuropaSL&Collection=EuropaPR&ResultMaxDocs=200&qtype=simple&DefaultLG=en&ResultTemplate=%2Fresult_en.jsp&page=1&QueryText=compliance&y=0&x=0#queryText=european+union+compliance+definition&tab=europa&filterNum=1&summary=summary).

with the meaning of "enforcement based upon coercion" that corresponded to the administrative control and litigation in the courts followed by sanctions (Cremona, 2012, p. 31). However, according to these scholars, "compliance" cannot "be confined within the strict boundaries of coercive means of enforcement" (Cremona, 2012, p. 31) and it is not considered as "the result of obedience" but as "the overall process through which obedience is gradually constructed" (Cremona, 2012, p. xli).

From a more political science-oriented perspective, International Relations studies[22] define a situation of "compliance" when countries "adhere to the provision of the accord and to the implementing measures that they have instituted" (Haas, 1998) but also "when the actual behaviour of a given subject conforms to prescribed behaviour, and non-compliance or violation occurs when actual behaviour departs significantly from prescribed behaviour" (Young, 1979; Raustiala and Slaughter, 2002). In EU implementation studies, instead, particular reference has been made to the fulfilment of specific requirements in the various stages of implementation. In other words, "compliance is a potential outcome of the implementation process" and "occurs only in those cases where all of its stages are fulfilled in a dutiful manner" (Hartlapp and Falkner, 2008, p. 2).

1.2.3 The "implementation compliance" concept in my research

The concepts of implementation and compliance have been defined differently in the literature. The concept of "policy implementation" has referred mostly to the process and the different stages of adoption of the legislation at the domestic level (Hartlapp et al., 2009) whereas, the concept of "compliance" has been discussed more in the context of conformity with a given law (Treib, 2006). Nevertheless, although "compliance is distinct from" it is also "closely related to implementation" (Victor et al., 1998; Raustiala and Slaughter, 2002) and both aspects are crucial elements when considering the approximation and adoption of European legislation at the domestic level. In fact, while compliance is more linked to legal conformity with the rule to be implemented, implementation is linked to the policy tools used to apply and enforce such rule. Thus, taking a convergent approach, I join the two concepts yielding: *implementation compliance*. In my analysis, then, I define *implementation*

[22] For a broader overview of the discussions within the International Relations and the EU implementation studies, see Haas, 1998; Tallberg and Johnsson, 2001; Hartlapp and Falkner, 2008.

compliance as *the legal conformity with and the adoption of specific requirements set into the EU directives.*

1.3 Measuring the *implementation compliance* concept

Existing studies have measured compliance with EU directives by mining the infringements database released by the European Court of Justice. This infringement database detects only cases of non-compliance with EU legislation but does not measure or even mention the national measures taken to implement such legislation. Hence, the literature is quite biased towards analyses of "non-compliance" over situations of compliance with European legislation. Moreover, this database covers only data for current EU Members. Article 258 of the Treaty on the Functioning of the European Union (hereafter, TFEU) stipulates that when the ECJ "finds a Member State to be in breach of Community law, the Member State concerned must then take the measures necessary to comply with the judgement of the European Court of Justice" and, in case of persisting non-compliance after negotiations are conducted between the non-compliant Member State and the EU Commission, the ECJ initiates infringement procedures. As Hungary and Poland only became members of the EU in 2004, the data contained in the ECJ infringement reports do not sufficiently reveal the paths of implementation compliance for these two countries. Furthermore, Hartlapp and Falkner recently outlined practical and methodological problems in using this database for evaluating the timeliness and accuracy of transposition of the European directives in the Member States, despite the popularity of the ECJ infringement database among researchers (for details, see Hartlapp and Falkner. 2009).

Unlike the ECJ infringement database, which covers only the period of membership in the EU of the CEE countries, other official documents released by the European Commission have monitored the CEE candidates' implementation compliance throughout their period of candidacy and membership. Since the beginning of the European negotiations[23] for their accession to the EU in 1998, the Commission has, in fact, elaborated Annual Monitoring Reports on the progress made by the CEE countries on the implementation of European

[23] The European Commission has started the negotiations for accession in 1998 with Poland, Hungary, the Czech Republic, Slovenia, Estonia and Cyprus. In 2000, at the European Council of Luxembourg, Slovakia, Lithuania, Latvia, Malta, Romania and Bulgaria started the negotiations for accession to the EU.

legislation. The monitoring exercise started by the European Commission with the Annual Monitoring Reports for the period 1998-2003 continued when the CEE countries became EU members, on 1st May 2004. Before Accession, the CEE candidate countries had no power to self-report on their compliance progresses but were strictly monitored by the Commission which also organised peer reviews initiatives in which Member States' experts visited and inspected the CEE candidate countries and then reported the situation at the European Council (interview 2). After assuming Membership, the CEE countries were obliged to fulfil reporting obligations contained in a number of European environmental directives and valid for the EU Member States. These European environmental directives governed the sectors of chemicals, waste, air, water quality, noise and horizontal legislation[24] and required Member States to fill in national questionnaires to be sent back to the Commission and to collect statistical data to be sent back to the European statistical office (hereafter, EUROSTAT), in accordance with specific deadlines (typically once every year or three years). The CEE new Member States were then obliged to self-report environmental data through the compilation of national questionnaires which are carefully checked by the Commission and, in case of non-correct or delayed transposition and implementation of European environmental measures, may be referred to the ECJ which will start infringement procedures (interview 92).

While as yet there has been no attempt to use the Tri-Annual Monitoring Reports to measure compliance in the CEE countries in the post-Accession period, scholars have used the information collected in the Annual Monitoring Reports to assess the monitoring strategy of the Commission towards the CEE candidates. Some studies have analysed the use by the EU Commission of particular words contained in these reports (Hille and Knill, 2006) or of specific aspects, such as the "administrative capacity in the candidate countries" (Moynian, 2006). However, only a handful of scholars have consistently used these reports as tools to track the CEE candidate countries' compliance with the EU *acquis communautaire* (for example, see Hughes et al., 2004). It has been suggested that the lack of precise analyses of progress made in each of the policy sectors or a lack of clear definitions of concepts and provisions adopted at the national level might be behind the fact that these reports are in disuse (in particular, see Moynian, 2006).

Despite the critics, the Annual Monitoring Reports offer a unique source of

[24] For further details on the EU environmental directives with reporting obligations, see Annexes 1-6 of Directive No. 91/692/EEC (available at: http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/uri=CELEX:31991L0692&from=EN).

information to measure the performances of Hungary and Poland in the years of their candidacy to the EU. The EU Commission has used these reports to monitor the compliance with the three criteria for membership defined at Copenhagen[25]; namely, political and economic criteria and the ability to assume obligations of membership (i.e. the Copenhagen Criteria of 1993) by monitoring compliance in the thirty Chapters into which the European *acquis communautaire* for the accession was divided. The Environmental Chapter (i.e. Chapter 22), in particular, contains the principles, dispositions and requirements set into the European environmental directives and regulations that CEE candidates must approximate and comply with before formal accession to the EU. Furthermore, after Hungary's and Poland's 2004 achievement of EU membership, the European environmental directives contained in the Environmental Chapter have continued to be monitored through the Tri-Annual Implementation Reports based on the national questionnaires filled-out by these two New Member States. Through these reports, the Commission has in fact monitored the Hungarian and Polish legislation transposition of the European environmental directives and also the definition of implementing measures for the adoption of requirements contained in these Directives.

Researchers focusing on post-Accession compliance pointed out that compliance monitoring of EU Member States heavily relies on Members' self-reporting. In particular, Sedelmeier (2008) specifies that "the EU's decentralized monitoring mechanism relies heavily on private actors at the domestic level to raise complaints with the Commission or to litigate in national courts against breaches of EU law" (Sedelmeier, 2008, p. 809). However, he also pointed out that "although transnational links with international institutions and nongovernmental organizations (NGOs) might partly compensate for the weakness of post-communist civil society[26]" (Sedelmeier, 2008, p. 809), the societal actors of all CEE countries have generally been recognised as weak (Sissenich, 2002; Howard, 2003). Nevertheless, interviewees from the Commission emphasised that, also for the CEE countries, the European Commission relies on complaints to monitor the implementation of EU environmental measures (interview 92) as well as through petitions, questions or simple emails from citizens, NGOs and business representatives which are considered a "constant monitor on what is going on in the waste sectors" (interview 93). In addition, the Commission relies on studies made by international consultancies, NGOs and industries as well as from the

[25] For a definition of the Copenhagen Criteria, see http://europa.eu/legislation_summaries/glossary/accession_criteria_copenhague_en.htm.

[26] Sedelmeier specifically refers to the works of Petrova and Tarrow 2007; Stark et al. 2006 on this point.

documents released by the national audit offices (interview 93). Moreover, to strengthen the new Member States' self-reporting capacity, the EU has provided funds and promoted specific projects in statistical offices and environmental inspectorates of CEE countries for data at national, regional and local levels. In particular, the Commission has promoted projects and set guidelines with EUROSTAT to improve the methodology used by CEE countries for compiling data and to harmonise it with the methodology used by remaining Member States (interviews 93; 98; 99). Furthermore, the cross-checking of the waste data has been made by national statistical offices and the EUROSTAT (interviews 98; 99). The DG Environment has also promoted compliance strategies to the EU Members through the organisation of events to increase public awareness as well as specific Technical Adaptation Committees for policy implementers (TAC) in which CEE environmental experts have acknowledged and exchanged best-practices with experts from the other EU Member States (interview 93).

Furthermore, the NGOs and private actors of Hungary and Poland have relied on the European stakeholders to inform the EU institutions on compliance issues. For example, in Hungary, the recovery organisation Öko-Pannon has established its contacts at European level through Pro-Europe which lobbied on its behalf the EU institutions (mainly the Commission's DG Environment and DG Industry) and which has played a role in informing the EU on the recent changes of the packaging system and how they may affect compliance (interview 34). Polish and Hungarian NGOs have also directly informed the European institutions through information campaigns such as the recent study on the waste compliance performances of Poland, Hungary, the Czech Republic and Slovakia released in July 2015[27].

[27] For further details, see http://www.humusz.hu/english/hirek/Complying-with-the-Landfill-and-Framework-Directives-in-the-Visegrad-Four-Countries

1.3.1 The operationalisation of implementation compliance in the waste sector

As already mentioned, the approximation and implementation of the European environmental legislation in Hungary and Poland has been strictly monitored by the Commission since the end of the 1990s. Among the different environmental issues monitored by the EU, waste management is one of the sectors for which it is possible to measure the progress made by these two countries in the period before and after their accession to the EU. Firstly, in the Annual Monitoring Reports the EU Commission monitored the CEE approximation with the European environmental *acquis communautaire*, comprising as well all the European directives on waste management [28]. Secondly, because these waste-related directives contained implementation reporting obligations for the EU Member States, after joining the EU, the New Members from the CEE were obliged to fill-out national questionnaires on the implementation of these European directives. These data have been controlled by the EU Commission and then aggregated in the Tri-Annual Implementation Reports for the years 2004-2006 and 2007-2009.

Among the European waste-related directives, as mentioned in the Introduction, I have selected the Waste Framework Directive, the Landfill Directive and the Packaging and Packaging Waste Directive. The first two European directives considered in this study deal with the management and treatment of municipal waste. This type of waste is defined at the European level as "the bulk of the waste stream originated from households, though similar wastes from sources such as commerce, offices, public institutions and selected municipal services" and is that waste that is "collected by or on behalf of municipal authorities, or directly by the private sector (business or private non-profit institutions) not on behalf of municipalities" (Eurostat webpage [29]). The Waste Framework Directive and its revised versions (No. 75/442/EEC; No. 91/156/EEC; No. 2006/12/EC, No. 2008/98/EC) has provided a general frame of the key definitions of waste, the principles according to which waste should be treated and disposed and the responsibilities for the management and the

[28] In particular, the environmental *acquis* in force since 1998 comprised 11 directives (and amended versions) related to waste issues (waste from titanium dioxide industry, municipal waste incineration, hazardous waste incineration, landfill of waste, disposal of waste oils, waste framework directive, disposal of PCBs and PCTs, hazardous waste, sewage sludge and soil, batteries and packaging waste). For further details, see http://ec.europa.eu/environment/archives/guide/annex2.htm.

[29] The source of the definition of municipal waste is the Eurostat webpage (http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/key_waste_streams/municipal_waste).

control of municipal waste. The Landfill Directive (No. 1999/31/EC) defined the different categories of waste (i.e. municipal waste, hazardous waste, non-hazardous waste and inert waste) and also established procedures for the application of permits and for the control and monitoring of landfill sites, for closure and after-care, as well as the rules concerning the existing sites. The third directive under examination is the Packaging and Packaging Waste Directive (No. 94/62/EC) which concerns the management and treatment of packaging waste. This type of waste has been defined at the European level as "made of a variety of materials including: paper and cardboard; wood; plastic; metal; glass" and is generally managed through producer responsibility arrangements which introduce "measures relating to the prevention, reduction and elimination of pollution caused by waste and the management of packaging and packaging waste" (Eurostat webpage [30]). This Directive, in particular, contained the definition of the operations to treat packaging waste (i.e. recovery, recycling and reuse) and the definition of economic instruments to attain packaging recovery and recycling.

In my analysis, I measure the difference in the *implementation compliance* and its sustainability of Hungary and Poland as a *variation in kind* rather than *in degree* for the three European waste-related directives. I then consider two specific dimensions: *municipal waste management* and *packaging waste management*. The dimension of *municipal waste management* is linked to the treatment of municipal waste and particularly to the proximity principle. This was defined in article 174 of the Treaty of Rome which required that "waste should be disposed of as closely as possible to its place of generation" (art. 174, par. 2). Article 5 of the Waste Framework Directive 91/156/EEC referred to the proximity principle in the "establishment of an integrated network of disposal installations" which "must enable waste to be disposed of in one of the nearest appropriate installations by means of the most appropriate methods and technologies in order to ensure a high level of protection for the environment and public health" (art. 5). Furthermore, specific requirements for the disposal installations and particularly for the landfill sites were defined in the Landfill Directive No. 1999/31/EC which, in articles 12, 13 and 14, set out the requirements for the operational landfill sites and for the closure and after-care of old and obsolete ones[31].

[30] The source of the definition of the packaging waste is the Eurostat webpage (http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/key_waste_streams/packaging_waste).

[31] In particular Article 12 required Member States to "take measures in order that control and monitoring procedures in the operational phase meet a number of requirements" (i.e. the operator of a landfill shall carry out during the operational phase a control and monitoring programme; the operator shall notify the competent authority of any significant adverse environmental effects revealed by the control and monitoring procedures and follow the decision of the competent authority on the nature and timing of the corrective

The dimension of *municipal waste management* then comprises the establishment of an integrated network of disposal installations, the compliance of operational landfill sites and the closure and after-care of old and obsolete sites. Being a *variation in kind*, there are a number of stages to the process of achieving sustainable implementation compliance, numbered 1-5. However, at one point between stages 3 and 4, a shift occurs where sustainable implementation compliance appears for the first time. In the operationalisation of the municipal waste management dimension, two conditions must be met for us to consider the country's performance as 'sustainably compliant'[32]: the adoption of implementing legislation AND the establishment of the specific measures on the disposal sites (i.e. the networks in place, the compliant operational sites and the closure and after-care of old and obsolete sites). The achievement of 'sustainable compliance status', then, revolves around the passage between stages 3 and 4. As mentioned above, stages 1-3 are *below the sustainable compliance level* and thus the countries' performances are to be considered non-compliant while the stages 4 and 5 are *above* this level, and thus such countries shall be considered sustainably compliant. In other words, a country may only be deemed to have achieved implementation compliance once the compliance has become sustainable.

Table 1 summarises the sustainable compliance stages in the *municipal waste management* dimension.

measures to be taken). Article 13 (c), defined the requirements for the closed landfill sites and required that "the operator shall be responsible for its maintenance, monitoring and control in the after-care phase for as long as may be required by the competent authority, taking into account the time during which the landfill could present hazards". The operator was also obliged to "notify the competent authority of any significant adverse environmental effects revealed by the control procedures and shall follow the decision of the competent authority on the nature and timing of the corrective measures to be taken". Article 14 required Member States to "take measures in order that landfills which have been granted a permit, or which are already in operation at the time of transposition of this Directive, may not continue to operate unless the steps outlined below are accomplished as soon as possible and within eight years after the date laid down in Article 18(1) at the latest [...]".

[32] The concept of 'sustainable compliance' as discussed herein is to be construed as denoting sustainable implementation compliance.

Table 1: Operationalisation of the implementation compliance in the municipal waste management dimension:

Sustainable compliance stage	Stage	Operationalisation
Non-compliance	**0**	Implementing legislation either missing or not in force. Integrated networks of disposal installations have not been set up, the landfill disposal sites in operation are not compliant[33] and those to be closed have not been closed.
	1	Implementing legislation not in force. Integrated networks of disposal installations have not been set up, the landfill disposal sites in operation are not compliant and those to be closed have not been closed yet but efforts are mentioned.
	2	Implementing legislation present but not in line[34], setting up of the integrated networks, measures to improve compliance in the operating disposal landfill sites and closure of obsolete ones have started but major efforts are required.
	3	Implementing legislation in line. Planning of integrated networks and regional disposal facilities observable in national legislation in the adoption of national and regional waste management plans.
Sustainable Compliance	**4**	Implementing legislation in line, integrated networks are set up, operating and closed landfill sites are almost compliant, only minor efforts are required to improve compliance and after-care of old and obsolete landfill sites.
	5	Legislation in line, networks are in place and functioning, operational landfill sites are compliant and after-care measures for old and obsolete sites have been implemented.

Source: own elaboration

[33] The compliance requirements of the landfill site in the operational phase are set in Annex 1 of Directive 1999/31/EC which set requirements on the location of the landfill site (i.e. the distance from residential and recreation areas and protection of geological and hydrological conditions, ground waters and nature); the control of the waters entering in the site and collection of contaminated water and leachate; the protection of soil and ground waters below and in the vicinity of the landfill site; the collection and treatment of landfill gas from biodegradable waste; protection from nuisances and hazards and the control on the access to each facility.

[34] According to European Commission's Monitoring Reports the legislation is in line when it is adopted and its content is conforming to the requirements contained in the European directive which implements.

The second dimension concerns *packaging waste management.* This is linked to the treatment of packaging waste and particularly to the "polluter pays" principle established in article 174 of the Treaty of Rome (amended in art. 191 of the Treaty on the Functioning of the European Union) which required that "the costs of environmental pollution must be borne by the polluter" (art. 174, par. 2). Article 7 of the Packaging and Packaging Waste Directive set out the treatment operations for packaging waste, and particularly the establishment of systems by the Member States "to provide for return and collection of used packaging or packaging from consumers, final users or waste stream" which would channel them "to the most appropriate waste management alternatives in participation with the economic operators of the sector and the competent authorities" (art. 7). These return and collection systems through which packaging recovery and recycling could be attained had to be financed, according to article 15, through economic measures defined by Member States in accordance with the "polluter pays" principle[35].

The dimension of *packaging waste management*, then, comprises the setting up of return, collection and recovery systems for packaging and the establishment of economic measures to encourage these systems. Similarly to the *municipal waste management* dimension, achievement of sustainable compliance with this dimension may also be characterised by five stages. Also in this case, there is a divide between stages 3 and 4 which where sustainable compliance is first achieved. The operationalisation of the *packaging waste management* dimension then looks at two elements to consider the country's performance as 'sustainably compliant': the adoption of implementing legislation AND the establishment of return and collection systems and economic instruments to finance them. Therefore, also in this case, the stages 1-3 are to be considered as *below the sustainable compliance level* and such countries' performance is therefore to be deemed as non-compliant. Stages 4-5 are *above this level* and such countries are to be considered sustainably compliant. Again, the achievement of implementation compliance may only be claimed once the compliance has become sustainable.

Table 2 summarises the sustainable compliance stages in the *packaging waste management* dimension.

[35] Article 15 of the Packaging and Packaging waste directive in particular established the definition of economic instruments by the Council to promote the implementation of the objectives of packaging recovery and recycling contained in the Directive and, in the absence of such measures, required the Member States to "adopt measures to implement those objectives".

Table 2: Operationalisation of the implementation compliance in the packaging waste management dimension:

Sustainable compliance stage	Stage	Operationalisation
Non-compliance	**0**	Implementing legislation either missing or not in force. Systems for collection, recovery and recycling and economic instruments have not been set up.
	1	Implementing legislation not in force. Systems for collection, recovery and recycling and economic instruments have not been set up but efforts are mentioned.
	2	Implementing legislation present but not in line. Setting up of systems and economic instruments has started but major efforts are required to improve their functioning.
	3	Implementing legislation in line. Systems for collection, recovery and recycling have been set up but economic instruments are not always consistent.
Sustainable compliance	**4**	Implementing legislation in line, systems and economic instruments are in line, only minor efforts are required to improve their functioning.
	5	Legislation in line, systems and economic instruments in place and functioning.

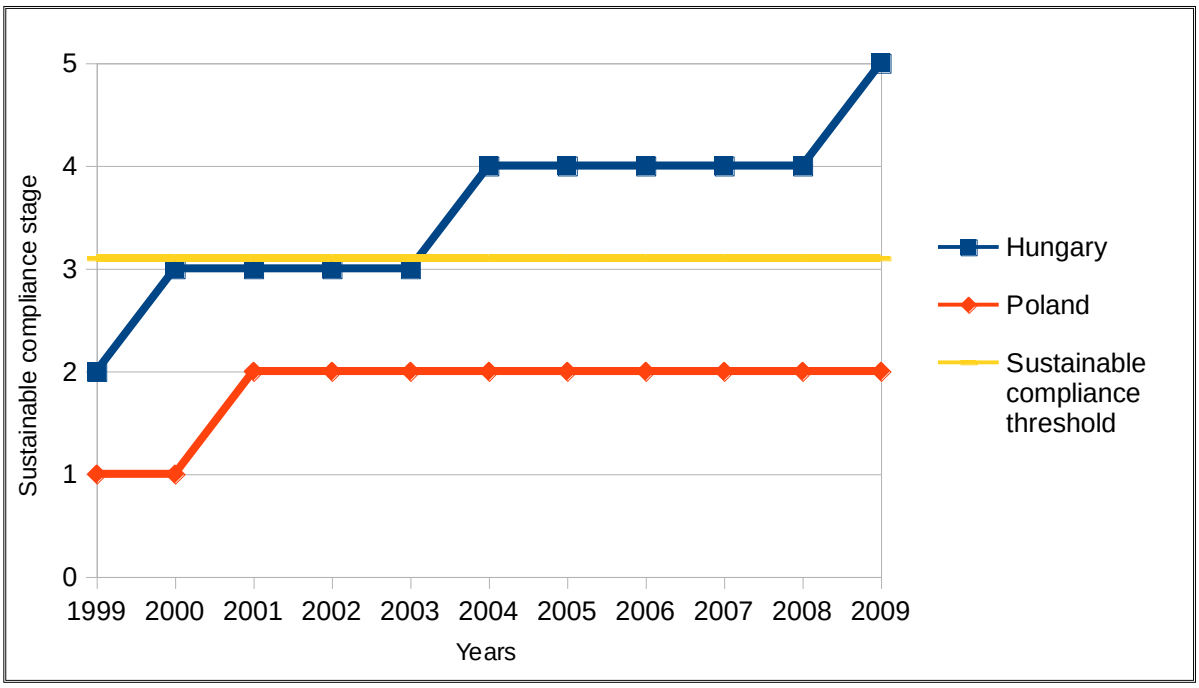
Source: own elaboration

1.4 The performances of Hungary and Poland in achieving sustainable implementation compliance with the municipal and packaging waste management dimensions

The 1999 Commission's Screening Report, the Annual Monitoring Reports for the years between 2000 and 2003 and the national questionnaires of Hungary and Poland on the adoption of the Waste Framework, Landfill and Packaging Directives for the years 2004-2006 and 2007-2009 reveal differences in implementation compliance for these two countries. Beginning with the information contained in the 1999 Commission's Screening Reports which assessed the starting situation in Hungary and Poland and further extending the analysis to the Annual Monitoring Reports and the post-Accession national questionnaires, the data highlight differences in the implementation compliance with the municipal waste management and the packaging waste management dimensions.

The performances of Hungary and Poland varied not only among countries but also between the two dimensions of municipal and packaging waste management. In the municipal waste dimension, Hungary and Poland started at a similar non-compliant situation (but different stages) but after accession their performances diverged widely. Since 2004, in fact, Hungary achieved stage 4, positioned *above* the sustainable compliance threshold and, therefore, its performance is to be considered as sustainably compliant. Contrariwise, at the end of the decade considered, in 2009, Poland was still at stage 2, positioned *below* the sustainable compliance threshold. Figure 1 summarises this data. Further details on how the performance of each year has been measured by the European monitoring reports are provided in Annex 1.

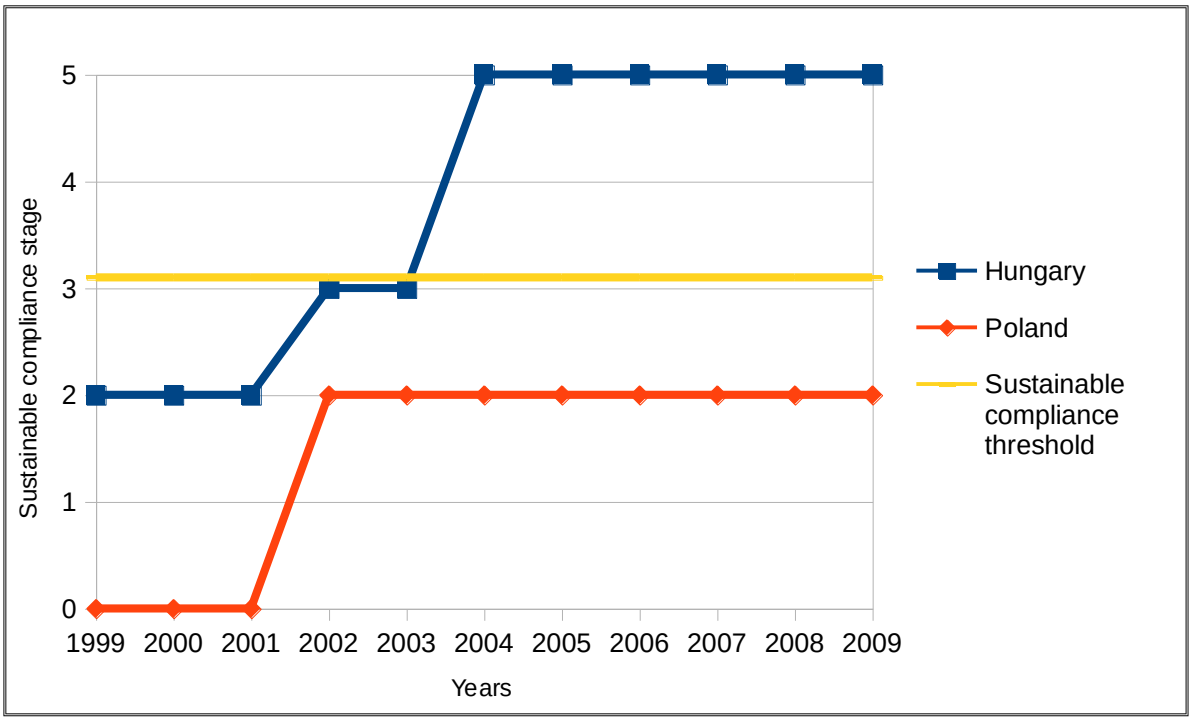
Figure 1: The performances of Hungary and Poland in implementing the municipal waste management dimension



Source of the data: Commission Annual Reports, National Questionnaires

The variation in the performances of Hungary and Poland is clearly marked in the packaging waste dimension. In this dimension both countries began with a situation *below* the sustainable compliance threshold but while Hungary began at stage 2, Poland started off at stage 0. Despite some improvements made by Poland by 2002, moving it to stage 2, this country did not achieve sustainable compliance by the end of the decade considered. In 2004, Hungary improved its performance *above* the compliance threshold and achieved stage 5 and full sustainable implementation compliance with all the requirements of the European Packaging Waste Directive, and remained at this stage until the end of the period in question. Figure 2 shows this data and, also in this case, further details are provided in Annex 1.

Figure 2: The performances of Hungary and Poland in implementing the packaging waste management dimension



Source of the data: Commission Annual Reports, National questionnaires

1.5 Conclusions

In this chapter, I have defined and operationalised the dependent variable of my dissertation. Firstly, I have presented the key problem of the research. EU documents have particularly emphasised that despite similar historical background, environmental problems and strategies adopted by the EU for the membership, there exists a variation in the respective performances of the CEE candidate countries and specifically between Hungary and Poland. Variation in compliance has been analysed well by Europeanisation scholars focusing on the EU-15 Member States. Moreover, in the analysis of the compliance performances of the CEE countries, conditionality scholars have hypothesised as a key incentive for compliance the reward of EU accession, and some of them anticipated a general backslide in compliance once these countries joined the EU. Nevertheless, the data reported in the Commission's Annual Monitoring Reports and the Tri-Annual Monitoring Reports have shown not only that the performances of the CEE countries have not regressed, but in some cases even improved. Therefore, the research problem addressed in this dissertation concerns firstly the existence of variation in the compliance with the European directives despite similarly problematic starting points. Moreover, extending the time-frame of analysis to the CEE post-Accession period, the dissertation aims as well to explore the mechanisms that supported the already superior performance of Hungary, leading to achievement of sustainability, against the poor performance of Poland stalled at a non-compliance stage also in the post-Accession period.

Hence, I have defined the key concepts. In doing so, I have particularly referred to two concepts which have been used in the literature to delineate the process of adoption of EU directives at the national level. Scholars have considered the concepts of "implementation" and "compliance" as different but linked aspects of said adoption: the former pertaining to *process* and the latter pertaining to *conformity* with the legislation. Retaining both aspects, I have fused these concepts arriving at *implementation compliance.* In order to operationalise and measure this concept, I have made references to relevant EU legislation in the waste sector and selected three directives regulating the management and treatment of municipal and packaging waste; namely, the Waste Framework Directive, the Packaging and Packaging Waste Directive and the Landfill Directive. Moreover, I defined two dimensions related to municipal waste management and packaging waste management and created visualisations of various stages of the process for achieving sustainable

compliance within the two dimensions.

Operating within this framework, I presented the respective performances of Hungary and Poland in regard to the process of achieving sustainable compliance in the municipal waste management and packaging waste management dimensions. In both cases, Hungary and Poland started off from different, yet similarly non-compliant stages. I demonstrate how, from the perspective of achieving sustainable implementation compliance, the final positions of both countries show a strong divergence with Hungary having achieved full sustainable compliance and Poland still failing to break through the sustainability threshold.

Chapter 2
The theoretical framework for analysing variation in sustainable compliance

Many theoretical approaches have been used to investigate rule compliance among EU Member States. Theorising different mechanisms for the delegation of power to the supranational European institutions, inter-governmentalists, neo-functionalists and social constructivists have similarly considered the compliance with European rules as “a matter of state choice” (Haas, 1998). The centrality of the state and the preference of state actors have also characterised the theoretical approaches focusing on compliance and on the effects of the European Union on its members. Compliance managerial and enforcement as well as Europeanisation researchers have scrutinised domestic capacity, administrative traditions and preferences of state actors in an effort to explain difference in the performance among EU Members. Similarly, governance researchers have pointed to different mechanisms of “coercive and voluntary transfer” of policy to which governments “may respond” (Holzinger and Knill, 2007, p. 779). Furthermore, conditionality researchers have considered the European 'rewards' that state actors of the CEE candidate countries could achieve by complying with EU legislation. Moreover, constructivists have analysed socialisation processes in which state actors were persuaded by external actors on compliance or simply emulated existing compliance best-practices.

This dissertation analyses the implementation compliance of Hungary and Poland in the decade between 1999 and 2009. The extension of the time-frame of analysis from previous analyses on CEE countries allows me to introduce the concept of 'sustainable compliance'. Recent studies on the CEE post-Accession and EU monitoring reports have shown the fears of compliance backslide to be unfounded, and that in some cases the new CEE Member States have performed even better than the older ones. Hence, going beyond the conditionality argument on the CEE candidate countries, this dissertation explores the mechanisms which sustained the implementation compliance of the CEE countries in the post-Accession period. The EU monitoring reports analysed in the previous chapter, however, also emphasised the existence of differences in the process of achieving sustainable compliance of Hungary and Poland in the post-Accession period. Hence, this dissertation also

aims at understanding which factors may have influenced such variation. In doing so, I have explored theories on the demand-side, and particularly on those stakeholders such as firms, non-governmental organisations, experts and local authorities who may decide to press for compliance. In particular, the analysis focuses on mechanisms arising from the market, from the domestic policy-making and implementation cooperation and from the external assistance which may (or may not) have made compliance profitable for these stakeholders and sustained the post-Accession compliance.

The chapter is then structured as follows: in the first section, I review the supply-side approaches to compliance and elaborate four alternative explanations to variation in sustainable compliance that point to differences in existing domestic administrative limitations, external incentives and threats, preferences of state actors, socialisation and learning process. I also discuss the limits of these approaches when applied to the analysis of the performances of Hungary and Poland regarding the implementation compliance with European directives. Then, in the second section, I begin with a presentation of the demand-side theories and introduce the theoretical frame, as well as the three hypotheses related to the existence of market incentives, pre-existing cooperative strategies and assistance alliances.

2.1 The supply-side approaches: alternative explanations to variation in sustainable compliance

Variation in compliance of EU members has been seen mostly through the prism of supply-side explanations, with a focus on those state actors and incumbents with the power to decide whether or not to supply the institutional change necessary for rule compliance. Since the 1960s, IR theories have debated the process of European integration as the result of decisions taken by national governments. For inter-governmentalists, state actors controlled the integration process and delegated limited authority to supranational institutions to achieve specific policy goals (Marks et al., 1996) and only for those issues considered important for the national governments (Puchala, 1999; Sandholtz and Stone Sweet, 1998; Rosamond, 2000; Wiener et al., 2004; Cremona, 2012). For neo-functionalists, national governments delegated their authority to European institutions to achieve better outcomes for their own interests (Cini, 2006). For social constructivists, governments' choice of compliance was

guided by "socially generated convictions and understandings" and "consensual knowledge" (Haas, 1998) which made compliance an "internalised obligation" (Cremona, 2012).

Following the idea of compliance as a rational or internalised choice, European integration theories have analysed under which conditions states decide to comply with rules and why there are observed differences in the performances of EU Members. These approaches have centred on four main elements: a) domestic pre-existing administrative capacity and traditions, b) European incentives and threats, c) stakeholders' cost-benefit ratio and d) transnational communication processes. These four notions constitute the alternative explanations considered in this dissertation as against the three hypotheses derived from demand-side approaches.

2.1.1 Similarity in pre-existing capacity and administrative traditions

Different approaches have highlighted how pre-existing institutional settings, administrative capacity and traditions attached to them matter for the compliance with European policies at domestic level. Europeanisation researchers pointed to the degree of compatibility between European and national legislation, administrative capacity and institutional settings to explain variation in compliance among EU members. These scholars considered that compliance with EU rules was likely when national rules, policies and processes had a high degree of similarity (or "goodness of fit") with the European ones. In particular, they hypothesised that, at the beginning of the process of approximation with the EU rules, the initial degree of "fit[36]" determined the extent to which domestic institutions had to change in order to comply with the EU rules and policies (Green Cowles et al., 2001). Therefore, the higher the incompatibility and distance between the EU processes, policies and institutions and the Members' processes, policies and institutions, the higher the changes needed at domestic level to comply with the EU rules and policies and the higher the expected implementation

[36] Over the years, scholars have focused on the existence of policy (Héritier et al., 1996; Börzel et al., 2000; Börzel, 2000 and 2003) and institutional misfits (Börzel, 1999; Knill and Lenschow, 2000; Knill, 2001; Knill and Lenschow, 2001) to explain the impact of Europeanisation at domestic level (Duina 1997 and 1999; Green Cowles et al., 2001). In particular, the concept of 'policy fit' has been operationalised to look at the distance between the EU and domestic rules and practices that affect also policy goals, regulatory standards, instruments and problem-solving approaches while for the 'institutional fit' it has been considered the distance between EU and national administrative structures and the collective understandings or traditions linked to them (Börzel, 2000).

problems at domestic level (Duina, 1997 and 1999; Duina and Blithe, 1999; Knill and Lenschow, 1998 and 2000; Börzel et al., 2000; Green Cowles et al., 2001).

In the same vein of the "goodness of fit" argument, researchers of the compliance managerial approach specified that states had a general propensity to comply but in presence of domestic financial, administrative or technical capacity weaknesses they would not be able to adhere to the EU requirements (Young, 1992; Haas, Keohane and Levy, 1993; Mitchell, 1994; Chayes and Chayes, 1993 and 1995; Keohane and Levy, 1996; Chayes, Chayes and Mitchell, 1998; Levy, Keohane and Haas, 1993; Jacobson and Brown Weiss, 1998; Sissenich, 2005, 2007, 2008; Dimitrova, 2002; Curtin and Van Ooik, 2000; Mbaye, 2001; Berglund et al., 2006; Hille and Knill, 2006; Kaeding, 2006; Haverland and Romeijn, 2007; Linos, 2007; Perkins and Neumayer, 2007; Toshkov, 2007; Berglung, 2009; Knill and Tosun, 2009; Börzel et al., 2010 and 2012; Konig and Mader, 2013; Spendzharova and Versluis, 2013; Trauner, 2009; Jensen, 2007; Hartlapp, 2014). The presence of high capacity limitations would then result in high adjustment costs and in low conformity with the EU legislation. In other words, the capacity limitations of a country would increase the distance between the EU legislation and its domestic compliance.

Similarly to Europeanisation and managerial compliance approaches, researchers of governance highlighted the importance of similarity between the European and domestic administrative structure and traditions to overcome bureaucracy resistance. In particular, when looking at the modes of policy convergence, researchers hypothesised the mechanism of policy coercion which considered European legislation as legally binding and left little room for discretion to the administrative bureaucracy. Nevertheless, Knill and Lenschow (2005a and 2005b) highlight how "the EU policy often assumes a given administrative model with the effect that national bureaucracies face a double challenge of adaptation" (Knill and Lenschow, 2005b, p. 116). Hence, they emphasised that the typical "rationality of national bureaucracy" to react to this mechanism is to "protect traditional structures" (Knill and Lenschow, 2005a, p. 585) by meeting "policy obligations while minimising changes to existing regulatory styles and structures" (Knill and Lenschow, 2005a, p. 590). In other words, bureaucracies put forward a strong resistance against full policy convergence when "coercive EU measures [..] are in contradiction with deeply entrenched national administrative traditions" so that the institutional changes "are generally restricted to incremental and piecemeal adjustments" (Knill and Lenschow, 2005a, p. 591).

Based on the three theoretical approaches above-mentioned, the following hypothesis on similarity in the pre-existing domestic capacity and administrative traditions can thus be defined:

Hypothesis on pre-existing administrative capacity and traditions similarity

The likelihood of implementation compliance increases, if domestic administrative capacity and traditions are similar to the EU policy administrative model.

To measure the degree of pre-existing administrative capacity and traditions of Hungary and Poland, I rely on the data contained in the monitoring reports released by the EU Commission over the decade considered (1999-2009). These documents[37] contain information on Hungary and Poland's environmental administrative capacity and infrastructures i.e. numbers of staff, division of competences and funds available to the Ministry of Environment and the Environmental Inspectorate (at national and regional levels). The reports, however, show similar administrative capacity and traditions of Hungary and Poland for the decade under consideration and with no difference between pre- and post-Accession periods.

Since the first European documents analysing and screening the starting environmental situation of Hungary and Poland, the administrative capacity and traditions of these two countries appear similar. The Commission Opinion for Hungary (1997) emphasised the low level of environmental investments in terms of share of GDP in comparison to the European average and the "limited availability of public funds for environmental improvements" (p. 91). Furthermore, it emphasised the need of "[M]ore efforts [...] in implementing and enforcing environmental policies, especially in relation to supervision and enforcement structures" (p. 92), a better coordination between the Ministry of Environment and the enforcement bodies at national and regional level as well as "greater financial and human resources" (p. 111). Similarly, the Commission Opinion for Poland (1997) highlighted a drop in the amounts of financial resources for protection of the environment as well as the need of a strengthening of administrative capacity which was considered as "understaffed at the policy level but overstaffed at the level of routine administration" and of "poor quality" (p. 105). Moreover, the Screening Report for Hungary on the Environment Chapter (1999)

[37] For the pre-Accession period, I consider the information contained in the 1997 Opinion on the readiness of the CEE countries for Accession, the 1999 Screening Reports and the Annual Monitoring Reports (1999-2003) released by the European Commission. For the post-Accession period, I rely on the data contained in the Environmental Performance Reviews of Hungary and Poland prepared by the OECD in 2008 and 2015.

showed coordination problems between Ministries in charge of environmental competences and between different implementing authorities as well as the need of additional staff and investments for the waste sector. Similarly, the Screening Report for Poland (1999) highlighted fragmentation in the division of environmental competences between the Ministry of Environment and the regional and local authorities in charge of the implementation of environmental measures as well as the need to increase the environmental investments.

Similar weaknesses in the administrative capacity of Hungary and Poland were also emphasised in the Annual Reports for the years 2000, 2001 and 2002. In 2000, the Hungarian Report highlighted persisting coordination problems between ministries on environmental issues as well as the need for a revision of the structures and responsibilities of the Regional Inspectorates and the training of their staff. Similarly, the Polish Report discussed coordination problems as well as the need of strengthening the monitoring capacity and of training staff on environmental legislation. The 2001 Hungarian Report showed an improvement in the number of staff in the Ministry of Environment and increased environmental investments, but it also emphasised persisting problems in the coordination of environmental tasks in the Ministry of Environment and Inspectorates. Similar problems of coordination between central and regional levels were highlighted in the 2001 Polish Report. The 2002 Hungarian Report showed still unsatisfactory levels of staff together with a need for further training and equipment. Problems in the administrative capacity to implement the EU environmental *acquis* was also emphasised in the 2002 Polish Report in terms of investments, environmental staff and staff resources.

The availability of detailed post-Accession data on the environmental administrative capacity of Hungary and Poland is difficult. However, OECD reports on the environmental performances of Hungary and Poland released in 2008 (for Hungary) and 2015 (for Poland) highlight some persisting administrative weaknesses in both countries. In particular, the 2008 Report (which monitored Hungary in the period 2000-2008) showed that Hungary still experienced financial and human resource shortage in the monitoring and enforcement capacity of inspectorates. Moreover, the environmental financing (also from EU sources) was not always adequate to implement new legislation (OECD Environmental Performance Review for Hungary, 2008, pp. 16-17). The 2015 Report (which monitored Poland in the period 2003-2015) emphasised that Poland had to strengthen the environmental compliance promotion by upgrading the supporting monitoring and analytical equipment, further strengthen the cooperation between national and regional inspectorates and simplify and

streamline the environmental governance system (OECD Environmental Performance Review for Poland, 2015, pp. 44-46).

The monitoring reports then show the presence of similar weaknesses in the administrative capacity, financial capabilities and traditions for both Hungary and Poland which persist in the overall period considered. However, while they emphasise an administrative similarity, they also reveal a variation in their compliance performances with Hungary fully implementing the EU waste requirements and sustaining its compliance while Poland only partially implementing them. Considering the lack of difference in this variable between the two cases under consideration, I therefore have to reject (and not test with process-tracing methodology) the hypothesis that difference in administrative capacity could be a factor explaining the observed variation in implementation compliance and in its sustainability.

2.1.2. European threats and incentives to compliance

Governance scholars have analysed the use of resources as incentives or penalties to compliance. They then defined the mechanism of 'imposition' ('coercive isomorphism' for DiMaggio and Powell, 1991) resulting from pressures exerted on organisations by other organisations "that control critical resources" (Knill and Holzinger, 2005, p. 780 quoting Guler et al., 2002, p. 212). On the one hand, the 'imposition' was linked to asymmetries of power between countries or institutions due to a resource interdependency between organisations or among countries. On the other hand, it was linked to conditionality for accession set forth by financial institutions such as the World Bank or the International Monetary Fund. This latter mechanism implied exchanging compliance with determined conditions for loans or other economic resources (Meseguer Yebra, 2003; Dolowitz and Marsh, 1996 as quoted by Knill and Holzinger, 2005, p. 780).

Following a similar perspective, the conditionality approach referred to the metaphor of the 'carrot' and the 'stick' to explain the role played by EU conditionality in the process of EU law harmonisation in the candidates from Central and Eastern Europe (Grabbe and Hughes, 1998; Grabbe, 1999; Grabbe, 2002; Kelley, 2004). In particular, scholars of such approach theorised the mechanism of "compliance by rewards" according to which states

achieved rewards upon the fulfilment of compliance. In other words, the EU had made compliance with its rules the condition for EU political (e.g. EU Membership) and economic rewards (e.g. EU funds and commercial treaties); still, the access to such rewards was granted to candidate countries only if they fulfilled the condition. Otherwise, EU rewards were withheld (Schimmelfennig and Sedelmeier, 2005). Furthermore, some researchers also feared that once candidates have achieved the EU rewards, compliance with EU rules would deteriorate and backslide (Grabbe, 2006; Pollack, 2009; Epstein and Sedelmeier, 2008; Sasse, 2008).

Based on the above-mentioned approaches which recognise the role played by threats and by incentives to compliance set by supranational institutions, the following hypothesis can be defined:

Hypothesis on European threats and incentives to compliance

The likelihood of implementation increases with high incentives and threats to compliance set by European institutions.

The focus of this alternative explanation is on the incentives and threats defined by the EU institutions to enhance compliance in its member/candidate countries. When considering the EU incentives to compliance, studies on the CEE Enlargement have primarily focused on the EU membership (for a review, see Cini et al., 2006). However, the mere provision of "EU membership" appears powerless to properly explain post-Accession compliance performance of CEE countries. In fact, with the EU Accession, the incentive of membership (and the threat of non-membership) no longer plays a role in influencing compliance in the CEE countries. Moreover, the European Monitoring Reports for the post-Accession period as well as recent studies have shown not only that the good performance of the CEE countries has maintained after their accession to the EU, but also that the CEE countries have "generally performed far better than the old member states" (Sedelmeier, 2008, p. 822) thus demonstrating that the EU concerns of a rising "Eastern problem" have been "unfounded" (Sedelmeier, 2008, p. 822). Schimmelfenning and Sedelmeier (2005) have also defined as EU incentives to the CEE countries' compliance the provision of EU financial assistance and institutional ties through trade and cooperation agreements. Similarly, Pollack (2009) argued that some studies on the CEE post-Accession period have suggested that the lack of compliance backslide could be

explained by the fact that “the EU retains considerable post-enlargement sources of leverage vis-à-vis the new members, particularly when it comes to the continued importance of EU funding” (Pollack, 2009, p. 250).

Nevertheless, in-depth interviews with Commission's officials held in Brussels revealed that in the pre-Accession period the access to the EU funding was not considered as an incentive to compliance but rather as an important aid to fulfil the conditions (interviews 1; 72). A Commission's official recognised that “without that money” the CEE countries would have hardly approximated with the EU environmental *acquis* in the pre-Accession period (interview 1), therefore, rather than an incentive, the EU funding has been an aid mechanism to achieve compliance. Similarly, Commission's officials recognised that the access to the EU Structural and Cohesion funds can be equally considered an aid to compliance for the post-Accession period (interviews 33; 30; 73; 76). Researchers focusing on the post-Accession have also considered the 'sanctioning' role played by the withholding of the EU funds in the CEE countries after their Accession to the EU (Pollack, 2009). However, while the 'freeze' in EU funding was effectively put in practice by the EU against Bulgaria (for details, see Trauner, 2009; Dimitrova and Toshkov, 2009), interviews with Commission's officials highlighted that such leverage was never used against Hungary and Poland in the decade under examination (interviews 28; 33; 30; 73; 76).

When considering the EU compliance threats, conditionality researchers recognise that the “pre-Accession alignment was largely underpinned by the conditional incentive of membership” (Sedelmeier, 2008, p. 810) and non-membership was considered the main threat. In the pre-Accession period, the membership incentive and non-membership threat, however, were the same for Hungary and Poland. However, in the post-accession period, the “rationalist perspective would expect the likelihood of continued post-accession compliance to vary […] according to the extent to which the EU is able to sanction (non)compliance” (Epstein and Sedelmeier, 2008, p. 797). In fact, in the post-Accession period, the CEE new Member States are subject to the infringement procedures of the ECJ which is entitled to “ultimately impose financial sanctions on members that infringe EU law: a lump sum payment and/or daily penalty payments until compliance with the ECJ decision is achieved (according to the severity of the infringement and the capacity of the member state to pay)” (Sedelmeier, 2008, p. 810).

Nevertheless, information from interviews held in Brussels reveal weaknesses in the effective “deterrent role” of the ECJ infringement procedure considered to be an extremely

long process[38] (interviews 92; 93). Additionally, interviews held in Hungary and Poland reveal that the long process of detecting infringements has negatively influenced the sanctioning role of this procedure which has then been considered as not sufficient to effect compliance (interviews 17; 44). Moreover, the disclosure of a breach in the EU legislation at EU level has resulted in the common practice adopted by the Commission of resolving the problem during the bargaining negotiations phase between Commission and non-compliant Member States in order to avoid the ECJ infringement procedure considered "long and ineffective until it arrives in Court where a Member State is condemned and has to pay fines" (interview 92). Furthermore, recent studies on post-Accession have shown that the CEE new Member States 'outperformed' their EU-15 counterparts with none or early settled infringement procedures (for example, see Sedelmeier, 2008; Sedelmeier, 2009; Schimmelfennig and Trauner, 2009).

As demonstrated above, information derived from studies and interviews shows the presence of similar EU incentives and threats for both Hungary and Poland. Moreover, despite changes in the incentive/sanctions structure from pre- to post-Accession as discussed in studies focusing on the CEE countries compliance, available data does not show differences in the effectively applied EU incentives and sanctions between the two countries under examination. However, despite the lack of such differences, EU monitoring reports highlight a variation in the compliance performances of Hungary and Poland. Considering the similar European incentives and threats between the two cases, I have to reject (and not test with process-tracing methodology) the hypothesis that differences in EU incentives and sanctions could be a factor explaining the observed variation in implementation compliance and in its sustainability.

[38] The ECJ infringement procedure consists of a pre-referral bargaining phase between the Commission and the non-compliant EU Member State. In the specific, after detecting a compliance problem, the Commission sends a letter and asks explanations to which the Member State has to reply agreeing or disagreeing with the points raised by Commission. If the Commission still detects problems then sends the letter of formal notice officially asking for explanations and for the correction of the problem. If after this official document the Commission "still thinks there is a problem" it the addresses the ECJ which only then imposes financial penalties (interview 92).

2.1.3 Transnational communication

As mentioned earlier, IR social constructivists explored the emergence of collective understandings and identities and the role played by the process of EU integration in affecting discursive and behavioural practices of the Member States (Wiener et al., 2004; Rosamond, 2006). According to social constructivists, ideas were then conceived as socially embedded and represented shared reference points while norms and social knowledge were constitutive of actors' identities (Cini et al., 2006); it was, in fact, through the internalisation of the norms that actors acquired their identities and established their interests (Rosamond, 2006). Moreover, it has been recognised that "the constructivist value added should be to explore complex social learning, a process whereby agent interests and identities are shaped through and during interaction" (Checkel, 2001, p. 561). Hence, researchers adopting a constructivist approach hypothesised that the internalisation of international norms by the political elites and implementers would positively influence compliance.

Constructivist approaches particularly "hint at processes of persuasion, deliberation, and argumentation as the micromechanisms driving social learning" (Checkel, 2001, p. 561). Risse (2000) and Checkel (2000 and 2001) highlight the argumentative character of persuasion. According to Risse (2000), "arguing implies that actors try to challenge the validity claims inherent in any causal or normative statement and to seek a communicative consensus about their understanding of a situation as well as justifications for the principles and norms guiding their action" (Risse, 2000, p. 7). Checkel (2001) refers to the role of social interaction in which "collective learning, internalization, and persuasion" are the dynamics producing compliance which occurs "through a redefinition of interests that takes place during the process of interaction itself" (Checkel, 2001, p. 556). He then defines 'argumentative persuasion' as "an activity or process in which a communicator attempts to induce a change in the belief, attitude, or behavior of another person ... through the transmission of a message in a context in which the persuadee has some degree of free choice" (Checkel, 2001, p. 562). Hartlapp (2007) categorises 'deliberation' as part of the persuasion approach and, referring to the work of Neyer and Zürn (2001), she argues that "a greater degree of political interaction leads to a higher political, legal and societal internalisation of rules" (Hartlapp, 2007, p. 657).

Furthermore, scholars have focused on the dimension of 'policy learning' and the circumstances under which programmes could be transferred from one place to another (Haas, 1990; Rose, 1991; Sabatier and Jenkins-Smith, 1993; Levy, 1994). Exploring these circumstances, researchers defined ‘lesson-drawing’ as the “voluntaristic process whereby government A learns from government B's solution to a common problem” (Holzinger and Knill, 2005, p. 783 quoting Rose, 1991). Within these studies, particular emphasis has been given to the epistemic communities which, working as informal networks, linked together experts at different levels (Haas, 1990; Rose, 1991). Europeanisation scholars further hypothesised the role of norm entrepreneurs towards domestic change by affecting the internalization of EU policies, ideas and collective understandings on the EU norms (Green Cowles et al., 2001; Börzel and Risse, 2000; Héritier et al., 2001). In particular, Börzel and Risse (2000) identified as norm entrepreneurs the epistemic communities whose supply of knowledge influenced domestic change. Epistemic communities have then been defined as “knowledge-oriented work communities in which cultural standards and social arrangements interpenetrate around a primary commitment to epistemic criteria in knowledge production and application” (Holzner and Marx, 1979).

Furthermore, researchers have analysed different forms of knowledge transfer. While they considered the copying or mimic of existing policies as a direct and complete transfer (Schimmelfennig and Sedelmeier, 2005), they also recognised that knowledge transfer on new programmes “can take many different forms” (Holzinger and Knill, 2005, p. 783). In particular, as Knill and Lenschow (2005) emphasised, there are two objectives at the heart of the policy transfer: “the stimulation of information exchange and mutual learning between national policy-makers and the development and promotion of innovative regulatory models or concepts – best practice – to be applied in the Member States” (Knill and Lenschow, 2005, p. 587). Scholars often refer to the mechanism of emulation of institutional models in relation to the two objectives of policy transfer. Policy emulation “requires agents looking for institutional designs outside their own realm to solve certain problems or to mimic the behaviour of their peers” (Börzel and Risse, 2012, p. 9). This mechanism is of “voluntary nature” and “policy suggestions leave broad leeway for interpretation and adjustment to domestic conditions” (Knill and Lenschow, 2005, p. 587). However, the “embeddedness of national bureaucrats and policy-makers in transnational expert networks implies [..] that these actors can observe and learn from developments in other countries” but they also “are 'observed' by their counterparts i.e. They have to demonstrate the quality and legitimacy of their concepts vis-a-vis external actors” (Knill and Lenschow, 2005, p. 588).

Despite the fact that persuasion and emulation may be considered as single mechanisms and hence may be separately theorised (for example, see Schimmelfennig and Sedelmeier, 2005), scholars have also recognised similarities between them (Holzinger and Knill, 2005; Börzel and Risse, 2012). In particular, Holzinger and Knill (2005) summarise under the term 'transnational communication' these "different but related mechanisms" emphasising that they share the similar characteristic of "information exchange and communication". Therefore, these scholars predict that their theoretical expectations on policy convergence "are rather similar" (Holzinger and Knill, 2005, p. 783). Based on the common element of information exchange and communication, the following hypothesis can be defined:

Hypothesis on transnational communication

The likelihood of implementation compliance increases with information exchange and communication between international and domestic actors.

The concept of transnational communication implies both the promotion of international ideas by providing an authoritative model through information exchange in peer-reviews and learning from best practices, and the promotion of ideas as legitimate/true through reason-giving and argumentative persuasion (Börzel and Risse, 2009). Researchers recognised that mechanisms related to social constructivism constitute "the most prominent alternative to rationalist explanations of conditionality" for the CEE compliance in the pre-Accession period (Schimmelfennig and Sedelmeier, 2005, p. 18 quoting the works of Checkel, 2000 and Kahler, 1992). Interviews with Commission's officials involved in the Accession process of Hungary and Poland, in fact, reveal that the Accession negotiations have also been characterised for being a "knowledge-based activity" (interview 48). Beside the Commission's close monitoring of the CEE candidates' EU legislation approximation, the EU established specific twinning, peer-reviews and exchange of best-practices between officials of CEE candidate countries and Member States as well as the arrangement of country visits (interviews 1; 48; 47; 72). However, scholars found that constructivist explanations played only a limited role in influencing the CEE candidates' pre-Accession compliance performance in comparison to incentive-based explanations (Schimmelfennig and Sedelmeier, 2005; but see also Kelley, 2004).

Although it has been recognised that conditionality "might have been highly effective in prompting pre-accession rule adoption" it was also emphasised that it "is much less so when it comes to sustained post-accession compliance" (Sedelmeier, 2008, p. 811). Epstein and Sedelmeier (2008) further suggested that the "the mixed [compliance] record of the incentive-based approach after enlargement should encourage us to revisit those original findings to assess the explanatory power of competing approaches" (Epstein and Sedelmeier, 2008, p. 802). They recognised that "the uneven legitimacy of IOs, the social context, persuasion and socialization could have been a bigger part of the story than is often recognized because of the methodological difficulty of separating incentives from social forces" (Epstein and Sedelmeier, 2008, p. 802). Therefore, they argued that "post-accession could be a more favourable context for observing alternative mechanisms, as they are no longer crowded out by overwhelming incentives" (Epstein and Sedelmeier, 2008, 803).

A number of post-Accession studies have then analysed the role that socialisation and learning mechanisms might have played in explaining the CEE compliance performances in the post-Accession period. Empirical findings from studies on post-Accession compliance in the CEE countries particularly suggest that socialization and learning differently influence compliance in these countries (for an early analysis on variation in emulation outcomes in the CEE countries before Accession, see also Jacoby, 2004). For example, Epstein (2008) focused on the existence of "a narrow social context" which "affords international institutions the power to assign particular meanings to policies" (Epstein, 2008, p. 895). Therefore, with the presence of a specific social context "international actors were able to orchestrate a shift in which domestic actors, who began the transition believing that protecting domestic ownership was rational and desirable, ended up embracing policies premised entirely on the efficiency of financial institutions, regardless of power considerations" (Epstein, 2008; p. 895). Contrariwise, Sasse (2008) argued that "through a change in attitudes or behaviour" socialization can 'lock in' bigger structural problems (Sasse, 2008, p. 856). Additionally, following Jacoby's argument on the link between the openness of the policymaking process and social-learning mechanisms (Jacoby, 2005), Kriszan (2009) recognised the role of social-learning in the enforcement of equality policies in Hungary. Similarly to the empirical findings of these studies, interviews with Commission's officials as well as interviews with members of transnational networks reveal that Hungary and Poland have differently carried out EU knowledge-based and capacity-building projects (interviews 40; 8; 57; 58; 28; 16; 32) as well as being differently engaged in information exchange practices (interviews 4; 5; 34; 42; 52; 11).

In summary, information from studies and interviews show that transnational communication (which includes information exchange and persuasion initiatives) towards Hungary and Poland have differently impacted these two countries. Considering the variation in this variable, I therefore include this variable in the in-depth analysis of the two cases and test it through the process-tracing methodology. In order to account for the role of the transnational communication in the compliance of Hungary and Poland, particular attention is given to the analysis of the knowledge-based and capacity-building projects promoted by the EU Commission and financed through PHARE, ISPA, Cohesion and Structural Funds. Furthermore, in the empirical chapters are also considered the initiatives promoted by European private and societal stakeholders to the Hungarian and Polish environmental NGOs and firms. The information has been primarily collected through in-depth interviews with policy officers in the Commission, representatives of the Brussels-based NGOs and industry lobbies as well as to Polish and Hungarian former or current government officials, business representatives and members of NGOs.

2.1.4 Stakeholders' adjustment cost/benefit ratio

Scholars of the regulatory approach considered the regulated entities as "rational economic actors that act to maximise profits" (Rechtschaffen, 1998). Therefore, according to cost-benefit calculations, they expected that the regulated entities complied with a given regulation "when the benefits of compliance exceed[ed] the costs of it" (Winter and May, 2001). Similarly to this approach, the compliance enforcement researchers stressed the role of the domestic incentive structure which influenced state actors' and politicians' rational cost-benefit calculations on compliance (Olson, 1965; Axelrod, 1984; Axelrod and Keohane; 1986; Yarbrough and Yarbrough, 1992; Bayard and Elliot, 1994; Downs, Roche and Barsoom, 1996; Dorn and Fulton, 1997; Maniokas, 2009; Trauner, 2009; Leiber, 2007). Thus, they emphasised that states' non-compliance performances derived from domestic cost-benefit calculations. Therefore, they expected that where costs outweighed benefits, that is, in presence of high costs of compliance and high benefits of shirking, domestic actors would have tried to avoid compliance. Studies highlighted that costs arising from the alignment with the EU *acquis* in the pre-Accession period would generally create high financial and administrative costs for the candidate countries (for example, see Schimmelfennig et al., 2003). Therefore, "the domestic disruption associated with the transfer of EU policy regimes

increased 'the likelihood of persistent compliance problems in key policy areas'" (Sedelmeier, 2008, p. 808 quoting Goetz 2005).

The problems arising from high domestic adjustment costs have also been analysed by researchers focusing on post-Accession compliance. In particular, scholars highlighted that the presence of high domestic costs of implementing EU legislation would "lead to deliberate 'cheating' at the implementation stage" (Sedelmeier, 2008, p. 808). In particular, researchers argued that problems arising from the alignment with the EU *acquis* in the pre-Accession period would generally create high financial and administrative costs for the CEE countries that could hamper "a durable influence of rules adopted during the pre-accession period" (Sedelmeier, 2008, p. 810). Hence, they expected the adherence to EU rules as "driven by rational cost-benefit calculations and [by] actors in pursuit of maximising their own power" (Trauner, 2009, p. 68 quoting Schimmelfennig and Sedelmeier 2004; Dimitrova 2002; Grabbe 2003; Vachudova 2005).

Based on the above-mentioned approaches, the following hypothesis can be defined:

Hypothesis on stakeholders' adjustment cost/benefit ratio

The likelihood of implementation compliance increases, if stakeholders perceive a high cost/benefit ratio.

Researchers of conditionality generally considered the domestic cost/benefit calculations as part of the "external incentives model" (Pollack, 2009) for the pre-Accession period[39]. However, as Schwellnus et al. (2009) specified, the "external incentives alone are therefore not sufficient to induce rule adoption – they also have to surpass domestic adoption costs" (Schwellnus et al., 2009, p. 128). This clarification then suggests a 'theoretical independence' of the role played by the domestic adaptational costs in the compliance performances of the CEE countries. A number of studies have then investigated the dimension of "costs". For example, Falkner (2003) considered 'costs' as "a crucial element of any estimation of misfit caused by EU regulation" and defined this variable as "the economic consequences of a required reform for the addressees on all levels" (Falkner, 2003, p. 4).

Testing this variable, researchers have looked at differences between CEE and

[39] For an analysis of the rationalist hypotheses on enlargement and a specification of the enlargement preferences of applicants and members in terms of costs and benefits, see Schimmelfennig and Sedelemeir, 2002.

European costs and found that in presence of high domestic costs, domestic state actors would not-comply with EU rules (for example, see Duina, 1997; Börzel, 2000; Jordan, 2004; Leiber, 2007). European and international documents reported the existence of high adaptational costs to approximate and adopt the EU environmental legislation in the CEE candidate countries. In particular, EU studies approximated the total costs of compliance with the European environmental legislation for all the CEE countries between one hundred and ten (110) and one hundred and twenty (120) billion ECU and annual costs estimated between eight and twelve (8-12) billion ECU (EU Report, 1998; Hager, 2002). Nevertheless, the Commission cautiously asserted that the exact amount of "these costs and their impact will depend on the timing of investments and the selection of most cost-effective policy measures" (Communication on Accession Strategies, 1998, p. 17). Furthermore, the World Bank estimated the costs of compliance with the EU waste requirements for Hungary and Poland: between 1.8 billion and 4.4 billion ECU for Hungary (World Bank, 1999) and between 2.5 billion and 4.4 billion US dollars for Poland (World Bank, 1999).

The helpfulness of domestic adaptational costs in explaining variation in compliance has also been tested in two recent studies addressing the sustained compliance of the CEE countries in the post-Accession period. In the analysis of the compliance performance of Lithuania in the transposition of EU directives, Maniokas (2009) argued that compliance enforcement explanations linked to the political will and cost-benefit calculations better explained post-Accession compliance (Maniokas, 2009). Moreover, Sedelmeier (2009) tested in a crisp-set QCA the role played by adaptational costs, favourable government attitudes and specialised NGOs in the implementation of the EU equality policy in four CEE countries after their accession to the EU. However, while he found that "the absence of high adjustment costs" and "the combination of strong social democratic governments and NGOs specialising in EU gender equality legislation" (Sedelmeier, 2009, p. 118) have a strong impact on compliance, he also argued that neither of the two variables "is sufficient by itself" to explain the CEE post-Accession compliance performances (Sedelmeier, 2009, p. 118).

European and international reports as well as recent post-Accession studies highlight limitations in the sole use of domestic "adaptational costs" to explain variation in implementation compliance. Despite differences in the exact amounts of the estimated environmental compliance costs between Hungary and Poland, both Commission and World Bank reports considered them to be similarly substantial and recommended to both countries to undertake "substantial investments" to achieve full-compliance (World Bank, 2000, p. 43), and reduce the time expected for the effective implementation of the measures (World Bank,

2000). Moreover, researchers looking at the "domestic adaptational costs" in the post-Accession period suggest that this variable in itself fails to sufficiently describe the CEE compliance performances in the post-Accession period. The mere focus on the "adaptational costs" then does not seem to provide a satisfactory explanation to the existing variation between Hungary and Poland.

In a recent study, however, Pollack (2009) specifically links the dimension of adaptational costs to benefits by arguing that "the adjustment costs of complying with a body of EU economic and social regulations designed primarily for western European countries could be considerable, creating the temptation to cheat once the overarching goal of membership had been achieved" (Pollack, 2009, p. 15). In other words, Pollack seems to suggest that despite the high costs, the benefits that domestic actors can get from supplying compliance with the EU rules may vary in the CEE countries. Following this view, Maniokas (2009) proposes that in "the absence of a strong EU pressure" in the post-Accession period, rational cost-benefit calculations may be assessed by coalition governments but also by "interest groups" whose role "is growing stronger" (Maniokas, 2009, p. 53). These calculations may well vary between Hungary and Poland where domestic actors may differently recognise benefits from becoming (or not) agents in the implementation of the EU legislation. I therefore include this variable in the in-depth analysis of the two cases and test it through the process-tracing methodology. To assess the rational calculations influencing (or not) the supply of rule compliance by domestic actors, I analyse the role played by stakeholders in domestic policy-making and implementation of municipal and packaging waste measures. I then rely on information from interviews with private and societal actors as well as the officials from the Ministries of Environment and Regional Development of Hungary and Poland.

2.2 The demand-side approach: the three hypotheses for variation in sustainable compliance

The focus of this thesis is to explain the variation in the implementation compliance and in its sustainability of Hungary and Poland. Supply-side explanations have analysed mechanisms that influenced the choice of domestic state actors and incumbents to supply compliance.

These explanations were developed to explain the CEE pre-Accession compliance performances such as the hypothesis elaborated by the conditionality approach on "rewards" upon the fulfilment of rule compliance or by managerial researchers on motivations for non-compliance linked to the presence of domestic administrative capacity weaknesses. These explanations, however, do not sufficiently grasp the variation in the performances of Hungary and Poland nor explain the good compliance of the CEE new Member States in absence of Accession conditionality. In order to uncover the motivations for variation in the sustainable compliance of Hungary and Poland, I build upon a recent article by Sedelmeier (2012) in which was introduced the concept of "institutional lock-in". In Sedelmeier's view, this occurred when the costly institutional changes introduced through the conditionality pre-Accession process were "locked in", thus influencing the sustainability of the institutional changes in the post-Accession period (Sedelmeier, 2012).

Building upon Sedelmeier, this dissertation further analyses the mechanisms that induced the pre-Accession compliance to be sustainable in the post-Accession period. Similar to Sedelmeier, who takes into account the works of North (1990), Pierson (1997 and 2000) and Streek and Thelen (2005) on the concept of institutional change and lock-in, this dissertation considers the theory of 'increasing returns' influencing compliance and specifically the sustainability of compliance in the post-Accession period. Unlike Sedelmeier, however, this thesis takes up the sustainability of compliance 'on the ground', meaning in the phase of domestic implementation of European directives. Hence, in order to consider the variation in the sustainable of Hungary and Poland, I explore explanations linked to the demand-side which scrutinise situations in which domestic stakeholders with the capacity to influence incumbents are, or become supporters of rule-taking.

Supply-side studies had already explored the role of societal actors in the policy-making process. The most prominent has been George Tsebelis who considered the role of veto players in understanding the logic of different institutional settings[40]. In his comparative study on the capacity for policy change within different institutional alternatives[41], he defined "veto players" as "any player who can block the adoption of a policy" and "whose agreement [...] is required for a change in policy" (Tsebelis, 1995, p. 301). Tsebelis argued that policy changes in a political system depends on three characteristics of veto players; namely on their

[40] Before Tsebelis, Arthur Benz pointed out the existence of veto points in supranational decision-making which may have influenced losses of decisional power or oppose the proposed policy (as cited in Héritier A., Policy-Making and Diversity in Europe: Escape From Deadlock, 1999).

[41] G. Tsebelis, Decision-making in Political systems: Veto players in Presidentialism, Parliamentarism, Multicameralism and Multipartitism, British Journal of Political Science, Vol., 25, No. 3, 1995.

number, their congruence and their cohesion. He hypothesised that these changes could be achieved when the number of veto players in a country was low and when the differences in their political positions and in their ideological and identity positions were also low (Tsebelis, 1995; Tsebelis, 2002). Following Tsebelis' veto players hypothesis, Europeanisation scholars further analysed the link between compliance and the number of veto players[42], having a say in the domestic policy-making process. These scholars consider the presence of multiple veto points within the political system of a country which could constrain the capacity to "foster domestic consensus or 'winning coalition' necessary to introduce institutional changes" (Green Cowles et al., 2001, p. 9). Implying a negative correlation between the number of domestic veto players and policy compliance, these scholars contend that a high number of these players could impede or slow down the capacity of domestic actors to achieve policy changes and reform a country (Börzel and Risse, 2000; Featherstone and Radaelli, 2003; Héritier et al., 2001; Green Cowles et al., 2001).

Contrariwise to the Europeanisation researchers' argument on veto players, a small number of works covering very different subjects have taken a different perspective on analysing domestic societal and private actors by considering their demands for compliance with externally-defined rules. Vachudova (2005) pointed to the EU traction on domestic political parties and its capacity to convince office-seeking opposition parties on the need of adopting pro-European platforms to defeat their opponents (Vachudova, 2005). Earlier also Innes (2002) explored the link between the rise of catch-all parties in the CEE and the EU enlargement process (Innes, 2002). Haughton (2007), in contrast, argued that the EU influence on domestic actors in the process of EU Accession of the CEE candidate countries has not been so pivotal (Haughton, 2007). Furthermore, analysing the emulation of Western organisational models in Meiji's Japan, Westney (1987) pointed out how domestic factors shaped the process of policy emulation which resulted in policy innovation from the original Western models. In her analysis, in fact, she emphasised how Japan's selection of Western models was linked to the image of the "rational shopper" (Westney, 1987, p. 19) and accomplished through a "selective emulation" process (Westney, 1987, p. 27) in which

[42] Researchers have debated on whether state or non-state actors had to be considered as veto players. Tsebelis, for example, while mentioning the existence of interest groups of specific policy areas or the army which could become powerful veto players (Tsebelis, 1995, p. 306), has also focused attention on institutional (i.e. president, chamber) and partisan (parties) veto players. Moreover, Knill (1998) discussed the domestic administration and administrative traditions as factors filtering implementation effectiveness (Knill, 1998). Héritier (1999) and Héritier et al. (2001) also distinguished between formal veto players proper of the political system and factual veto players such as the interest groups within specific policy areas (Héritier et al, 2001). Furthermore, Steunenberg (2007) and Dimitrova (2010) identified politicians and members of the administration as veto players (Steunenberg, 2007; Dimitrova, 2010).

domestic actors chose the features to adopt from the original model while not losing sight of the Japanese tradition and environment. Focusing on institutional transfers in post-Second World War Germany (East and West), Jacoby (2000) further developed Westney's argument on emulation by emphasising that policy transfers from abroad have been effective and persistant in driving institutional change when they were "'pulled in' by social actors rather than decreed by policymakers alone", and "must be embraced by domestic actors" even when they were initiated by the policy elites (Jacoby, 2000, p. 15).

Demand-side approaches then analysed the role of domestic actors in "pulling in" the adoption and implementation of externally-defined rules. Tanja Börzel (2000) elaborated the "push-and-pull" model with a "pull" factor arising from below and a "push" factor from above. In particular, she specified that domestic NGOs could "pull" for the adaptation of the European legislation[43] by mobilising the public opinion or by being "watchdogs" of the implementation of the EU rules while the Commission could "push" for adaptation through the opening of infringement procedures for non-compliance. Hence, when public authorities were "sandwiched" between these two factors, Börzel recognised that "EU environmental policies have a good chance of being implemented more effectively, even if implementation involves high costs owing to policy misfit" (Börzel, 2000, p. 148).

Despite the possibility of a "pull" from NGOs which could act as "watchdogs" or mobilise the population on specific issues as specified by Börzel, scholars analysing CEE societal non-state actors have considered them as weak and characterised by "low levels of organisational membership and participation by ordinary citizens" (Howard, 2002; Howard, 2003). Moreover, individual-level surveys have also shown a general low level of political participation and environmental activism in the CEE region (Gerhards and Lengfeld, 2008 as quoted in Börzel and Buzogány, 2010, p. 166). When focusing specifically on environmental NGOs in the CEE countries researchers have also recognised that the involvement of the CEE green NGOs in European pre-Accession twinning and knowledge-based programmes or in the financial and technical assistance within the European aid programme PHARE, the Instrument for Structural Policies for Pre-Accession (hereafter, ISPA) and the Special accession Programme for Agriculture and Rural Development (hereafter, SAPARD) have been mostly "top-down" (Börzel and Buzogány, 2010a). Moreover, they noted that the empowerment of NGOs by the EU did not automatically correspond to "sustainable cooperative state-society relations" (Börzel and Buzogány, 2010a, p. 728) and that the weak

[43] In her paper, Börzel also refer to the "pull" enacted by political parties raising concern on the proper implementation (Börzel, 2003, p. 148)

capacities of state and non-state actors in these countries often prevented them from "pooling resources to make EU policies work" (Börzel and Buzogány, 2010b, p.159).

A number of studies, however, have challenged the assumptions of "dormant" societal and private non-state actors in the CEE countries. For instance, recent works have reviewed the idea of including CEE civil society organisations as partners in public governance (Gasior-Niemiec, 2010; Pleines, 2010). Moreover, Börzel and Buzogány (2010), analysing the role of CEE environmental NGOs in the promotion of European legislation, have stressed how EU accession has empowered these actors by fostering their role as "policy facilitators, consultants and lobbyists of government" (Börzel and Buzogány, 2010a, p. 728). Furthermore, adopting Europeanisation and political economy theories and challenging the current focus of the enlargement literature on intergovernmental cooperation, Andonova has underscored the role of European integration on domestic economic actors and representatives from the private sector (Andonova, 2004). In a co-authored paper, she has also recently investigated the role of environmental transnational networks in strengthening the capacity and the interests of societal and private non-state actors in countries with weak administrative capacity (Andonova and Tuta, 2014). Similarly, Langbein (2015) has uncovered the role of domestic and foreign firms in the process of EU policy convergence in Ukraine (Langbein, 2015).

Building upon these works, this dissertation analyses the role played by domestic and foreign actors operating in the CEE countries during the 'implementation on the ground' phase. I then identify a range of stakeholders of the municipal waste and packaging waste management dimensions and specifically three categories: (1) business actors and their associations or lobbies (for the municipal waste dimension: private national or foreign and municipal waste collecting companies while for the packaging waste dimension: packaging producers and fillers and recovery organisations) (2) environmental NGOs; and (3) the municipalities and local authorities and the regional authorities. By analysing this wide range of stakeholders, the thesis focuses not only on state actors' preferences but also on those of societal and private actors who, when recognising the existence of 'increasing returns' from compliance with the three European waste directives, may decide to sustain implementation compliance domestically.

The first hypothesis considers those stakeholders who, in the presence of specific incentives arising from the market, might have demanded or sustained compliance with the EU requirements. Taking into account that the environmental NGOs of the CEE countries might have been weak in demanding compliance with EU requirements, this hypothesis

spotlights private stakeholders who may have demanded and sustained compliance with EU requirements. The hypothesis contrasts two market mechanisms which see either domestic firms such as waste collecting companies and recovery organisations, or foreign and multinational firms penetrating the Hungarian and Polish less-regulated-markets. The underlying assumption is that firms recognise the competitive advantage of complying with the EU rules when their preferences converge. In order to have converging preferences, firms, which are profit-oriented, must recognise compliance as the only possible way to make profits in that policy area.

The second hypothesis explores the style of policy-making and policy-implementation set up in Hungary and Poland which may be linked to two strategies pursued by societal and private actors: they could achieve their own interests, or they could seek to achieve common interests by cooperating with the other involved actors (including state actors). The actors linked to this hypothesis are waste-collecting firms (domestic and foreign), recovery organisations, NGOs, municipalities/local authorities as well as officials from the relevant Ministries and the Parliament. The hypothesis states that cooperative strategies pursued in the policy-making and implementation of EU waste requirements enhance their compliance. The underlying assumption linked to this hypothesis is that the government will adopt the European legislation and this will imply costs for domestic state and non-state actors. Keeping this in mind, it is then expected that domestic actors will follow strategies for the sharing of the compliance costs through cooperation.

The third hypothesis considers the involvement of domestic actors in external assistance projects, and the impact of such involvement in fostering domestic compliance with EU rules. When analysing the adoption of externally defined rules, it is important to remember that external and domestic dimensions are intertwined, as rules are set by external - EU - actors, but domestic actors are in charge of their implementation. In this dissertation, then, external assistance is not understood *stricto sensu* but always in relation to domestic actors because, quoting Jacoby, "external influences can almost never have real purchase unless they operate in tandem with domestic influences" (Jacoby, 2006, p. 626). Following this idea, it is then hypothesised that when external and domestic actors establish alliances in joint problem-solving, the implementation compliance will be more likely. The actors considered in this hypothesis are municipalities and local authorities, firms and NGOs as well as European institutions, such as the Commission, in charge of knowledge-based and capacity building projects, as well as European networks and associations of private actors and NGOs. The underlying assumption is that external assistance from the EU and the European

networks aims at ascertaining compliance with EU requirements. However, the effectiveness of the external assistance is strictly linked to the domestic actors' environment.

2.2.1 The market incentives

Scholars in the fields of political economy, market regulations and governance have debated the mechanisms of European market integration and the relationship between domestic and external firms and multinationals. Governance researchers, in particular, have hypothesised the role played by 'regulatory competition' in driving policy convergence (Holzinger and Knill, 2005; Knill and Lenschow, 2005). Their key argument stemmed from the idea that economic integration among countries puts "competitive pressure on national states to redesign domestic market regulations in order to avoid regulatory burdens restricting the competitiveness of domestic industries" (Holzinger and Knill, 2005, p. 782). Moreover, they hypothesised that "the more exposed a country is to competitive pressures following on from high economic integration […] the more likely it is that its policies will converge with other states with international exposure" (Holzinger and Knill, 2005, p. 789). The elements of domestic redesign of market regulations to enhance the effectiveness "in achieving certain, politically defined objectives" (Knill and Lenschow, 2005, p. 585) and the domestic exposure to international economic competition have been similarly conceptualised by political economy researchers.

On the one hand, political economists have focused on domestic economic actors which, entering a more regulated market, had to adjust to its standards (Vogel, 1995; Vogel and Kagan, 2004). This phenomenon has been defined as "the California Effect", a model of firms' behaviour which postulated a "ratcheting upward of regulatory standards in competing political jurisdictions" (Vogel, 1997, p. 561). Researchers have generally assumed that trade liberalisation would influence a regulatory "race-to-the-bottom" in which firms (and countries) would lower their standards "towards the lowest common denominator in order to maintain competitiveness" especially in relation to environmental regulation (Kelemen, 2010, p. 336; but on this point see also Knill et al., 2008 and Knill and Tosun, 2009). Furthermore, Kelemen and Vogel (2010) argued that the adoption of environmental standards by governments "is shaped by how such agreements affect the competitive position of domestic

producers" (Kelemen and Vogel, 2010, p. 444). They expected that where a country has (or is soon to have) strict domestic standards, producers are less likely to oppose international treaties. By contrast, they will oppose their adoption when domestic standards are weak.

The findings brought about by Vogel (and Vogel and Kagan), however, reveal the opposite. The "California Effect" model assumed that in the presence of large and highly regulated markets, domestic firms who seek to export into these markets may be forced to enact their standards, thus inducing them to push for higher standards in their own countries (Vogel and Kagan, 2004). It was then hypothesised that the likelihood of a regulatory "race to the top" increased if the establishment of stricter regulations represented a source of "competitive advantage" for the domestic firms that supported their adoption (Vogel, 1995). In the presence of international market competition, in fact, specific regulations may create a competitive advantage for domestic firms which, considering asymmetries in the burden of costs of compliance, may be willing "to support stricter regulations than they would have in the absence of foreign competition" (Vogel, 1997, p. 560).

Following in the footsteps of Vogel's and Vogel and Kagan's works on the "California Effect", Anu Bradford analysed the process of "unilateral regulatory globalisation", according to which single states were able to "externalise" outside their borders laws and regulations by using market mechanisms which then resulted in the globalisation of such standards (Bradford, 2012, p. 3). This scholar argues that the main conditions for this "unilateral regulatory globalisation" are the existence of "a large domestic market, significant regulatory capacity, and the propensity to enforce strict over inelastic targets" (Bradford, 2012, p. 5). Furthermore, an important pre-condition for this "unilateral regulatory globalisation" is that the benefit of adopting this unilateral standard must exceed the benefit of adopting multiple standards (Bradford, 2012). Then, Bradford analyses the role of the European Union in influencing the standardization of regulations in specific fields. She proposes that multinational corporations operating in the EU may "have the incentive to standardise their production globally and adhere to a single rule" with the consequence that the EU rules become global (Bradford, 2012, p. 6). The mere adoption of EU rules by these corporations corresponds to a "*de facto* Brussels Effect" which, however, may lead to the adoption of EU rules in the countries of origin of these corporations. The firms that early adopted EU rules to be competitive in this market, in fact, might have a competitive advantage in lobbying for stricter requirements at the domestic level, thus triggering a "*de jure* Brussels Effect" (Bradford, 2012).

On the other hand, political economy researchers considered the effects of foreign direct investments and technology spill-overs from foreign and multinational companies in less-regulated markets (Caves, 1974; Globerman, 1979; Blomström and Presson, 1983). Technology spill-overs and a foreign presence have been found to have "had a positive impact on the productivity of local firms" (Kokko, 1994). For instance, in his study on Canada and Australia, Richard Caves (1974) classified three potential benefits: firstly, allocative efficiency in which multinationals might provide an increase in competition in the host-country market and reduce the monopolistic distortions; secondly, technical efficiency in which the subsidiary firm in less-regulated countries might induce a higher level of technical efficiency in domestic firms that compete with it; and thirdly, technology transfer, in which the subsidiary firm might speed up the transfer of technology and innovation to domestic firms. Moreover, Blomström and Kokko (1998) analysed the benefits for host countries from foreign investments in situations when foreign multinational companies carried out their operations in fully-owned affiliates (Blomström and Kokko, 1998). According to these scholars, local firms might decide to imitate technology, hire workers from the multinational firms or, with the broader foreign competition, decide to introduce new technologies to remain competitive on the market.

However, Kokko (1994) and Blomström et al. (1999), investigating the determinants of efficiency of FDI productivity spill-overs, have written that theoretical consideration of these determinants have been relatively "*ad hoc*" (but for a detailed literature review on the determinants of FDI spill-overs, see Blomström et al., 1999). In more recent years, scholars have started to look at the domestic firms which may benefit from the technology spill over. Blomström and Kokko (2003) asserted that "spillovers do not occur automatically" but rather "the ability and motivation of local firms to engage in investment and learning to absorb foreign knowledge and skills" play an important role on the successful realisation of such spill-overs (Blomström and Kokko, 2003). Theorists have contended as well that in the presence of multinational companies exporting in the domestic market, these multinationals may "pave the way for local firms to enter the same export markets, either because they create transport infrastructure or because they disseminate information about foreign markets that can be used also by local firms" (Blomström and Kokko, 1998).

Both mechanisms may be relevant in the analysis of implementation compliance of Hungary and Poland. Since the 1990s, with the processes of market liberalisation and the privatisation of former Communist state-owned companies, Hungarian and Polish private and municipally-owned companies have emerged. These firms might have *de facto* adopted the

EU rules to do business in the EU's market and then, considering the competitive advantage of adopting EU requirements in light of their EU membership might have lobbied their governments to adopt them *de jure*. Similarly, after the fall of the Communist regimes in Hungary and Poland, foreign and multinational companies entered their waste markets and established subsidiaries. These foreign and multinational firms, established and operating in the EU Member and Western countries[44], had better and cleaner technologies than their CEE counterparts. Arguably, then, these firms might have shaped the less-regulated-markets of Hungary and Poland by providing technology spill-overs. Moreover, these foreign and multinational firms, operating already in other EU Member States, already had in place stricter European standards and regulations. Thus, they may have benefited from following these European standards also in these two countries and they may have provided to their subsidiaries or partners knowledge of European regulations and standards.

Based on the above political economy approach which looks at mechanisms of market access and penetration as drivers for the adoption of stricter regulations (and compliance), the following hypothesis on market incentives can thus be defined:

Hypothesis on market incentives

The likelihood of implementation compliance increases, if (a) domestic companies recognise a competitive advantage in adopting EU requirements and lobby for their adoption at the domestic level, or if (b) foreign and multinational companies recognise a competitive advantage in adopting EU standards when operating in less-regulated markets.

In order to test these two hypotheses on market incentives, I have relied firstly on material collected by international organisations, such as the European Investment Bank and research groups such as the Public Services International Research Unit of the University of Greenwich (hereafter, PSIRU), which have documented the market shares and multinational companies in the sector of waste management penetrating in Hungary and Poland since the early 1990s. As well, I interviewed Hungarian and Polish businessmen who dealt with packaging and municipal waste from the early and mid-1990s. These interviewees provided

[44] For the details on the country of origin and operating countries of those European and multinational waste management firms which entered the Hungarian and Polish waste markets, see PSIRU, 2006. Further details are also provided in the empirical chapters on Hungary and Poland.

me with knowledge of the systems established for the management and treatment of municipal and packaging waste. Moreover, I gained information on the composition of the actors operating in the municipal and packaging waste market in terms of shares of market, type of firms (i.e. the pioneer domestic firms and the multinationals penetrating the market) and the existing interactions between European/multinational firms and their subsidiaries/partners in providing technology transfer and knowledge of the EU requirements.

2.2.2 The pre-existing cooperative strategies

There is a broad consensus among scholars that institutions and institutional characteristics influence policy change and performance of EU members (Hille and Knill, 2006). The link between democracies encompassing consensual mechanisms and policy performance has been studied by Arend Lijpart in his comparative work on consensus and majoritarian democracies (Lijpart, 1984; 1994; 1999). Further, Joel Hellman, studying the post-communist countries, has emphasised the role of inclusive political systems in adopting and implementing economic reforms (Hellman, 1998). Moreover, scholars focusing on environmental policy compliance have stressed the consensual capacity of countries as the institutional condition necessary for a successful environmental policy (Lundqvist, 1980; Brickman et al., 1985; Badaracco, 1985; Jänicke, 1992; Carew-Reid et al., 1994; Jänicke et al., 2002). The role of consensus in policy-making has been recognised as well by researchers examining the preferences of domestic actors. Earlier in this chapter, I asserted that supply-side explanations of compliance have considered domestic actors as veto players within the process of decision-making and implementation of EU legislation. However, George Tsebelis while hypothesising the negative correlation between the number of the "veto players" and the policy change, has also considered the importance of the congruence and cohesion of these players. He honed in the role of agreement between (institutional) veto players "as a necessary and sufficient condition for policy change" (Tsebelis, 1995, p. 302). Moreover, political economy scholars have highlighted the importance of consensus among veto players on the direction of policy change to foster economic reforms in post-communist European countries (Gehlbach and Malesky, 2007).

When looking more deeply into the existing link between actors' agreement and

policy implementation, scholars have identified different styles of formulating and implementing policies in Western Europe and in the United States (Richardson et al., 1982; Lundqvist, 1980). Richardson et al. (1982), for example, drawing from different categorisations developed in previous studies on policy typologies[45] defined the concept of "policy style" by looking at the relationship between a government and the stakeholders involved in the policy-making processes (Richardson et al., 1982). Furthermore, scholars of Europeanisation have proposed that different policy styles proper of each Member State have influenced their compliance performances (Börzel and Risse, 2000; Börzel, 2002; Jordan and Liefferink, 2004). Börzel (2002), in particular, has explained members' style of policy-making as a cost-sharing strategy. Domestic non-state actors, considered by Börzel as veto players, could achieve their own interests or, they could seek to achieve common interests and therefore cooperate with the other domestic actors involved in the policy-making process. However, she also recognised that countries with more consensus-oriented or cooperative decision-making cultures, were more likely to have domestic change because cooperative strategies assured veto players of cost-sharing (Börzel, 2002). Different theoretical approaches, then, have stressed the role of a consultative policy style and cooperation among domestic state and non-actors for compliance with EU rules. The following hypothesis on pre-existing cooperative strategies can thus be defined:

Hypothesis on pre-existing cooperative strategies

The likelihood of implementation compliance increases, if domestic state and non-state actors pursue cooperative strategies in the domestic policy-making process.

Cooperative styles of policy-making might have reassured domestic stakeholders operating in the waste management sectors of Hungary and Poland of the cost-sharing occurring with accession to the EU and compliance with EU environmental directives. In applying the analysis of policy style to Hungary and Poland, I hone in on the relationship between government and other actors in the policy process (Richardson et al., 1982), on the relationship between formal domestic actors such as the Ministry of Environment and the Parliament and the domestic stakeholders involved in the policy-making process as well as on the relationship between private and municipal firms. As mentioned earlier, the stakeholders

[45] For example, see the works of Lowi, 1964.

considered in this dissertation are those of the municipal and packaging waste dimensions and particularly the environmental NGOs, the firms and the local and regional authorities. In this section, I also consider the academics who, as experts on specific environmental issues, took part in the decision-making process by advising at ministerial and parliamentary levels in both Hungary and Poland.

To assess the interrelations between these actors and to grasp if such interrelations affected the compliance performances of Hungary and Poland, I look at existing environmental consultative bodies and committees in which state and non-state actors discussed the municipal and packaging waste legislation and implementing acts. At the ministerial level, I analyse the National Council on Environment (*Országos Környezetvédelmi Tanács,* hereafter also OKT) in Hungary and the National Council on Environmental Protection (*Państwowa Rada Ochrony Srodowiska,* hereafter also PROS) in Poland. At the parliamentary level, I consider the work of the Hungarian Parliamentary Standing Committee on Environmental Affairs. I also consider the work of the Polish Committee on the Environment Protection, Natural Resources and Forestry in the *Sejm* (*Komisja Ochrony Środowiska, Zasobów Naturalnych i Leśnictwa*, hereafter also OSZ) and the Environmental Committee of the Senate (*Komisja Środowiska*). Moreover, I analyse the direct and the bilateral contacts between state and non-state actors which occurred during the discussion of environmental draft legislation and implementing acts at both the ministerial and parliamentary levels in Hungary and Poland. Furthermore, I also consider the development of cost-sharing strategies between private and municipal firms in joint-ventures and partnerships for the management and treatment of waste.

The information to assess cooperation in policy-making was collected during fieldwork in Hungary and Poland, through semi-structured in-depth interviews with current or former members of the ministerial advisory councils and parliamentary committees but also with stakeholders directly involved in the bilateral meetings. Particular attention has also been paid to the position papers and the meeting minutes of the environmental advisory bodies to the Ministries of Environment, i.e. the OKT in Hungary and the PROS in Poland, which have discussed extensively drafts of legislation concerning the management and treatment of municipal and packaging waste. Additionally, the information to assess cooperation between firms was collected through in-depth interviews with businessmen of Hungary and Poland and to officials from the DG for the Regional and Urban Policy of the European Commission as well as through archival research.

2.2.3 The assistance alliances

In recognising external assistance as a mechanism for helping to transfer rules from external actors to the domestic environment, Bruszt and Holzhacker have criticized approaches that take for granted that external actors can assist domestic actors based on the possession of the "right" information on implementation problems in diverse local settings (Bruszt and Holzhacker, 2009). This view has indeed marked a number of studies in which the establishment of a principal-agent relationship in the process of implementation of EU legislation was assumed, and which specifically identified the European institutions as principals and the national governments as agents of rule implementation (for a detailed review of these studies, see Tallberg, 2003). In this principal-agent relationship, the principal decided to delegate certain decisions to the agents and expected them to act in order to produce the principals' desired outcomes (Tallberg, 2003). This took for granted that external actors had the "right" incentives and knowledge to "best serve recipients' interests" while the domestic actors were considered merely as "exogenous factors" of the rule transfer process (see a critique of that view in Bruszt and Holzhacker, 2009). However, Tallberg (2003) but also Sabel and Zeitlin (2010) have particularly stressed the existence of information asymmetries between the principal and the agent, meaning that generally the principal had only a vague idea of its own goals in comparison to the agent (Tallberg, 2003; Sabel and Zeitlin, 2010). This information asymmetry could ultimately result in the agents' shirking (Tallberg, 2003) or in degrees of discretion left to the agent by the principal (Sabel and Zeitling, 2010 but on the discretion left to "street-level bureaucrats", see also Lipsky, 1980 and Pressman and Wildavsky, 1973).

Studies on external assistance have also pointed to domestic actors who, far from being considered as "exogenous factors", may play an active role in the implementation of externally-defined rules. In particular, international political economy scholars have analysed more horizontal interactions among external and domestic actors by focusing on transnational networks involving international and European societal and private actors, and also domestic societal and private actors (for example, see Andonova and Tuta, 2014). Horizontal interaction could also occur in the enlarged European market between international and multinational companies and domestic companies (for example, see Blömstrom and Kokko,

1993). Furthermore, considering assistance as a tool to help domestic actors overcome problems and move from non-compliance to compliance situations, scholars have identified two elements which may ensure that domestic actors meet the compliance goal: multiplexity and joint problem-solving. These elements have been firstly defined by Bruszt and McDermott (2011) within the conceptualisation of the Transnational Integration Regimes (hereafter also TIRs); this concept refers to the integration of developing countries in transnational institutional arrangements which also induce an upgrading of the domestic institution-building process. Within this frame, Bruszt and McDermott highlighted that TIRs that emphasize multiplex assistance that involves diverse state and non-state actors in joint problem-solving and monitoring better adjust assistance programs to diverse contexts and "empower a variety of state and non-state actors to experiment, coordinate and contest one another's institutional needs and solutions" (Bruszt and McDermott, 2011, p. 744). TIRs that build their assistance programs on different principles may in the worse cases induce "formal legal changes that favour entrenched groups" but which offer fewer resources or participatory channels for broader and sometimes weaker groups of actors at domestic level.

It has been recognised that the EU has provided multiplex assistance and joint problem-solving forms of assistance and monitoring to CEE candidate countries but actual assistance programs might differ country by country, and sector by sector. In order to specifically measure the presence of elements of multiplexity and joint problem-solving assistance provided to Hungarian and Polish domestic actors, this dissertation specifically focuses on the "quality" of such assistance. This term refers to the capacity of external actors to generate alliances with domestic actors (Stark, Vedres and Bruszt, 2006; Stark and Vedres, 2006; Bruszt and Vedres, 2013). Scholars have found that the involvement of multiple actors and the establishment of alliances with them in the financial, capacity-building and knowledge-based assistance projects strengthens the identification of the problems which prevented that country from complying with the EU requirements.

Thus, the following hypothesis on assistance alliances between external and domestic actors can be defined:

Hypothesis on assistance alliances

The likelihood of implementation compliance increases, if external actors create alliances with domestic stakeholders in joint problem-solving programmes.

In order to account for the existing alliances between external and domestic stakeholders, particular heed is paid in this dissertation to EU funded projects that have engaged with both capacity-building and knowledge-based activities and those initiatives promoted by European business associations and NGOs lobbies. To this aim then, I considered the pre-Accession aid programmes PHARE and ISPA and the post-Accession Cohesion Fund, which have had projects targeting specifically the promotion of compliance with EU requirements in municipal waste management and treatment. To analyse these EU-funded programmes I relied on the information available online in the Commissions' web pages of the Directorate General for the Enlargement (for PHARE) and the Directorate General for the Regional and Urban Policy (for ISPA and Cohesion fund). I also relied on the information collected during my fieldwork in Brussels, where I met officials from the European Commission who were in charge of EU pre-Accession aid programmes and EU funds for Hungary and Poland. I further used information I gathered from interviews held in Hungary and Poland with Hungarian and Polish clerks from the relevant Ministries in charge of the management of these EU funds. As well, I considered in my analysis those initiatives promoted by Brussels-based business and societal lobbies. To acknowledge the existence of assistance alliances in these types of initiatives I recurred to the information I collected during fieldwork done in Brussels where I held interviews with representatives from Brussels-based associations (i.e. business and environmental NGOs) which had among their members relevant business associations, recovery organisations or environmental NGOs from Hungary and Poland.

2.3 Conclusions

This chapter has outlined the theoretical frame for analysing and explaining the existence of the different compliance performances of Hungary and Poland for municipal and packaging waste dimensions. Beginning from an analysis of the supply-side approaches which privilege state actors and incumbents, I have elaborated four hypotheses to explain variation in compliance in these two similarly rule-taking countries. Building from arguments developed by Europeanisation, managerial and governance researchers, the first hypothesis focused on administrative capacities and traditions implying that divergence between the domestic and the European model reduced the likelihood of implementation compliance. Furthermore, conditionality and governance researchers have honed on the external incentives and sanctions posed by European institutions for the compliance with externally-defined rules. The second hypothesis elaborated then addressed the European threats and the incentives to compliance predicting implementation compliance when these were both substantial. Evidence from European and international monitoring reports and interviews as well as recent studies on the CEE post-Accession compliance performances have however highlighted shortcomings in these two hypotheses. Firstly, data on the administrative capacities and traditions of Hungary and Poland show, in fact, the existence of similar weaknesses in comparison to the European model even despite compliance performance differences. Secondly, information from studies and interviews show the presence of similar incentives and threats offered by the European Union to Hungary and Poland. Despite changes in the European incentive/sanctions structure from the pre- to the post-Accession periods, in fact, the data show similarities for the two countries under examination. Considering the similarities highlighted by empirical data and studies despite variation in the performances of Hungary and Poland, I reject these two first hypotheses as explanations to the research problem under consideration in this dissertation.

Among the supply-side explanations I considered two further hypotheses which, in the light of evidence and studies on post-Accession, may explain Polish and Hungarian variation in compliance performances. The first of the two stemmed from a constructivist perspective and focused on the role that **information exchange and communication** between external and domestic actors plays in enhancing compliant paths. Evidence from

interviews suggest that Poland and Hungary may have been differently impacted by processes of persuasion and emulation. Therefore, this variable is considered in the empirical chapters and tested through process-tracing methodology. Furthermore, I elaborated a hypothesis based on the compliance enforcement approach which addressed differences in **cost/benefit ratio**. Evidence from international reports and interviews suggested a similarity on the side of the domestic adjustment costs, considered high in both countries, but a variation when considering the gains that Hungarian and Polish domestic actors perceived in complying with the European rules. Hence, considering a difference in the cost/benefit ratio between the two countries this variable is further analysed in the empirical chapters and tested through the process-tracing method.

In elaborating the theoretical frame of this dissertation, I have also considered demand-side explanations which focus on domestic stakeholders who did not simply supply compliance with externally-defined rules, but benefitting from compliance, may have demanded it, enhancing as well its sustainability over time. As this dissertation centres on the implementation of the EU requirements at the domestic level, my analysis privileges those actors involved in this phase of the policy-making process, and specifically those stakeholders of the municipal and packaging waste dimensions (i.e. firms, NGOs, local and regional authorities). Supply-side approaches had already included societal and private actors in their analyses. Tsebelis, then followed by Europeanisation scholars, has focused on the role of veto players in policy compliance but argued that these players acted only to oppose or delay compliance. Questioning the negative connotation of domestic veto players, this dissertation looks at the existence of specific mechanisms which made compliance more likely and sustainable in the post-Accession period. The hypotheses then concern market incentives, pre-existing cooperative strategies and assistance alliances found among external and domestic actors.

Within the **market incentives** hypothesis, two aspects have been explored: domestic private actors demanding compliance and foreign firms exporting their standards in Hungary and Poland. To develop the hypothesis it has been taken into consideration the work of Vogel (1995), Vogel and Kagan (2004), Kelemen (2007) and Bradford (2012) as well as Caves (1974) and Blomstrom and Kokko (2003). Building from these studies, it has then been hypothesised an existing variation in the possibility that Polish and Hungarian firms may have had access to the better-regulated EU market, or in the possibility that foreign firms already operating in the EU started to penetrate the Polish and Hungarian waste markets and differently exported their technology and stricter EU standards in these two countries. In

elaborating the **pre-existing cooperative strategies** hypothesis, I looked at the works of Richardson et al. (1982), Lundqvist (1980), Börzel and Risse (2000), Börzel (2002) as well as Jordan and Liefferink (2004). It has then been considered the existence of strategies that reassured domestic stakeholders on the sharing of the costs of compliance in the form of cooperations between state and non-state actors in the policy-making process (within advisory bodies and committees discussing the rule implementation) and between private and municipal firms in the management and treatment of waste. Moreover, in framing the **assistance alliances** hypothesis, I relied on the work of Jacoby (2006), Bruszt and McDermott (2011) as well as various works by Bruszt, Stark and Vedres (Stark, Vedres and Bruszt, 2006; Stark and Vedres, 2006; Bruszt and Vedres, 2013). The analysis then investigated the quality of the assistance programmes, and specifically the capacity of external actors to generate alliances with domestic actors. It has then been hypothesised a variation in the capacity of external actors to create alliances with Polish and Hungarian beneficiaries of the European/international programmes and initiatives through which domestic actors could gather, process and use context-specific information on implementation problems and alternative ways to solve them.

Chapter 3
Hungary

In the late 1980s, Hungary became one of the CEE pace-setters in the relations with the European Union. In 1988, it was the first to sign the Trade and Cooperation Agreement with the European Community[46] (EC), also signed by Poland in 1989 (Pogatsa, 2004). This Agreement promoted trade on the basis of non-discrimination and reciprocity between the EC and the Central and Eastern European countries, and formalised bilateral relations and technical agreements between the two parts of the "Iron Curtain" (EIPA, 1993; Pogatsa, 2004). After the collapse of the Communist regime, Hungary was among the front-runner group of CEE countries to rapidly reform its economic and political system into a market economy and a democracy (Pogatsa, 2004). Furthermore, in 1989, the EU signed the PHARE aid programme with Hungary and Poland (Poole, 2003) while, in December 1991, Hungary signed the European Agreements in which the political, economic, financial and commercial objectives that formed the framework for implementation of the EU accession process were set out (Ott and Inglis, 2002; Poole, 2003; Pogatsa, 2004). Moreover, immediately after the ratification of the European Agreements in February 1994, on 1st April 1994 Hungary applied for EU membership (interview 7).

As part of the accession strategy defined in the Agenda 2000, the European Commission in 1998 started to monitor the performance of Hungary and the other candidate countries from the CEE in carrying out the economic and political criteria defined at Copenhagen in 1993 and in approximating to the European *acquis communautaire*. Among the different Chapters in which the EU *acquis* had been divided, the EU analysed the environmental protection policy established in Hungary and started to monitor the different environmental areas whose European legislation and requirements was to be transposed and implemented upon Hungary' accession to the EU. As previously shown in the *explanandum* chapter, the performance of Hungary in the implementation of the waste management sector

[46] According to the Glossary of the European Union and European Communities, by European Communities (EC) has been defined as "the collective body that resulted in 1967 from the merger of the administrative networks of the European Atomic Energy Community (hereafter, EURATOM), the European Coal and Steel Community (hereafter, ECSC), and the European Economic Community (hereafter, EEC)". The Treaty of the European Union of 1992 established the European Union as a body of three pillars namely, the European Communities, a Common Foreign and Security Policy and Cooperation in the fields of Justice and Home Affairs. For more details, see Nugent, 2010 and http://www15.uta.fi/FAST/GC/eurgloss.html.

was characterised by a gradual compliance path in the dimensions of municipal and packaging waste management; Poland, in contrast, still had not fully complied with all the EU requirements at the time of its accession. These two similar countries then differently performed in the implementation compliance of EU waste requirements at the domestic level. In this chapter, I explore in detail the compliance path of Hungary in adopting and implementing the three European waste-related directives under examination in this dissertation namely, the Waste Framework Directive, the Packaging and Packaging Waste Directive and the Landfill Directive. I take special note of the development of municipal and packaging waste management and treatment systems, of the interactions between domestic state and non-state actors as well as those between domestic and international actors that might have influenced the compliance performance of this country.

As the information on the Hungarian case is analysed through the process-tracing method, the data is presented in chronological order, highlighting the observations that contribute to the outcome of sustainable compliance. The chapter is then structured as follows: the first section deals with the municipal waste management dimension. After a brief review of the elements considered to measure the country's compliance performance, the analysis follows a division into three historical periods constituting three phases of policy implementation compliance, from *status quo* to the transposition 'on the books', from transposition to implementation and from implementation to sustainable compliance. Each of the three phases ends with the achievement (or not) of an intermediate outcome, namely transposition, implementation and sustainable compliance. In these three phases, the empirical data which is linked to the five testable hypotheses presented in the theoretical chapter are set out. The second section deals with the packaging waste dimension. In this case as well, the data are presented following the same three-phase division adopted for the municipal waste dimension. Finally, in the conclusions, the key elements for understanding the performance of Hungary in the municipal and packaging waste dimensions are pointed out. These are further discussed in the comparative and concluding chapter of the dissertation.

3.1 The Hungarian process of implementation compliance with the municipal waste dimension

The first dimension under analysis in this dissertation deals with the management and treatment of municipal waste defined in the European Waste Framework and Landfill directives (and amended versions). In order to measure the degree of sustainable compliance in this dimension I selected a number of requirements contained in both Directives linked to the "proximity principle" established in article 174 of the Treaty of Rome. This measured compliance by looking at the transposition of the Directives into the national legislation and, more practically, at the establishment of an integrated network of disposal installations and the fulfilment of specific requirements concerning operational and old landfill disposal sites.

The process of implementation compliance with the municipal waste management dimension is then analysed following three temporal phases which have seen Hungary move from a stage of non-compliance (stage 2 out of 5) in 1999, to sustainable compliance (and compliance stage 5) in 2009. The first phase covers the period from the end of the 1980s until the adoption of the 2000 Act on Waste Management (No. XLIII). In this first phase, the mechanism of market incentives applied by foreign firms linked to cooperative strategies between private and municipal firms as well as between societal, private and state actors influence the transposition 'on the books' of the requirements contained in the European Waste Framework and Landfill directives. The second phase begins after conclusion of the transposition "on the books" and comprises the process of implementation of such measures which produced the National Waste Management Plan whose adoption at the end of 2002 marks the end of this phase. The phase is characterised by the continued interaction between market incentives and cooperative strategies as well as by the establishment of alliances between external and domestic actors in carrying out EU knowledge-based and capacity-building projects. The third and final phase concerns the development of measures for the sustainable compliance of the European waste directives after the adoption of the National Waste Management Plan in December 2002 and the Regional Waste Management Plans in 2003. In this phase, Hungary achieves full compliance with the requirements thanks to the interaction between market incentives and cooperative strategies which enhance also the establishment of alliances between external and domestic actors in realising EU projects.

3.1.1 From the end of the 1980s to 2000: the transition from the municipal waste *status quo* to the law "on the books"

At the close of the 1980s, the management and treatment of municipal waste was governed by a "semi-state" system. The Governmental Decree No. II.1 of 1986 entrusted Hungarian municipalities and local authorities with the management of municipal waste (Dax et al. 2001) and granted them the right to organise the collection of waste at municipal and county levels by delegating it to private companies or by establishing municipal companies owned by the state (interview 8). In fact, according to this Decree, only "specialised public sector enterprises established for the purpose", "other public enterprises", "small entrepreneurs" and "small individuals who have received requisite permits" were authorised to fulfil public sanitation and waste management services (Dax et al., 2001, p. 54). Such collection was operated within a specific municipality where the private and municipal companies collected the waste directly from the households and disposed it in landfills owned by the state and managed by the public health services (interview 9).

The "semi-state" system was financed through the Central Environmental Fund (in Hungarian, *Környezetvédelmi Alap Célelőirányzat,* hereafter also KAC). This fund guaranteed investments to the state waste-collecting companies (interview 10; interview 11) operating in the collection and recovery of municipal waste within a municipality (interview 12; interview 8) but, based on the size of that municipality, these investments could be extended to neighbouring villages (interview 8; interview 13). The KAC was established in 1986 and most of its revenues derived from pollution fine payments and product charges[47], which could not be used for purposes other than environmental protection (REC, 1994; REC, 2001). It was organised within the structure of the Ministry of Environment, but final decisions on the fund were approved within the Inter-ministerial Committee which grouped ministers or representatives from relevant ministries (i.e. Transport, Telecommunication and

[47] In particular, according to Act LXXXIII of 1992, the main sources of revenues of Fund revenues were fines on air pollution, hazardous waste, noise and vibration, wastewater, nature conservation, ozone layer, transport of hazardous materials and environmental product charges on fuels (REC, 1994). Other sources were emission charges; tax revenues forgone by the state budget; international aid on environmental protection; direct allocations from state budget; voluntary payments and donations; principal and interest repayments; damage remediation costs (REC, 1994).

Water, Industry, Agriculture, Finances, Welfare and Internal Affairs) and representatives from NGOs operating in the sectors of environment and trade (REC, 1994; interview 14) such as the Waste Alliance (hereafter also HUMUSZ[48]).

Soon after the collapse of the Communist regime in Hungary, the Communist state-led system of municipal waste management and treatment began a gradual change. Act No. LXV on Local Governments, approved by the Hungarian Parliament in 1990, granted to municipalities the authority to "take care of municipal tasks related to waste treatment, ensure settlement hygiene, provide for collection, disposal, treatment/neutralisation and utilisation of solid and liquid communal wastes and designate the deposit areas for disposal" (Sect. 63/a, par. e). Above all, the 1990 Act recognised that the management of municipal landfills lay with municipalities and small settlements (interview 15). Moreover, it entrusted municipalities with the selection of the areas in which landfills could be constructed (interview 16). However, it still did not define a detailed legislation on the issue. Hence, municipalities generally solved the problem by constructing their own landfill sites in the vicinity of each municipality (interview 15; interview 16), without following any coordinated and organised strategy for the construction of integrated disposal facilities (interview 16).

The collapse of the Communist regime had implications also for the actors in the system of municipal waste management and treatment. On the one hand, in the early 1990s some of the state waste-collecting companies became of municipal ownership (interview 10; interview 8). These new municipally-owned companies were generally established in bigger cities where they had higher incentives to invest in adequate waste-collecting machinery (interview 8; interview 14). For example, in the city of Budapest the FKF[49] (Hungarian acronym for *Fővárosi Közterület-fenntartó Zártkörűen Működő Nonprofit Részvénytársasá*), created in 1895 as a Public Sanitation Office and in the 1990s becoming property of the city, grew in importance. On the other hand, recognising the Hungarian waste sector as a "good business" in the early 1990s (interviews 17; 10), foreign firms began to invest in the Hungarian waste market by establishing branch offices, buying existing regional and local waste collecting companies or establishing joint-ventures[50] with municipalities (Dax et al., 2001; interview 17). Many small Hungarian settlements and villages, in fact, did not have the financial capacity to invest in their own waste-collecting companies and they partially or

[48] HUMUSZ is the Hungarian abbreviation for *Hulladék Munkaszövetség*.

[49] For further details, see the FKF Zrt. web page http://www.fkf.hu/portal/page/portal/fkfzrt/vallalatrol (in Hungarian).

[50] According to the Country Commercial Guide for Hungary released by the U.S. Department of State in 1996, the term "joint-venture" was used in Hungary to refer to "any venture which involved foreign participation". For further information, see http://dosfan.lib.uic.edu/ERC/economics/commercial_guides/Hungary.html.

totally privatised the existing ones through partnerships with foreign firms. The establishment of joint-ventures can well be explained by the mechanism of cooperative strategies. To work, this mechanism assumed a certainty in the adoption of the EU legislation by the government which enhanced the domestic actors' strategies of compliance costs' sharing. In this case, municipal companies established joint-ventures to share the costs of compliance with the EU rules.

The first foreign companies to enter the Hungarian waste market were Austrian and they generally established themselves in Hungary by setting up their own subsidiary companies or joint ventures with already existing municipal companies (interview 17; interview 10; interview 8). Among the Austrian companies, Saubermacher[51] was the first to penetrate the Hungarian municipal waste market in 1991. They created joint-ventures with municipal companies and established separate collection systems in the Western and Southern parts of the country (interview 19; PSIRU, 2000). This firm was followed by other Austrian companies such A.S.A., AVE and Pyrus-Rumpold which, when entering the Hungarian market generally established their own branches such as AVE Hungary and Pyrus-Rumpold Hungary (interview 17). A.S.A. started to operate in Hungary in 1992 by establishing a partnership in Debrecen for the construction of a landfill disposal site (i.e. the A.K.S.D. Ltd. Debrecen[52]). In 1993 it created its own subsidiary, namely A.S.A. Hungary[53]. These companies were soon followed by German and French companies, such as the German companies Rethmann and RWE which established their subsidiary companies in Szolnok and Rem and the French ERECO and Vivendi which established their own branches in the country (PSIRU, 2000; interview 10).

At first, foreign and joint-venture companies offered their services for the treatment of municipal waste and the strategies they followed were threefold: a) in some cases, these companies bought and started to invest and modernise already existing non-conforming disposal sites (interview 17); b) they managed landfills of municipal ownership and exported EU standards (interview 17); and c) they constructed new EU-conforming landfill sites. According to Dax et al. (2001), in particular, foreign companies contributed to the construction of "the first modern EU-conforming landfills in Hungary" (Dax et al., 2001). The EU-compliant strategies pursued by these foreign firms in the treatment of municipal

[51] For further details, see http://www.saubermacher.com/web/en/news/archive_details.php?nid=449.

[52] The AKSA Debrecen was one of the first joint-ventures established in Hungary. It was created in 1992 as a consortium of investors: three foreign investors (A.S.A., AVE and Kröpfel-Spreitzer) which owned 51% of the shares and the city of Debrecen which owned 49% (Dax et al., 2001). For more information on this joint-venture, see also http://www.aksd.hu/cegunkrol/ (in Hungarian).

[53] For details, see http://www.asa-group.com/en/Hungary/Company/History.asa.

waste can be well explained by the market incentives mechanism. It assumed that firms would comply with the EU rules when they recognised that compliance was the only way to make profits. In this case, acknowledging that Hungary would soon adopt the EU standards, since the beginning foreign firms (also as partners in joint-ventures) exported and implemented their standards, machinery and technology that conformed with EU waste legislation (interview 8; interview 17; interview 16). Moreover, when investing in and constructing disposal facilities, foreign firms expanded the operation of a facility beyond the borders of a single municipality in compliance with the integrated network of disposal installations approach set out in the European Waste Framework Directive (Dax et al., 2001; interview 16).

Unlike in the operation of municipal treatment where municipalities sold or cooperated with foreign firms, the collection of waste was mostly managed by municipal companies (Dax et al., 2001). These companies operated in cities where they could have larger profits from the compulsory waste collection in municipalities established in the 1990 Act on Local Governments. However, this Act did not specify any financing system (Dax et al., 2001). It then became common practice of the municipalities to finance waste collection services through the municipal budget and then collect taxes from citizens (interview 13). As well, many municipalities started to regulate in contractual terms the municipal waste collection by establishing "collection fees" which had to be paid directly by the households to the municipal collecting companies (interviews 17; 13). Nevertheless, the majority of the problems occurred in rural areas in which waste collection was considered as not mandatory. It happened, in fact, that many neighbouring municipalities required the payment of collection fees also in these agglomerations. Being against this duty, private households then started to file cases before the Hungarian Constitutional Court[54] to solve the problem (Dax et al., 2001; interview 13). The Constitutional Court then ruled on the need for a change in legislation and asked the Parliament to elaborate and adopt a specific law in which the financial means and prices for municipal services including waste collection were clarified (interview 13; interview 17).

As a result of the Constitutional Court rulings, in 1995, the Parliament passed Act No. XLII on the Mandatory Use of Certain Local Public Services. This Act recognised the right of

[54] In particular, citizens challenged the right of municipalities to impose the payment of fees in areas where the collection of waste was not obligatory. In 1994, the Court asked the municipalities to withdraw municipal regulations on waste management because they considered them to counter the national framework legislation (interview 17). Moreover, the Court argued in favour of the households by specifying that municipalities could not set prices when these prices were not reflected in the guarantee of the service (interview 13; interview 17).

local governments to regulate waste management services, and obliged households for the payment of "collection fees" defined by the local governments (Dax et al. 2001; interview 13; interview 17). Moreover, it obliged households and property owners to use public services for the collection of municipal waste and obliged private collecting companies to obtain a permit to operate within a specific municipality (interview 16). However, it also recognised that municipal waste collection could be operated by municipal and by private companies (interview 13; interview 16) and, in the latter case, municipalities had to select the private waste collection companies through competitive public tender procedures, in accordance with the European legislation on public procurement[55] (Dax et al., 2001). The tender procedure was also established for the management of municipally-owned landfill disposal sites (Dax et al., 2001).

At first, the disposition of organising public tenders came "as a shock" for most municipalities. Until then, in fact, municipalities had managed the collection of municipal waste by establishing and delegating the operations to their own companies (Dax et al., 2001, p. 55). Hence, the writing of the first tenders was patchy because municipalities either lacked experience in writing public tenders or "were satisfied with the status quo" (Dax et al., 2001, p. 55). The situation was further complicated by the European legislation, which set out that fully-owned municipal companies were not subject to public tender procedures[56]. Then, according to the 1995 Act, when municipalities fully owned their own waste-collecting companies and treatment facilities, these companies were automatically appointed for providing the service of waste collection and the treatment for that municipality (interview 9; interview 16). After several years, however, the Hungarian waste collection and treatment system accommodated to the European public tender procedure (interview 17). In

[55] According to the European legislation "public procurement refers to the process by which public authorities, such as government departments or local authorities, purchase work, goods or services from companies which they have selected for this purpose". For more information on this legislation, see http://europa.eu/youreurope/business/public-tenders/rules-procedures/index_en.htm.

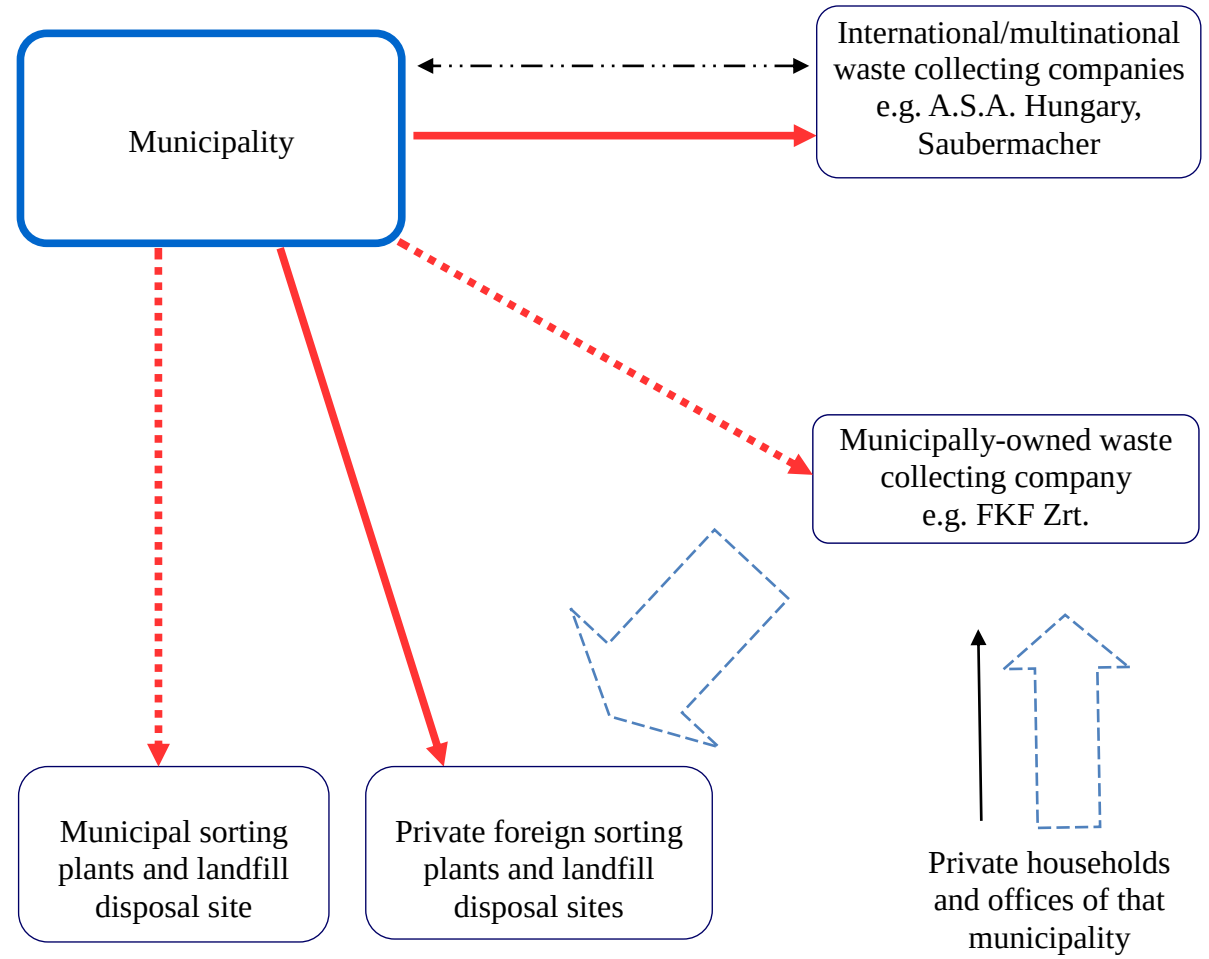
[56] In 2003, the European Court of Justice ruled on the matter of lawfulness in the award of a contract for waste services without a public tender procedure (i.e. Stadt Halle and RPL Recyclingpark Lochau GmbH vs. Arbeitsgemeinschaft Thermische Restabfall und Energieverwertungsanlage TREA Leuna). In the specific case, the city of Halle appointed the RPL Lochau, a company in majority owned by the city of Halle, for the collection of waste without the establishment of a public tender. In its ruling, the European First Chamber Court recognised that "a public authority […] has the possibility of performing the tasks conferred on it in the public interest by using its own administrative, technical and other resources, without being obliged to call an outside entitles not forming part of its own departments". Furthermore, it also recognised that "in that case, there was no question of a contract for pecuniary interest concluded with an entity legally distinct from the contracting authority" and, thus, "there was no need to apply the Community rules in the field of public procurement" (Section 48 of the ruling). For further details, see http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62003CJ0026.

municipalities without a fully-owned municipal waste collecting company, municipalities were obliged to establish public tender procedures for the definition of waste-collecting companies and treatment facilities in use within that municipality (interview 16). In this case, private waste-collecting companies and joint-ventures between municipal and private companies competed for shares on the market through public tenders (Dax et al., 2001).

The tendering system introduced with the 1995 Act could have had an impact on the strategies of the foreign firms in which cost/benefit calculations could have had influenced a regulatory "race to the bottom", but this did not happen. On the contrary, with the introduction of the 1995 Act, the foreign companies expanded their services to the collection of municipal waste. Following cost/benefit calculations and the pursuit of bigger profits, they then obtained permits from the municipalities to operate for the collection of waste and participated to public tenders. However, recognising the EU compliance as the only way to make profits, they did not lower their standards and, winning many contracts with municipalities they then exported their EU-conforming collection machineries and standards in the waste collection market too (interview 8; interview 17; interview 15; interview 18). In some cases, foreign companies participated in different public tenders and operated in different municipalities either for municipal waste collection, for the treatment of municipal waste with their sorting and disposal facilities or for the collection of other waste streams such as packaging waste (interviews 13, 19, 20). The Hungarian system defined for the management and treatment of municipal waste in 1995 then resembled systems set up in the EU Member States. This had been deeply influenced by foreign firms which, in cooperation with municipal firms through joint-ventures or winning tenders, recognised the competitive advantage of exporting knowledge and technology that was compliant with EU standards. Hence, contrariwise to what assumed by cost/benefit calculations and the logic of profits at the lower costs, foreign firms exported costlier services and machinery because considered more profitable the EU rule compliance.

The system and the main actors operating in the municipal waste collection and treatment established in Hungary since the 1995 Act is outlined in Figure 3.

Figure 3: The Hungarian municipal waste management system



Source: own elaboration

In 1995, the system of municipal waste management and treatment successfully enforced the European tendering procedure, however, the process of approximation of the Hungarian legislation to the concepts and principles contained in the EU Waste Framework and Landfill directives still lagged behind (interview 17). Since the Communist era, Hungary had defined some waste-related principles in general Acts on environmental protection [57] while environmental groups such as the Green Future Group and the Danube Circle58 promoted the protection of the environment. Taking advantage of the "relatively empty political space" left by the Communist government on this issue, the Hungarian environmental movement rapidly became an arena for discussions on the environment (Hajba, 1991), but it also had a general focus on political opposition to the Communist regime (interview 21). This focus rapidly grew to the point that the dissent to the regime became "implicitly represented by the green movement" (Hajba, 1993). Hungarian academics and experts, in fact, concur that the transition to democracy and the fall of the Communist regime was influenced by the existence of a strong environmental movement in Hungary (interview 22; interview 13; interview 21).

After the change of regime, many environmental experts from the green movement went into politics in different political parties and lobbied for environmental protection legislation at the parliamentary level59 (interview 22; interview 21) and in the ministerial advisory bodies 60 . Nevertheless, there was a general feeling that the Ministry of Environment and the existing parliamentary committee on environmental issues were "often 'over-politicised'" and party interests came "to the front" in comparison to environmental protection issues (Hajba, 1992, p. 21). Representatives from the environmental movement then established more direct contacts with the government to influence the environmental

[57] For example, the Act No. II on the Protection of Human Environment adopted in 1976 had been the first unitary act conceived as a "container" for the environmental legislation because it was very theoretical and short i.e. only ten pages (interview 21). In the waste sector, the Act mentioned the problem of the disposal of waste in landfill sites (HOE, 2011) and the recognised the responsibility of controlling the landfill disposal sites to the public health services (interview 9).

[58] These environmental groups were established in the early 1980s in reaction to the problematic state of the Hungarian environment and to protest for single environmental issues (Hajba, 1993).

[59] Since May 1990, with the opening of the first session of the Hungarian Parliament, a system of committees comprising standing and special committees was established (Hajba, 1996). Among these standing committees, the committee for Environmental Affairs was set up. In the parliamentary period 1990-1994, this committee was very active in the development of twenty-three committee's independent proposals involving in its discussions a variety of stakeholders (Hajba, 1996). Moreover, the Committee established direct links with environmental NGOs and experts through the organisation of "open days" for discussion (Hajba, 1996) and developed regular consultation exercises with environmental NGOs, associations and clubs (Hajba, 1993).

[60] In the early 1990s, it was common practice for ministries to have "their own" advisory groups which were established on personal bases by each minister (interview 23).

policy-making which, in some cases, resulted in a privileged relationship between the Ministry of Environment and the environmental NGOs[61].

The enthusiastic pro-environment period of the early-1990s strongly impacted on the development of cooperative strategies in the environmental policy-making of Hungary. Soon after the change in the regime, the Hungarian government realised that it had to renew the Hungarian environmental legislation by defining a new Act on Environmental Protection. This work involved academics - mostly environmental lawyers - and a "good balance" between economists and lawyers from the Ministry of Environment who discussed in special meetings in the Ministry the content of the draft Act which was then discussed in public forums and disseminated to a wide range of stakeholders (Hajba, 1995; interview 8). In 1992, an independent group appointed by the Hungarian Parliament prepared a seven-hundred page draft, which was circulated by the Ministry of Environment for comment among a wide range of NGOs, business interests, academics and officials from other ministries (Hajba, 1995). However, given the length of the draft, it was not accepted into the parliamentary discussions (interview 21). In 1993, a new draft of environmental legislation was adopted by the government, but it failed to win parliamentary approval. This failure, according to Hajba, was "owing to the delaying tactics used by some members of Parliament" (Hajba, 1993). This situation created a stalemate between the Parliamentary Commission led by the Christian Democratic Party and the Hungarian Democratic Forum representatives in the Ministry of Environment who could not agree on the draft (interview 24). The situation changed when a group of environmental activists led by the Göncöl Foundation[62] offered a compromise between the different political parties (interview 24). Thanks to this initiative and the support of the green activists, Ferenc Baja, the Minister of Environment in charge of drafting the Act (in office from 1994 to 1998), was finally able to overcome the stalemate (interview 24). In December 1995, the Hungarian Parliament adopted the Hungarian Environmental Protection Act (No. LIII, hereafter HEPA).

By the time the Act was adopted, the green movement was in a strong bargaining position. It made request specific requests that were partially responsible for a number of

[61] Since the 1990s, the Ministry had established specific channels with the NGOs, such as cooperation within the Green Spider, a network regularly used by more than two-hundred environmental protection NGOs in which the Ministry of Environment put out semi-annual draft statutes to the Green Spider members (Jendrośka, 1998; REC, 1998). Moreover, a number of governmental decrees on the functioning of the Ministry of Environment (i.e. Decree No. 20/1983 and Decree No. 10/1995) established the participation of NGOs within the committees dealing with environmental issues. For example, NGOs could send recommendations for the distribution of the KAC and nominate their representatives in the Inter-ministerial Committee (Jendrośka, 1998; interview 14).

[62] For details on this Foundation, see http://www.goncol.hu/indexb35c.html?menu_id=448.

provisions being adopted within the HEPA[63]. The major footprint of the environmental NGOs in the HEPA was, however, the introduction of channels of open stakeholders' participation in the draft- and decision-making of environmental legislation, considered as "an essential 'technique' of the green organisations" (Hajba, 1996, p. 11). This resulted in the establishment of advisory bodies in the Ministry of Environment and the creation of the National Council on Environment (hereafter, OKT). The OKT, in fact, was part of the package accepted by Ferenc Baja who agreed to the establishment of such council in exchange for the green movements' support in the adoption of the HEPA (interview 24). In the establishment of the OKT in 1996, Hungarian policy-makers analysed existing models of advisory councils established in Germany and the Netherlands to emulate (interview 23). Nevertheless, the model that was then adopted for the OKT differed from the European ones. It was, in fact, established as "alien to the system" (interview 15) and had to work as a "cross-cutting body" in cooperation with the Ministry of Environment. However, it was not directly subordinated to any Ministry or state administration (interviews 23, 15 and 24). Moreover, despite the fact that the Minister of Environment was appointed by law as member of the Council and was invited to attend its sessions, the selection process within the Council removed the government from any role in appointing its members[64] (Rose-Ackerman, 2005).

The discussions within the OKT have been clear examples of cooperative policy-

[63] This Act recognised the right of knowledge and information on environmental issues, and particularly on "the state of the environment, the level of environmental pollution, environmental protection activities as well as the impact of the environment on human health" (Art. 12.1 of the HEPA as quoted in Jendrośka, 1998, p. 186). Furthermore, the HEPA gave importance to cooperation among different stakeholders by stating that "state organs, local governments, natural persons and their organizations, business organizations and the organizations safeguarding the interests of all the above, as well as other institutions, shall co-operate in the protection of the environment" and also that "the right and responsibility to co-operate shall extend to all phases of achieving the environmental objectives" (Art. 10, par. 1).

[64] The OKT grouped three main fields of representatives: from the universities, the industry and the civil society (NGOs). The general representation principle within the Council was defined by Professor Miklos Bulla who established that each of the three fields could elect seven representatives (i.e. seven academics, seven from the business and seven from the NGOs) for a total of twenty-two members. In the HEPA of 1995, Section 45 contained a number of paragraphs concerning the OKT established that its members had to be representatives from "public organisations registered with environmental goals" and from "agencies representing professional and economic interests" who were "elected in a manner determined by themselves" and representatives "appointed by the scientific community and the president of the Hungarian Academy of Sciences" (Section 45, paragraph 3). Furthermore, the HEPA established that these representatives had to be in number "up to 22" (Section 45, paragraph 1) and had to "participate in equal proportion" (Section 45, paragraph 3). Nevertheless, the HEPA did not establish the proportions of the seats among the three fields and the Minister of Environment appointed the Secretary of the Council, Professor Bulla, for this task (interview 23).It established a rotation in the chairmanship between the three fields and each group defined its own rules of delegation (Interview 23). The representatives from the three fields were then selected independently. In particular, the representatives of the NGOs were elected by the National Gathering of Environmental and Nature Protection Forum which grouped the different environmental groups (interview 15); the representatives of the universities were appointed by the Hungarian Academy of Sciences (HEPA, Sect. 45, par. 3); the representatives of the business were appointed by the MGYOSZ, the National Association for Hungarian Manufacturers and Industrialists (Rose-Ackerman, 2005).

making in which the members from business and from civil society have learnt that "the other part is not an enemy" (interview 25). The HEPA specifically obliged the Minister of Environment to send to the OKT all legislative drafts, assessment analyses and national concepts concerning the protection of the environment (Sect. 43, par. 1) as well as drafts of plans or programmes that contained environmental reports for evaluation (Sect. 43, par 4 and Sect. 44, par. 2b). Moreover, the Council could give opinions on assessment analyses and drafts of plans or programmes, propose legislative measures to improve the efficiency of the environmental protection and nature preservation as well as express its opinions on matters of strategic importance in relation to the protection of the environment (Sect. 45, par. 2). Hence, from a procedural point of view, the government was obliged to ask the OKT an opinion on environmental legislation; otherwise, such a draft could be declared invalid[65] (interviews 23; 25; 9; 26). Moreover, according to the internal regulation of the Council, in the event that the Council in plenary session did not achieve a consensus, it was possible to elaborate majority and minority opinions. These opinions were sent to the relevant governmental and parliamentary authorities, who then acknowledged that on that specific issue a consensus among the three parties did not exist (interview 23). However, even when there was a dissent among the OKT members, the different representatives cooperated to find a common solution to specific topics and draft legislation (interview 25).

The cooperative policy-making within the OKT positively influenced the adoption in the Hungarian legislation of stricter principles and concepts connected to the European legislation on waste issues. Despite the novelties introduced in 1995 with Act No. XLII on the Mandatory Use of Certain Local Public Services and the provisions in the HEPA[66], at the end of the 1990s the Hungarian legislation had not defined detailed requirements for landfill sites and lacked clear definitions of the term "waste", unambiguous divisions of responsibilities on waste issues as well as the definition of individual permits for specific waste-related issues (interview 17). However, it soon became clear to the government as well as to domestic private and societal actors that Hungary had to start approximating to the

[65] Interviewees recall four or five times in which the Constitutional Court cancelled a law because the Government did not previously consult the OKT (interview 23; interview 25). Nevertheless, the Government and the Parliament are neither obliged to accept the opinions in the final versions of Decrees and Acts nor to report back to its members (interviews 25; 26).

[66] The HEPA established the general rules for environmental protection and "arranged the already existing legal instruments into a comprehensive system" (Ágh et al., 2007) by encompassing the key environmental principles such as precaution, prevention and restoration and by detailing the duties and the obligations of the institutional bodies such as the Parliament and the Government (Ágh et al., 2007). Furthermore, Section Thirty required local governments to develop municipal programmes and regulations concerning the disposal of municipal waste and established obligations for the "user of environment" to provide for the treatment of wastes (OECD, 2000).

European legislation concerning waste (interview 17). Discussions on a draft legislation on waste then occurred within the OKT which, on 1st September 1999, approved a common position. This position specifically emphasised the need to transpose all the definitions and principles concerning waste defined by the EU. Moreover, OKT members recalled the need to involve a broader number of stakeholders involved at local level in the management of municipal waste such as representatives of small neighbouring villages and private waste-collecting firms.

The 1999 OKT position strongly influenced the inclusion of EU waste-related provisions in the Act on Waste Management (No. XLIII), adopted on 23 May 2000 by the Hungarian government. This Act "took over as a framework law the system of communal waste management regulation" (Ágh et al., 2007, p. 97) previously based on the HEPA of 1995 (National Waste Management Plan, 2002). According to Professor Gyula Bandi - an environmental lawyer who contributed to the drafting of this law - the 2000 Act could be considered as "relatively good" and "a step forward" in waste legislation (interview 17). This Act clarified the responsibilities of municipalities and the duty of households to use the municipal waste services for the collection of waste at the local level (interview 17). It also contained the main definitions and principles of waste management, the general duties and requirements for waste management and set out the requirements for waste treatment and recovery. Moreover, it fully transposed all the key principles and requirements contained in the European Waste Framework Directive (interview 26; interview 17). This Act also addressed specific dispositions related to municipal solid waste and hazardous waste, set out the duties and the division of competencies between the different authorities and defined the fines and the fees systems (HOE, 2011). Moreover, Chapter III of the Act contained regulations for the treatment and recovery of municipal and hazardous wastes including the operations of incineration and disposal into landfills. Section 19, in particular, stipulated the requirement of obtaining a permit for the disposal of waste into a landfill site (section 19, art. 1 a), established the construction of new disposal sites only for regional purposes (sect. 19, art. 4) and forbade the disposal of non-pre-processed waste unless otherwise stated in other Acts (sect. 19, art. 5). In addition, it established that the conditions to set up a disposal installation (sect. 19, art. 2), provisions for the design, construction and management of the disposal installations as well at those related to the closure and after-care of old sites (sect. 19, art. 3) were subject to separate legal acts.

From the end of the 1980s until the Act on Waste Management of 2000, progress was made

towards the transposition of the European municipal waste requirements and principles in the Hungarian legislation. This improvement was firstly influenced by market incentives and specifically by the strategies pursued by foreign firms which recognised EU compliance as profitable. Therefore, instead of lowering their standards when penetrating the Hungarian market, they exported their costly standards, technology and machinery conforming to the European waste legislation. Additionally, a strong environmental movement played a crucial role in the recognition of cooperative strategies in the environmental policy-making through the creation of the OKT. Within this advisory body, members originating from business, NGO and academia circles cooperated in the adoption of common positions aimed at strengthening the compliance of Hungary with the European municipal waste principles and requirements. In this period we saw *no form of assistance from external actors*.

3.1.2 From 2000 to 2002: the changeover from the municipal law "on the books" to its implementation compliance

With the Act on Waste Management of 2000, Hungary had transposed the European legislation on the management and treatment of municipal waste. This Act also contained a number of provisions to further strengthen the implementation compliance of Hungary. On the one hand, the Act urged the adoption of measures in the treatment of municipal waste and specifically the establishment of compliant operating disposal landfills as well as the closure and after-care of the obsolete ones (Section 3, paragraph h). Moreover, it emphasised the need to reduce the hazard of generated waste and the safe disposal of non-reusable waste (National Waste Management Plan, 2002). On the other hand, the Act stressed that "to achieve the strategic goals of waste management and the objectives defined in this Act and to implement the principles of waste management" it was necessary to "adopt a National Waste Management Plan" (Section 33).

By that time, the majority of the municipal waste disposal sites were still unregulated and without any sanitary or environmental standards in terms of control and insulation of the soil (interview 16; interview 15; interview 27). Thus, the lack of technical regulation on landfill sites still influenced the creation of different types of landfills, namely those which followed and those which did not follow the sanitary requirements for the disposal operations

or the closure and after-care of obsolete sites (interview 16). Impetus to resolve the problems of unregulated and unsanitary landfills came from the assistance alliances established between EU and domestic stakeholders.

In December 1999, the EU Commission adopted a twinning project financed by PHARE[67] (No. HU9911-01) to improve the knowledge on the Hungarian waste deposit system (hereafter also PHARE Survey). This project aimed at surveying the number of existing sites in use in Hungary from the 1950s and at classifying them among those in operation and those closed or illegal (interview 8). The project was promoted by a Dutch firm which, in cooperation with the Hungarian regional and local authorities, reported the existence of two thousand six hundred and seventy (2670) disposal sites since the 1950s of which: half was not in use any more and closed in 2000; eight hundred and eighty-seven (887) were closed but did not conform to the EU requirements on re-cultivation of the soil (interview 11); sixty/seventy (60-70) were fully (or almost fully) compliant with the European requirements (interview 8). Additionally, there existed some 620 sites with a small capacity (National Waste Management Plan, 2002). Then, considering that at the beginning of the 2000s there were approximately three thousand two hundred (3200) municipalities and small settlements, it could be said that "practically each settlement had its own dump" (Dax et al., 2001, p. 13).

In addition to surveying the number of existing landfills, the PHARE twinning assessed their ownership (interview 8). The results of the Survey had a strong impact on the strategies pursued by private firms and municipalities. On the one hand, the Survey recognised that most of the compliant landfills were of foreign ownership and had been built between the end of the 1980s and the 1990s (interview 8; interview 16). The level of compliance of foreign or jointly managed landfill disposal sites with the European requirements can be explained through the market incentive mechanism and the assumption

[67] Before the 1999 PHARE Survey, Hungary has been targeted by other EU initiatives financed by PHARE which aimed at strengthening the Hungarian environmental institutional setting and capacity-building. In particular, between 1994 and 1998, the EU spent EUR 14.5 million on developing the Hungarian environmental policy, harmonising the environmental legislation, upgrading the laboratories within the Regional Environmental Inspectorates and providing funds for local authorities in the environmental sector (OECD, 2000). PHARE has been extremely important specifically for the institution building and legislative harmonisation process covering up to 30-50% of the institution building costs for the EU's preparatory readiness of Hungary (interview 28). PHARE has also supported the construction of municipal waste treatment facilities such as the construction of two regional landfill sites in 1994 (Dax et al., 2001) or other small regional facilities below the minimum size of five million Euro (interview 16; interview 28; Heil, 2000). Moreover, since the late 1990s, the EU Commission financed a special peer-review project which consisted in the establishment of an office in Bratislava where experts from private European consultancies held regular meetings, organised seminars and training sessions on how to write and implement the European legislation for representatives of the CEE candidate countries (interview 72).

that foreign companies considered the compliance with the EU waste requirements more profitable than a regulatory "race to the bottom". The pro-EU compliance strategy pursued by the foreign firms was also influenced by their increasingly dominant position on the Hungarian market for the collection and treatment of municipal waste. An international report reveals that these foreign companies gradually acquired bigger shares of the market to the point that, in the early 2000s, they owned already between seventy-five and eighty (75-80%) percent of the total Hungarian market of waste collection and treatment (PSIRU, 2000). Furthermore, the account was expected to grow "by 8-10 percent in the coming years, due to the Hungarian government's commitment to meet the EU environmental standards" (PSIRU, 2000, p. 11). The high level of foreign ownership of the Hungarian market had been emphasised as well by Hungarian interviewees who have implied that the high level of investments from foreign companies made them "buy the Hungarian market" (interview 10; interview 8; interview 12) and strengthened their position in the Hungarian waste market (interview 10). At the beginning of 2000s, the Hungarian waste collection and treatment market was then divided between two main actors: few big foreign firms (i.e. Saubermacher, AVE, A.S.A., Remondis) and some waste-collecting companies owned by big cities, villages or cooperatives of municipalities (interview 29; interview 17; interview 14). Indeed, private Hungarian firms never became relevant actors in the Hungarian municipal waste market (interview 10; interview 14).

On the other hand, the Survey highlighted that most of the operating municipally owned-landfills were non-compliant with the EU waste requirements. To improve the compliance with the EU requirements of municipal disposal sites, municipalities applied for EU ISPA funding. From 2000, the EU has financed twelve projects concerning the sector of solid waste treatment and two technical assistance projects to build administrative capacity, infrastructure and the ability to manage EU projects and funding (interview 30). However, not all the EU-funded projects had been initially successful. For example, delays in the adoption of the ISPA legislation by the EU and the definition of projects to submit for application[68] influenced the approval of projects on the disposal of waste into landfills in the vicinity of medium-size and big cities, a move that hardly encouraged thinking on other

[68] In Hungary, the preparation for the ISPA projects started already in 1998 "when the regulations pertaining to subsidy were not yet finalized" (Szabó, 2007). However, the EU defined the legislation on ISPA only in 2000 but by that time, Hungary did not have any project ready to be submitted to the EU Commission for approval (interview 31). The first projects were then selected among those submitted by municipalities and local authorities to apply for the Hungarian national grants and funding which, after being subject to additional studies on the requirements for the EU, were submitted by the Hungarian authorities for the EU Commission's approval (interview 31).

solutions such as waste sorting and recycling (interview 28; interview 16). Moreover, at first projects were generally not sophisticated and in some cases they were based on notions that were already out-dated by the time of their implementation (interview 32; interview 28). These problems were influenced by a poor level of expertise at the local level, manifested in lack of knowledge on how to define the projects, procedures for application to EU funds and on how to correctly manage the investments by a set deadline (interview 33). Hungarian municipalities tend to be small, with the smallest number of inhabitants per municipality on the EU continent: their relatively small size has caused "many drawbacks in terms of development" (Pogatsa, 2004). Lack of local employment and the tendency amongst those trained and educated to relocate had drastically reduced the possibility of providing the most basic physical and public infrastructure and an inefficient use of the resources (Pogatsa, 2004). Additionally, local authorities lacked sufficient experience to carry out the implementation of such projects (interview 31; interview 33; interview 32).

Weak planning in the definition of EU-funded projects influenced also an over-capacity of facilities to treat municipal waste in some regions. It could happen, for instance, that in one region a foreign firm had built or modernised an existing landfill disposal site to the EU requirements and, soon after, neighbouring municipalities applied for the construction of own facilities through ISPA or through public funding from the Hungarian central budget's target support and the Central Environmental Protection Fund[69] (Dax et al., 2001; interview 16). This for instance was the case in the Hajdu-Bihar region, where the foreign firm A.S.A. Hungary managed a consortium in partnership with AVE and the city of Debrecen for the construction of a new landfill site in the area of Debrecen (Dax et al., 2001). In the name of the consortium, the city of Debrecen applied for and received funding from ISPA for the construction of three sub-regional waste disposal sites (No. 2000/HU/16/P/PE/002). In the same region, however, the city of Nádudvar had constructed from state subsidies its own disposal site which, according to Dax et al. (2001), corresponded to a case of "wasted money" considering that this city could have been easily served by the new landfill site constructed by the A.S.A-AVE-Debrecen consortium. Moreover, the city of Nádudvar could not manage the facility through its own firm and had to call for a public tender procedure. This, eventually, was won and then managed by A.S.A (Dax et al., 2001).

In order to reduce incidence of problems in the planning phases of EU-funded projects, the EU financed two specific technical assistance projects (No.

[69] According to Dax et al., between 1992 and 1999 these two mechanisms supported the construction of sixty-three landfills in Hungary (Dax et al., 2001).

2000/HU/16/P/PA/005 and No. 2001/HU/16/P/PA/009) to help in the tendering procedure and in the drafting of ISPA projects in 2000 and 2001. Moreover, a list of experts from the EU Member States in all sectors was drawn up; these experts provided technical assistance before the submission of ISPA projects and checked its contents and development (interview 31; interview 13; interview 28). The purpose of these projects was the exchange of best-practices between European and Hungarian civil servants as in the case of the Szeged regional waste management programme (project No. 2000/HU/16/P/PE/005). The drafting of the project began in 2000 and was redrawn repeatedly as it contained technical weaknesses that could have resulted in a loss of EU financing (interview 28; interview 31). Then, in March 2000, experts from the Belgian consultancy Carl-Bro were delegated by the EU Commission to help the Hungarian experts in the preparation of the finalised project documentation. Following the exchange of information and best-practices from the external experts, the project was finally accepted by the EU Commission few months later and the Szeged regional programme started to be carried out (Szabó, 2007).

Despite problems arising in the management of specific EU-funded projects, the regional waste management planning was successfully organised in most of the Hungarian regions thanks to the establishment of cooperative strategies between stakeholders through the establishment of associations of municipalities or public-private-partnerships (hereafter, PPPs) between private and municipal firms. Associations of municipalities were created as a consequence of the lack of financial capacities to finance individual disposal facilities or co-finance ISPA projects by the municipalities and local authorities. While the EU favoured that small municipalities joined a more centralised system, it happened that in some cases too many municipalities were gathered around one single solution (interview 32). At times, because of the high number of municipalities within a single region, the municipalities were also not able to establish an association responsible for the common facility (interview 32). Or, they were able to establish an association, but unable to manage it because of the lack of a common governance model at the local and governmental levels (interview 33; interview 32; interview 28).

Parallel to the associations of municipalities, foreign and municipal firms established PPPs which resulted to be more successful in improving the regionalisation of waste management in Hungary. Since the early 1990s, there existed public-private cooperation with the establishment of joint-ventures for the collection of waste (Dax et al., 2001). Moreover, after the approval of ISPA projects, public-private-partnerships became important for the management of EU-funded regional treatment projects. In fact, according to Fleisher and

Futó (2005), "the objectives and means of programmes co-financed by the EU […] can only be realised through public-private-partnerships" (Fleisher and Futó, 2005, p. 14).

The Act on Waste Management of 2000 set as objective also the regional planning for municipal waste management. To achieve this goal, the PHARE Survey has been an important source of knowledge for organising the treatment of municipal waste at the national and regional levels (interview 9). Furthermore, since 2000, the EU has promoted a project (No. HU0004-02) to develop the Waste Management Information System linked to a twinning on the definition and adoption of the National Waste Management Plan (interview 8). This twinning had to be managed by the Public Waste Agency of Flanders (hereafter also OVAM) in cooperation with the Hungarian Ministry of Environment and the international consultancy COWI (interview 29; interview 8). At the time of the launch of the twinning on 27th August 2001, however, as part of the Second National Environmental Protection Programme, the Hungarian Parliament had already prepared a draft of the National Waste Management Plan to cover the period between 2003 and 2008 (interview 8) and discussions now revolved around the implementation of the Plan (interview 8; interview 9) and specific financial aspects within the OKT[70].

The National Waste Management Plan was adopted by the Parliament in November 2002 and established that by 2009 there could exist and operate at the national level no more than one hundred (100) disposal sites (interview 8, interview 15; interview 9). The rest had to be closed down and re-cultivated (interview 31). Within this plan, it was also decided that the operating sites had to guarantee a reception capacity for at least six years and they could not be located more than fifty kilometres from the point where the waste had been collected by 2009 (HOE, 2011), in conformity with the European principle of "correction of damage at source". As a consequence of this plan but also of the PHARE Survey, the municipal waste management was centralised in one single project at the regional level, and the number of landfill disposal sites was reduced to seventy-seven (77) operating for the whole country (interview 9; interview 18). The National Waste Management Plan also established the adoption of regional waste management plans 270 days after the approval of the National Plan; furthermore, municipal governments had to develop local waste management plans 270 days after the approval of the regional plans (National Waste Management Plan, 2002, p. 9).

[70] On 27 July 2001, in particular, the OKT in plenary session approved an opinion concerning the National Waste Management Plan which specifically emphasised the need of strengthening the financial means at the national level for the realisation of the Plan. This opinion was then taken into consideration by the government which discussed the adoption of a six-year financial plan for supporting the implementation of the National Waste Management Plan but ultimately decided on an annual amount from the central budget (interview 8; interview 9).

The Hungarian government decided that the twinning with the Flemish experts from OVAM "would have targeted the development of the regional waste management plans" (interview 8). The same National Waste Management Plan stated that regional waste management plans had to be based on the National Plan but "in order to complete and unite the systems [...] for an overall waste management system [these were] developed within the framework of a PHARE program" which supported their implementation by 2003 (National Waste Management Plan, 2002, p. 16). The OVAM twinning, which lasted less than two years, resulted in the drawing up of a plan "for the establishment of the best institutional structure for the management of waste streams, the transfer of know-how on data collection, the development of guidelines on waste management planning at regional level and the implementation of the necessary staff training" (Project Fiche No. HU0004-02). In particular, Flemish experts drafted a guideline manual "to support and coordinate the regional waste plans in consultation with the Hungarian Regional Environmental Inspectorates" (OVAM web site). Moreover, Flemish experts assisted in guiding the planning process by organising training session in Budapest or in the regional Inspectorates as well as organising study tours across Europe and in Flanders, where the Hungarian team was introduced to the methods, collection management and processing of data in use in Flanders (interview 8). Furthermore, clerks from the Hungarian Regional Inspectorates were also invited to Flanders for a study tour, during which meetings aimed at the exchange of best practices and also on-site visits to the Flemish waste collection and sorting centres, container parks and incineration plants too place (OVAM web page).

In November 2003, the Hungarian regions officially published regional waste management plans. The local governments soon followed suit, publishing municipal waste management plans in August 2004 (Hungarian national questionnaire on the transposition and implementation of directive 75/442/EEC, 2006). The creation of assistance alliances in the twinning project promoted by Flemish experts of OVAM had been essential for the definition and implementation of regional waste management plans in Hungary (interview 8; interview 9). Moving from an initial distance at the beginning of the project, Flemish experts and Hungarian regional and local authorities established a cooperative relationship in the exchange of information and know-how, which resulted in the adoption of the plans. Moreover, this fruitful experience was positively evaluated by the Hungarian Ministry of the Environment, which requested to expand the project scope to several other waste issues such as the import and export of waste material streams, the treatment of animal waste and the packaging waste (OVAM web site).

In the period between the adoption of the Act on Waste Management in 2000 and its implementation with the adoption of National and Regional Waste Management Plans in 2003, there was a move in the implementation compliance of the principles of waste management and treatment contained in the European Waste Framework and Landfill directives. This progress was strongly influenced by external – EU – assistance which, through twinning and capacity-building projects, improved knowledge of the EU requirements and the municipal waste infrastructure for the treatment of municipal waste. Unlike the mere provision of technical information and exchange of best-practices from external actors assumed by the transnational communication hypothesis, the external assistance to Hungarian stakeholders has been characterised by the establishment of assistance alliances and a good relationship between external and domestic actors as shown by the case of the OVAM twinning. Furthermore, cooperative strategies pursued by foreign and municipal firms facilitated the establishment of joint-ventures and PPPs in the organisation of the regional waste management. Moreover, as demonstrated by the PHARE Survey, foreign firms did not lower their standards but, as explained by the market incentives hypothesis, recognised the profitable aspect of EU compliance and established and/or modernised existing waste treatment facilities following costly but EU-conforming technology and standards. These strategies further improved the overall conformity of the Hungarian waste treatment facilities and system of municipal waste collection.

3.1.3 From 2003 to 2009: moving from municipal waste implementation compliance to its sustainability

By 2003, Hungary had implemented the principles of regional organisation and integration of municipal waste management within the National and Regional Waste Management Plans. Soon after the implementation of National and Regional Waste management Plans, cooperative strategies between foreign and municipal firms - which enhanced the establishment of assistance alliances in the implementation of EU-funded projects - and market incentives influenced an improvement in the municipal waste implementation compliance of Hungary towards full conformity in 2009. These mechanisms also enhanced the sustainable compliance of Hungary.

The case of remediation of old and obsolete disposal sites offers a clear example of the combination between cooperative strategies and market incentives. The National Waste Management Plan and the National Environmental Remediation Program (established with the Government Regulation No. 33/2000) recognised the recultivation of old and obsolete sites as a priority, to be achieved by 2009 (National Waste Management Plan, 2002; interview 9). Recultivation was however considered a very costly operation (interview 31; 16). On the one hand, municipalities applied for EU funding. Many of the approved ISPA projects, in fact, contained a reference to remediation of old disposal sites, but considering the costs of this operation, municipalities tended to "put out" this phase from the EU projects (interview 31). Furthermore, between 2004 and 2006, the EU approved two projects for the development of separate waste collection and composting facilities in Szabolcs-Szatmar-Bereg county and in the Üröm-Csókavár landfill (No. 2004/HU/16/C/PE/004 and No. 2006/HU/16/C/PE/001), but these were not considered sufficient to cover the costs of the required technology (HOE, 2011; interview 19, interview 27; interview 16). Hence, in many cases the projects were re-submitted for financing by the Cohesion Fund in the period 2007-2013 (interview 31).

On the other hand, recognising that the Hungarian legislation would soon have required the recultivation of old disposal sites but also the high costs of such operations, municipal firms established PPPs with foreign firms. These partnerships have however been limited in number and successful only in the areas around Budapest, where a higher number of inhabitants and foreign firms investing in this technology to cover the costs could be found (interview 16). Foreign firms, in fact, considering the profitability of EU compliance, since the beginning exported EU compliant technologies and modernised non-conforming facilities. Furthermore, they provided knowledge of EU standards and requirements for their partners in joint-ventures. As highlighted by Eszter Sarosi, in particular, the bulk of knowledge of the EU requirements in Hungary has come, in fact, from foreign companies which, in establishing their own business in Hungary, exported the EU-conforming requirements (interview 19), thus enhancing a regulatory "race to the top".

Some problems persisted in the enforcement of the regionalisation principles during the selection of the location for the disposal sites, resulting in protests by the local population, and over-capacity of facilities. Although limited to few regions (interview 16), these problems were linked to initial lack of cooperation between firms with already existing and operating concessions within a region (State Audit Report, 2004; Meyer, 2006; Dax et al., 2001; interview 32). The lack of cooperative strategies pursued by the various existing and new regional projects was also highlighted in the OKT common opinion released on 11

September 2003, in which OKT members specifically called for a closer cooperation among parties in the share of information and data to achieve full conformity with EU requirements.

An example of non-cooperation occurred during the construction of the ISPA-funded North Balaton regional municipal solid waste management system (No. 2002/HU/16/P/PE/017). In this case, the lack of cooperation between private companies already operating in the area and municipalities applying to ISPA influenced local protests and delayed the construction of the EU-funded project. These protests were framed within the NIMBY[71] syndrome, but soon it became clear that they had been manipulated by the existing private economic interests in the region which feared a loss in their market share (interview 28; interview 32). Additionally, the lack of cooperation between foreign and municipal firms influenced an over-capacity in the number of disposal sites operating in the surroundings of Budapest. For many years, this city had been served by the landfill of Gyál, but the situation changed when the site was acquired and modernised by A.S.A. Hungary (Dax et al., 2001). A municipal decree then established that only the Budapest's service provider FKF or FKF's authorised companies could manage the municipal waste produced by the city of Budapest with the result that neither FKF nor A.S.A agreed to cooperation or to a joint management of the landfill of Gyál (Dax et al., 2001). Thus, while two new landfills were built by FKF in the municipalities of Dunakeszi and Pusztazámor, the use of the landfill of Gyál owned by AS.A. was "relegated to the local market of Gyál and [the] surrounding small settlements" (Dax et al., 2001, p. 67).

In the period between 2003 and 2009, Hungary fully implemented the EU municipal waste requirements achieving the level of sustainable compliance. The progress in the compliance of Hungary with the municipal waste dimension was influenced by EU external assistance through ISPA and Cohesion funding. Nevertheless, unlike the transnational communication hypothesis that postulated a mere exchange of information and best-practices between external and domestic actors, the successful implementation of external assistance projects, aimed at the construction and modernisation of treatment facilities, had been influenced by the establishment of cooperative strategies between foreign and municipal firms. In fact, the problems that characterised the implementation of some ISPA projects, such as the NIMBY syndrome and over-capacity, generally arose when there was a lack of cooperation between

[71] The Collins English Dictionary online defines as "not-in-my-backyard" (NIMBY) syndrome a situation in which a person objects the occurrence of something if it will affect him or her or take place in his or her locality. These protests generally concern projects intended for the benefit of the public, such as a school or landfill, being sited near one's residence. For more details, see http://www.thefreedictionary.com/NIMBY.

stakeholders and coordination among operating facilities. Where cooperative strategies were established in the form of public-private-partnerships, the sustainable compliance implementation of the ISPA projects and the regionalisation of the waste management were very effective. Nevertheless, as the case of the recultivation of old disposal sites has shown, there was also a link between market incentives and cooperative strategies. In fact, in the establishment of PPPs to share the costs of the recultivation technology, the profitability of EU-conforming standards recognised by foreign firms impacted also the municipal partners which gained in terms of knowledge of EU standards, foreign investments and technology.

3.2 The Hungarian process of implementation compliance with the packaging waste dimension

The second dimension considered in this dissertation concerns the management and treatment of packaging waste. Management of this type of waste at the European level was the responsibility of packaging producers and fillers in line with the European principle of "polluter pays" established in Article 174 of the Treaty of Rome. Moreover, the Packaging and Packaging Waste Directive specified the adoption of measures to improve the reuse, the separate collection and the recovery and recycling of packaging goods. In particular, to measure the implementation compliance with the European legislation, the transposition of the Packaging Directive into the Hungarian legislation as well as the setting up of return, collection and recovery systems for packaging and the establishment of economic measures to encourage these systems were taken into consideration. As in the case of the municipal waste dimension, compliance with selected packaging requirements is analysed following a chronological division in three phases (each with its distinct intermediate goal as in the case of the municipal waste management dimension), over which Hungary improved from a non-compliance level (stage 2) in 1999 to sustainable compliance (sustainable compliance, stage 5) in 2009.

Also similarly to the municipal waste dimension, the three phases of analysis cover the periods from the *status quo* to the transposition, from transposition to implementation and the sustainability of compliance. The first phase covers the years from the late 1980s until 2002, when the Governmental Decree 94/2002 transposed the European legislation on

packaging waste in the Hungarian legislation. In this phase we see the mechanism of market incentives highly influencing the transposition on the books of the EU Directive on packaging waste as well as the establishment of cooperative strategies among domestic state actors and stakeholders. The second phase covered the years between 2002 and 2003 and culminated in the implementation of the packaging requirements contained in the Hungarian legislation transposing the EU packaging requirements. In this phase, the interrelation between market incentives and cooperative strategies among stakeholders influenced the progress towards the achievement of sustainable compliance. The third phase covered the years from 2003 to 2009; in its course, Hungary achieved sustainable compliance with the EU packaging requirements. In this phase the mechanisms of market incentives and cooperative strategies as well as the interrelation between market incentives and assistance alliances played a substantial role in making sustainable the implementation compliance of Hungary in the packaging waste dimension.

3.2.1 From the late 1980s to 2002: the passage from the packaging *status quo* to the law "on the books"

At the end of the 1980s, a system of collection and treatment of packaging materials did not exist in Hungary, and the state subsidised the collection of only certain types of packaging. The Communist system of packaging collection and treatment entitled a few selective collection schemes funded directly by the Communist government for paper in schools and return schemes for glass in the shops (interview 27; interview 13). Specific reuse schemes for beer glass bottles, refilling of plastic bottles and deposit refund systems were also established, and their rates depended on voluntary negotiations between industry, retailers and traders[72] (interview 13). Moreover, with the exception of a law of 1981 on hazardous waste, Hungary had also not defined any detailed legislation concerning the management of any type of waste, including packaging (interview 8).

The first impulse for the adoption of legislation on packaging waste came from the

[72] According to a document elaborated by the United Nations, in Hungary the most common types of bottles (wine, beer, soft drinks) always had about a 70-80% return rate but since 1991, the return rates decreased (except for beer bottles) to about 50% (estimates) and the trend was that the system worked only for those types of bottle for which refilling was economical. In 1998, the deposit rates (with % of deposit in products market price) were as follows: 0.75 l wine bottles made of glass: 5 US Cents/bottle (< 3%); 0.5 l beer bottles made of glass: 5 US Cents/bottle (6-8%); 1.5-2 l soft drink bottle made of plastic: 15-35 US Cents/bottle (30-40%).

application of Hungary to the OECD and the EU. Soon after the change of regime and in parallel to the debate on the various drafts of the HEPA, in fact, Hungary applied to the OECD (interview 8). In order to become a member, however, Hungary had to implement all the OECD decisions concerning environmental issues (interview 8) among which there were a number of important decisions concerning the management of packaging waste[73]. Moreover, on 4 April 1994, Hungary signed the Association Agreements with the EU. It then became clear to the government but also to the domestic packaging stakeholders that they had to adopt and comply with the European requirements on packaging (interview 17; interview 7). That same year, in fact, the EU adopted the Packaging and Packaging Waste Directive (No. 94/62/EC) which introduced the "producer responsibility" principle in the European legislation.

Between 1993 and 1994, broad discussions were conducted between the government and various packaging stakeholders on how to set up a system that made producers of specific goods responsible for their after-use phase (interview 34). The stakeholders involved were industrial organisations such as the Confederation of Hungarian Employers and Industrialists (hereafter, MGYOSZ), HUMUSZ and packaging associations[74] (interview 34). Hence, broad discussions among government and stakeholders contributed to the establishment of cooperative strategies for the adoption a preliminary agreement on a packaging draft law. This agreement then led, in June 1995, to the adoption of the Product Charge Act (No. LVI) by the Hungarian Parliament. This Act was among the first Hungarian laws to rule over specific waste-related matters, and it was designed to comply with the OECD Recommendation on the Reuse and Recycling of Beverage Containers before the formal accession of Hungary to the OECD in May 1996.

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[73] In specific, by the early 1990s, the OECD had already adopted one Recommendation on waste paper (i.e. Recommendation C(79)218/FINAL on Waste Paper Recovery); one Recommendation on beverage containers (i.e. Recommendation C(78)8/FINAL on the Re-Use and Recycling of Beverage Containers); one Recommendation on the waste management policy (i.e. Recommendation C(76)155/FINAL on a Comprehensive Waste Management Policy); and four Decisions on the transboundary movement and export of hazardous waste (i.e. Decision C(90)178/FINAL on the reduction of transfrontier movements of wastes, Decision C(88)90/FINAL on transfrontier movements of hazardous wastes, Decision C(86)64/FINAL on exports of hazardous wastes from the OECD area and Decision C(83)180/FINAL on the transfrontier movement of hazardous waste). For further details, see http://webnet.oecd.org/OECD ACTS/Instruments/ListBySubjectView.aspx.

[74] In 1990, more than seventy manufacturers, distributors and enterprises in the fields of packaging and materials handling established the Association of Packaging and Material Handling (in Hungarian: *Csomagolási és Anyagmozgatási Országos Szövetség*, hereafter also CSAOSZ) to represent their interest in the domestic discussions on the packaging legislation and to provide information on the existing systems and the best practices. Moreover, since 1992, packaging producers and fillers have been members of the Association of Environmental Enterprises (in Hungarian: *Környezetvédelmi Szolgáltatók és Gyártók Szövetsége*, hereafter KSZGYSZ), and of business associations such as the Beverage Carton Environmental Services Association (in Hungarian: *Italos Karton Környezetvédelmi Szolgáltató Egyesülés*, hereafter IKSZ).

The 1995 Act established economic instruments to encourage the recycling, recovery and reuse of packaging waste and aimed at providing sources of funding for the prevention and reduction of damages from production and distribution of certain products (interview 8; Faolex web site). The major novelty of the Act was, however, the establishment of a charge that all producers of certain products (i.e. packaging, electric and electronic equipment, specific petroleum products, batteries, commercial printing paper and tyres) had to pay to the Ministry of the Environment a charge for every product put on the market. The level depended on specificities of the product[75]. It also recognised the KAC[76] as the body responsible for the collection and redistribution of this charge (interview 10; interview 35; interview 11). In particular, the KAC Inter-ministerial Committee decided on the allocation of sixty/seventy percent of the product charge (interview 10; interview 14; interview 9), part of which was allocated to the producers to cover their fixed costs resulting from waste operations and to the government to support waste management companies in the organisation of the collection of waste, in developing new capacities for the recovery of waste and in establishing selective collection and recycling of waste (interview 10; interview 8; interview 34).

The 1995 Product Charge Act, however, only partially transposed the EU requirements contained in the European Packaging and Packaging waste directive. First, unlike the European legislation which governed the whole range of packaging (i.e. bottle, closure and label), it governed only over the packaging bottle (interview 26). Second, unlike the "producer responsibility" principle defined in the European Packaging directive, the system introduced with the 1995 Product Charge Act did not require producers to fulfil any obligation on the recovery and recycling of packaging waste (interview 26). Third, the system of product charge collection was considered by Hungarian business and NGO stakeholders as not transparent (interview 34; interview 14) and "complicated" (interview 26). According to Laszlo Szylagyi, former leader of HUMUSZ, in fact, the product charge was spent mostly on waste-water and sewage projects instead of being directed to waste management firms or other waste management purposes (interview 14). Moreover, not all the money was clearly

[75] In particular, for the packaging producers and fillers the level of the charge to be paid depended on the material of the packaging (interview 26).

[76] The Environmental Protection Act established the Central Environmental Protection Fund (KAC) as "a special budget line in the annual budget of the Ministry of Environment" and this was "directly subject to the relevant regulations in the State Budget Act" (REC, 2001). Its main financial sources came from the central budget and the product charges (i.e. transport fuel, tyres, batteries, packaging) and, in an only limited way, from natural resource fees (interview 8). In the late 1990s, however, the KAC was cancelled without any notification (interview 11) and the product charge collected by the Ministry of Environment went directly into the central budget.

labelled, and the firms did not exactly know how the product charge had been spent (interview 36). These stakeholders then soon became aware that such a system would not have worked under the EU conditions because, in practice, only selected companies received the money (interview 34; interview 14). Such awareness was confirmed by the fact that, with the opening of the negotiations for accession in Hungary, the EU negotiators considered this system as a state-aid to specific environmental and waste firms, thus countering the EU *acquis* (interview 36), they requested that the Hungarian government change it (interview 10). This issue was also discussed within the OKT in March 1998 in a plenary session. The common position approved on this occasion emphasised the need for a gradual introduction of legislation on product charges and the need to consider as models those European systems that best resembled the Hungarian situation.

Despite a partial transposition of the European Packaging and Packaging Waste Directive with the 1995 Act, the European legislation on packaging was not lost on the Hungarian industry. Recognising the compliance with the EU packaging legislation as the only way to make profits, György Viszkei - at that time general director of CSAOSZ – promoted the organisation of a system for packaging recovery and recycling as assumed by the market incentive hypothesis. Viszkei's expertise and organisational know-how helped him to win “the favour of the Hungarian professional public opinion” (Öko-Pannon web site) and to rapidly convince the Hungarian packaging firms “to put aside their economic interests and work together to facilitate a combined effort to achieve the goals of environmental protection” (Öko-Pannon web site). Viszkei was also able to convince the packaging producers and fillers to pay for the establishment of a system of recovery and recycling of packaging waste based on a long-term perspective for the fulfilment of the European packaging targets (interview 34). In other words, he was able to convince thirty-five among the biggest Hungarian and international packaging companies on the profitability of the compliance with the European requirements. At the end of 1996, he then received the financial support of these firms for the foundation of Öko-Pannon as the first public utility company responsible for the coordination of the collection and recovery of packaging waste, in compliance with the European regulations (Öko-Pannon Annual Report, 2010).

The 1995 Act did also not define a clear system for the collection and treatment of packaging waste. However, recognising profit in the compliance with the EU packaging requirements in this case as well the Hungarian packaging industry played an important role. Öko-Pannon, in particular, played a leading role in the development of a EU-conforming system thanks to fact that it had the biggest packaging producers and fillers among its

founding members and had contracts with waste collectors and recyclers. Hence, establishing "a good balance" between the packaging industry and the collectors and recyclers and having direct contacts with both producers and collectors, Öko-Pannon was able to convince them to take a broad perspective and organise the system for the collection, recovery and recycling of packaging waste (interview 34). Then, between 1997 and 1998, György Viszkei studied the European systems, trying to find the one that best fit the Hungarian case (interview 34). Considering that the industry generally wanted to pay "as little as possible", it soon became clear that a system based on the German model[77] would be too expensive for Hungary (interview 34). In the same period, discussions also took place between experts in the Ministry of Environment, environmental organisations and companies on the definition of the "producer responsibility" principle in the Hungarian legislation (interview 26). Moreover, being a member of the OKT since 1996, György Viszkei managed to discuss, modifications and improvements on the Product Charge Act of 1995 in the Permanent Working Group on Waste and in plenary sessions. Nevertheless, these discussions did not produce plenary consensus (interview 23).

After participating in study tours throughout Europe, Viszkei designed a system based on the French and Portuguese models which could fit the Hungarian reality and which would allow a gradual establishment at domestic level (interview 34). This licence system was based on the European accession requirements to transfer the responsibility of recovery and recycling from the state to the companies, and specifically established the creation of recovery organisations (hereafter also ROs) representatives of the producers which would manage the collection and recovery of packaging waste. These ROs were to be financed by licence fees which would cover the costs of organising the separate collection and recovery of packaging and would be paid by the packaging producers and fillers. Moreover, companies participating in such a scheme would have been partially exempted from the payment of the product fee if they reached the packaging recovery and recycling rates set by the law (interview 34; interview 35). Additionally, this system was analysed and positively evaluated by EU officials in their monitoring exercise on the Hungarian approximation to the European legislation. In particular, they recognised that this system "set something already in use in the

[77] According to the system established in Germany, packaging fillers and producers were obliged to take-back free of charge used packaging from households, offices and commercial entities and forward it for recycling to specialised companies. An alternative solution to these obligations for household packaging is the creation of a private system of collection and recycling (DSD) in collaboration with the private and public recovery companies. For further details, see http://grossbritannien.ahk.de/fileadmin/ahk_grossbritannien /Dokumente/Formulare/Environment/Packaging_Recycling_in_Germany.pdf and also http://www.pro-e.org/Legal_Basis_germany.html.

EU Member States" and that, thus, "it was going in the right direction" in terms of requirements contained in the European packaging directive (interview 34).

Since the drafting of the licence fee system by Viszkei, Öko-Pannon introduced pilot projects based on this system which were financed by its members on a voluntary basis (interview 26). The aims of these projects were to provide a gradual establishment of the licence fee system in Hungary and to enable Öko-Pannon to be in full operation in the late 1990s (interview 34). Moreover, by establishing these pilot projects, Öko-Pannon gained experience and allowed Öko-Pannon to start a wide range of packaging selection recovery and recycling projects (interview 26). The designing of the system was then influenced by market incentives, in the figure of Viszkei and the pilot projects enforced by Öko-Pannon, which postulated a regulatory "race to the top" when domestic firms recognised a competitive advantage in adopting the EU legislation.

Parallel to the development of the licence fee draft and the Öko-Pannon pilot projects, in 2000, the Hungarian Parliament adopted the Act on Waste Management which for the first time recognised the "polluter pays" principle in the Hungarian legal system (interview 26). In particular, the Act established that "on the basis of the 'polluter pays' principle, the producer or holder of waste or the manufacturer of the product that became waste shall pay the waste treatment costs or dispose of the waste; the polluter shall be responsible for the abatement of environmental pollution caused by the waste, for the restoration of the state of the environment and the reimbursement of damages including costs of restoration" (Chapter 1, Section 4 g). Despite the adoption of this new Act, however, the key legislation on packaging management remained the Product Charge Act of 1995 (interview 17).

The co-existence of the Acts of 1995 and of 2000 established two parallel systems of responsibility on the management of packaging products (interview 26). On the one hand, according to the 1995 Act, producers and fillers of packaging had to pay a product fee to the KAC for each product put on the market. On the other hand, according to the 2000 Act and the "polluter pays" principle, producers were responsible for the management and treatment of the waste from the packaging products they put on the market. This legislation did not properly harmonise the European packaging legislation but, rather, made it harder to implement the system (interview 36). In fact, while Hungary wished meet the requirements of the European waste legislation by adopting framework legislation in the form of the Act on Waste Management of 2000 (interview 36), the Product Charge Act of 1995 created

confusion for the producers regarding obligations[78]. Both Acts contained tables for a step-by-step and year-by-year introduction of recycling and recovery targets and product fees to be paid. Nevertheless, the products considered were different and the calculations for the targets and fees were confusing, as they could be equally based on the performance of the previous year or on the expected performance for the coming year (interview 36).

It became clear to the government and the packaging stakeholders that the co-existence of these systems created confusion, and in some aspects they were also not properly harmonised with the European legislation (interview 36; interview 34). Moreover, during the negotiations for the accession, the EU informed Hungary that the system ran counter to the European requirements (interview 26). Following discussions with the packaging stakeholders, on 5th May 2002, the government adopted the Governmental Decree on Packaging and Packaging Waste (No. 94/2002) which imposed obligations on the whole packaging goods (interview 26), contained requisites and standards regarding the production and making of packaging materials (art. 3-5) and established rules on the treatment of packaging material wastes in terms of recycling and reuse (art. 6 and 7). Furthermore, the Decree acknowledged the system drawn up in the Öko-Pannon's pilot projects by recognising that producers and traders could "create a coordinating organism that fulfilled their obligations regarding the treatment of packaging material wastes against payment of a fee on contractual terms" (art. 10-11).

In the period from the end of the 1980s until 2002, there was a shift in the performance of Hungary with the transposition of the European requirements on packaging in the Hungarian legislation. This achievement was influenced by the broad discussions between the government and the packaging stakeholders which led to the establishment of cooperative strategies which allowed the parties to strike a preliminary agreement, which later led to the approval of the Product Charge Act in 1995. Thanks to cooperative strategies between packaging business actors, NGOs and the government, the involved parties soon recognised shortcomings of the 1995 Act, thus inducing further discussions on the topic. Nevertheless, the definition and first implementation of the packaging system in Hungary were driven by the mechanism of market incentives and specifically by György Viszkei and Öko-Pannon.

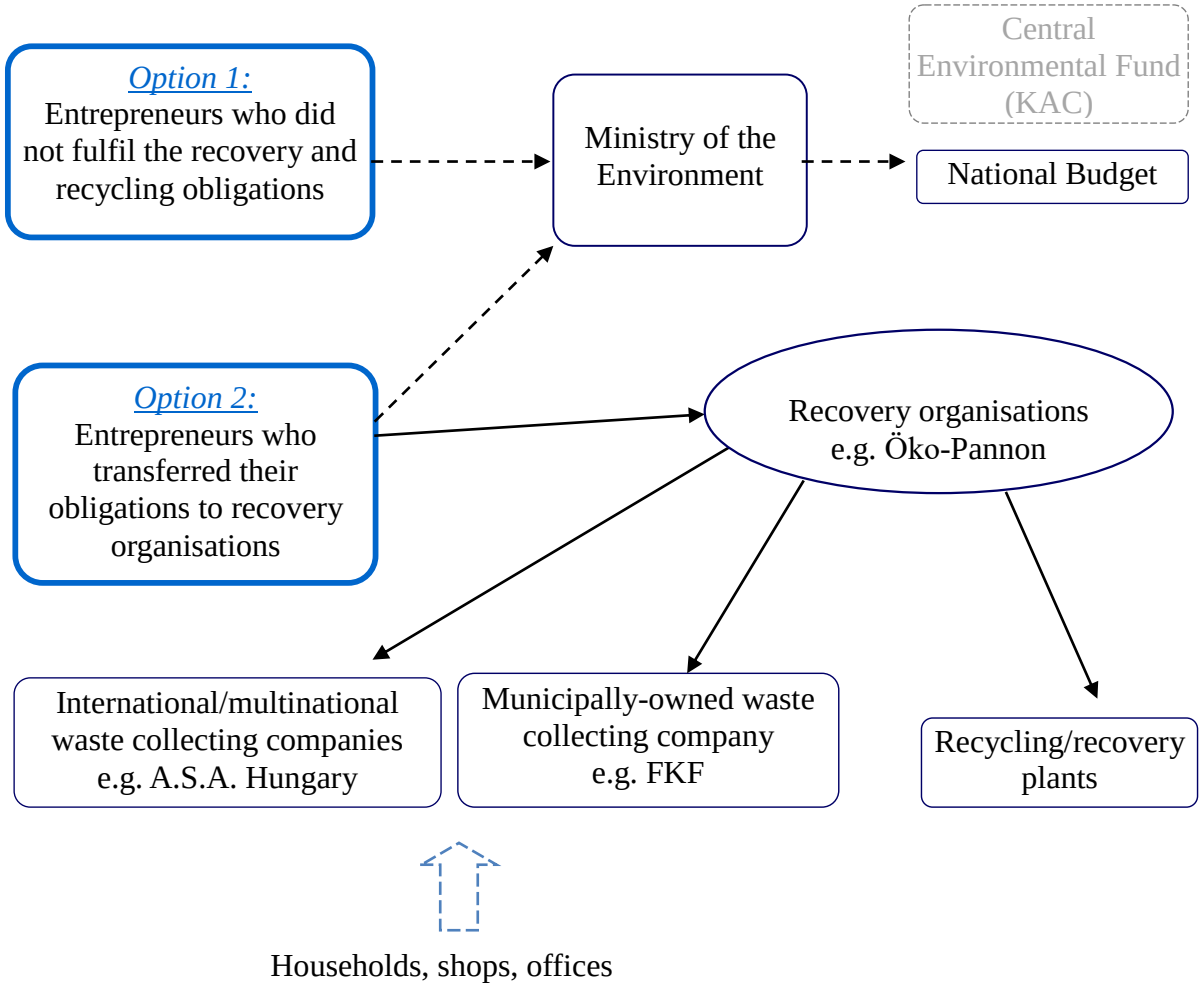
[78] According to the two Acts, the packaging producers had four obligations to fulfil: a) based on the performance and the kilograms put on the market of packaging, the producers had to collect back and recycle a certain percentage; b) producers had to pay to the government a tax for their products put on market; c) producers have to give a guarantee on the amount of packaging collected back; d) producers had to prepare reports to submit to the government that changed every year based on the product fee (interview 36).

Recognising the compliance with the EU packaging requirements as profitable for the Hungarian packaging industry, Viszkei was able to convince the other packaging firms to put aside the "fierce competition with each other" (as described on the Öko-Pannon web site). This meant rejecting the race to individually achieving highest possible profits in the market as assumed by the cost/benefit ratio hypothesis. Thus, Viszkei laid down the foundations "for the setting up of a system […] which would transfer responsibility from the state to the manufacturers" (Öko-Pannon web site). Moreover, by maintaining good relations with the industry, Viszkei convinced the heads of it to establish Öko-Pannon, as the vehicle for fulfilment of the European packaging recovery and recycling targets. Using the existing EU systems as a springboard, Viszkei elaborated a proposal, which was then implemented in the form of pilot projects for the Öko-Pannon's members. Indeed, Öko-Pannon and its pilot projects were singled out as exemplars in the Governmental Decree on Packaging of 2002 which fully transposed the EU packaging legislation in Hungary. No role was played in this period by any form of external assistance.

3.2.2 From 2002 to 2003: moving from the packaging law "on the books" to its implementation compliance

The 2002 Governmental Decree on packaging harmonised the Hungarian packaging legislation with the European one. The major novelty of the Decree was to have changed the product charge to a penalty (interview 34). In fact, the product charge was now considered as a "virtual tax" because it was to be paid only in the event that producers and fillers did not fulfil the requirements of collection, recovery and recycling of packaging (interview 34). This Decree also changed the system of responsibilities of the producers and fillers by adding to the direct payment of a product fee the possibility of fulfilling the packaging obligations by delegating the obligations to recovery organisations which would organise the collection and recovery of packaging upon the payment of a licence fee (interview 26; interview 10). Figure 4 outlines the system of management and treatment of packaging waste defined in the Governmental Decree on Packaging and Packaging Waste of 2002.

Figure 4: The Hungarian packaging waste management system



Source: own elaboration

The Governmental Decree No. 94/2002 did not mention concrete measures for its implementation 'on the ground'. However, it established the system for the management and treatment of packaging waste. Therefore, progress towards its implementation can be considered the setting up of the measures to enact this system, such as the establishment of recovery organisations. By 2003, the majority of Hungarian producers were organised into twenty-three ROs, which were legally responsible for the management of specific types of

waste such as packaging, tyres, accumulators, batteries, waste from electric and electronic equipment (hereafter also WEEE) and oils (interview 26). The number of recovery organisations varied according to the waste fraction: in some cases they were one or two per waste fraction, but some fractions had between five and eight coordinating bodies (interview 10). Specifically, there were nine ROs for packaging waste, four ROs for WEEE, four ROs for accumulators, two ROs for tyres and one RO for vehicle wreck.

In the establishment of recovery organisations, the cost/benefit ratio and specifically the pursuit of bigger profits on the market have been relevant, especially at first. Recovery organisations could obtain a licence for one waste stream only, they then competed on the market (interview 34), and after some years the system "became chaotic" (interview 16). The main idea behind the establishment of these ROs was that "whatever happens in practice, this should not affect the competition" (interview 36). The market, in fact, started "as an anarchy" between private companies and ROs, and it was characterised by "big competition" between ROs asking for lower levels of licence fees to fulfil their obligations (interview 10; interview 12; interview 9). Moreover, the establishment of the recovery organisations was considered as an "easy" task following only minimum requirements and "almost anyone" could establish them, including the recycling companies, the collecting companies and the packaging producers and fillers (interview 9; interview 12).

However, state actors and firms recognised that the system of delegation to recovery organisations could be set up following a different logic. This could be the creation of a "collective" system in which the state only needed to deal with a limited number of actors, and producers could understand the system (interview 36). Hence, when producers contracted ROs they did not have to juggle with waste collection and treatment operations; rather, they kept only the take-away obligations. This "collective" system was established in the packaging waste fraction where Öko-Pannon, created already in 1996, was also the first to officially register as waste recovery organisation in December 2002 and to start its operations on 1st January 2003. Soon after the Governmental Decree on Packaging of 2002 came into force, Öko-Pannon established itself as a monopolist in the packaging waste fraction (interview 34; interview 35; Öko-Pannon Annual Report, 2010). The monopoly of Öko-Pannon can be explained by two elements: first, the members of Öko-Pannon had already voluntarily implemented the pilot projects on which was based on the licence fee system established in the 2002 Governmental Decree, which allowed Öko-Pannon members to adapt rapidly to the system defined in the Decree. Second, the packaging firms believed that the monopoly of a single company was enough for the development of the packaging recovery

and recycling system but this company had to be controlled by the biggest packaging fillers, who would finance the system and, as shareholders, would also control the charges and possible market distortions (interview 34). Although Öko-Pannon was founded indeed by the industry and composed of industries, this was balanced by the fact that each of the founders had the same number of shares that the statute specified that every member had to be equal and that Öko-Pannon could not be dominated by any single industry (interview 34).

In the period between 2002 and 2003, Hungary moved from transposition to implementation of the packaging legislation "on the ground". Having previously participated in voluntary pilot projects involving putting EU packaging requirements into practice, Öko-Pannon members could enjoy a competitive advantage once the requirements were transposed into national legislation. This also strongly influenced the definition of a functioning "collective" system and cooperative strategies among packaging firms to attain the European packaging recovery and recycling targets. Öko-Pannon then established itself as a monopoly on the packaging waste fraction in which the different parties involved in the production, collection and recycling of packaging pursued cooperative strategies for the fulfilment of the EU packaging requirements. In contrast, firms in other waste fractions still pursued their own profits with the consequence of creating chaotic and competitive recovery systems not always attaining the EU targets. As demonstrated, also in this second phase, any form of external assistance hardly played a role.

3.2.3 From 2003 to 2009: transforming the packaging implementation into sustainable compliance

Soon after the implementation of the Governmental Decree on Packaging with the establishment of recovery organisations in 2003, cooperative strategies between government, packaging stakeholders and societal actors as well as market incentives interlinked to assistance alliances influenced a further improvement in the packaging implementation compliance of Hungary which, in 2004, achieved full conformity. These mechanisms also enhanced the sustainable compliance of Hungary.

The discussions between packaging stakeholders, societal actors and government on

the product charge exemptions offer a first clear example of cooperative strategies. According to the 2002 Governmental Decree, the system of delegation to recovery organisations was to be financed through licensing fees, while the packaging producers who had not attained the targets were to pay the product charge (interview 11; interview 9; interview 34; interview 35). Moreover, considering that the licence fees was one-tenth (1/10) lower than the product fee, when producers contracted ROs they were also obliged to the payment of a percentage of the product fee to the government (interview 36; interview 35). This "double payment" deeply concerned the business stakeholders, who discussed the topic in the OKT. Discussions within the OKT were a way for the government and the Parliament "to check consensus among the different fields of the OKT" (interview 23), but also to signal problems. The discussions that occurred on the fees to be paid by packaging producers are an example of disagreement between the OKT representatives but still of cooperative strategies pursued within this advisory body.

In September 2003, the establishment of exemptions to the payment of the product charge by the producers was firstly "informally" discussed in the Permanent Waste Committee and then in the following plenary session (interview 23). During the plenary session, a majority of OKT members agreed to change the product charge from a charge to a penalty to be paid in the event that specific recovery and recycling targets were not attained, and in accordance with the European principle of "polluter pays". In addition to the majority opinion, the OKT approved a minority position in which OKT members from the business side expressed their concern about the existence of a dual system of payment for those producers delegating obligations to the recovery organisations. These members feared that this system would reduce the fulfilment of the European recovery and recycling targets because, according to György Viszkei, "under the double system, companies could conclude that it is no longer cheaper to join a licence fee system" (BBJ, 2003) and thus prefer to pay directly the product fee to the government without fulfilling their packaging recovery obligations. These discussions influenced the adoption of the Product Fee Exemption Decree (Act No. LXXXIX of 2003), which clarified conditions and limits on the application of the product fee to producers delegating their obligations to recovery organisations[79].

[79] According to this Decree, when producers agreed to the licence fee system they could be individually exempted or pay a reduced product fee if they collected and recovered the waste of their products (OECD, 2008; Öko-Pannon website). In particular, producers within the licence fee system paid the licence fee to the ROs and they were exempted from paying eighty-five percent of the product fee but paid instead only twenty-five percent of the product fee to the government). If they did not reach the targets, however, they had to pay the full amount of the fee and also a penalty (interview 35; PRO-Europe newsletter, 2006). In the specific packaging waste fractions, over the years there were also full exemptions for specific items when

Moreover, the cooperative strategies established between producers and the government thanks to the mediation of recovery organisations (interviews 34; 36) played also a major role in enhancing the implementation compliance of Hungary. In one interviewee's description, ROs "lived together with the producers" (interview 36), but they also directly controlled the reports that firms had to annually send to the Ministry of Environment and the statistical office on the amount of packaging put on the market (interview 36; interview 34; interview 9). Furthermore, when making policy, the government and the Ministry of Environment often listened to the proposals of the ROs on ways to further clarify the system established in 2002. They typically took seriously the ROs' comments which, representing the positions of both the producers and the recycling industry, were considered to improve the system from a "practical" point of view (interview 36; interview 34).

As regards the role played by market incentives, the initial lack of clarification on the double system of fees could have had influenced the market incentives that Öko-Pannon recognised in fulfilling the EU packaging requirements. In fact, following cost/benefit calculations, Öko-Pannon could have lowered its standards for the fear of profit loss. However, this did not come to fruition. On the contrary, Öko-Pannon still considered the compliance with the European requirements as profitable and continued to enforce the EU standards. To fulfil the recycling and recovery targets set in the legislation[80], Öko-Pannon minimally raised its licence fee each year to cover the costs of the operation, but also informed its members of the raises in a timely fashion. The members then considered these annual increases as planned costs (interview 34). Moreover, it also favoured cooperation between collectors and recyclers by establishing long-term contracts between them which, in turn enhanced the possibility of loans from the banks (interview 10). Furthermore, the professionalism of Öko-Pannon in organising the packaging system and achieving the targets allayed the initial mistrust of the environmental NGOs about the possibility of fulfilling packaging recycling and recovery targets through delegation to ROs (interview 34). Environmental NGOs such as HUMUSZ began to establish cooperative strategies with Öko-Pannon and came to recognise that the system established by this RO was the best option for achieving the European packaging recovery and recycling targets (interview 34).

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producers joined Öko-Pannon (Öko-Pannon Annual Report, 2009).

[80] The targets on reuse and recycling set in the Governmental Decree 94/2002 were amended several times with the Government Decree No. 195/2002 (IX. 6.) which established that the reuse and recovery of 60% of packaging waste must be reached by 2012. This required the involvement of nearly 60% of the population into the selective waste collection systems by 2008 following also the Parliamentary Resolution No. 110/2002 on the National Waste Environment and Energy Operational Programme (Environment and Energy Operational Programme of Hungary for 2007-2013, 2007, p. 127).

Considering its long experience in the packaging waste fraction Öko-Pannon then established itself as model for the other packaging firms and in this period was able to further increase its shares of the packaging market segment. Since April 2003, it signed contracts with one hundred and ninety (190) producers and, at the beginning of 2004, was responsible for forty-five percent (45%) of the overall Hungarian packaging waste and financed system (PRO-Europe booklet, 2006). These figures further increased to fifty-four percent (54%) in 2005 and sixty-eight percent (68%) in 2006 (PRO-Europe booklet, 2006). Moreover, the number of members among the packaging producers and fillers rose from one hundred sixty-five (165) on 1st January 2003 to two thousand five hundred and six (2506) on 1st January 2009 (Öko-Pannon Annual Report, 2009). Furthermore, thanks to the prominence of its members, Öko-Pannon was able to establish a stable system of contracts between producers and recycling companies and thus achieve good results in the collection, recovery and recycling of packaging waste. In fact, already in 2006 it had achieved the packaging recovery target of fifty-eight percent (58%) of the packaging waste generated by its members[81] (PRO-Europe booklet, 2006) while in 2009 it "over-performed its objectives and organised the selective collection and recovery of more than 325 thousand tons of the 568 thousand tons emitted in 2009" in Hungary (Öko-Pannon Annual Report, 2009, p. 3).

The dominant position of Öko-Pannon in the Hungarian packaging market influenced the establishment of assistance alliances with European packaging lobbies which recognised it as the main Hungarian target of their initiatives. According to the National Waste Management Plan adopted in December 2002, "waste management developments in the private sector, including those of the producers [...] are usually financed from preferential loans, internal funds or credit" (National Waste Management Plan, 2003). Packaging producers and recovery organisations such as Öko-Pannon were involved in knowledge-based events and initiatives organised by Brussels-based stakeholders' organisations (interview 10). Since its establishment as a recovery organisation, Öko-Pannon has been a member of PRO-EUROPE[82], the major international umbrella organisation of thirty-one national producer responsibility systems and recovery organisations throughout Europe (and Canada).

Öko-Pannon has exclusively benefitted from the PRO-EUROPE initiatives, participating in conferences and workshops in which advice and best practices in the

[81] According to the European Directive 2005/20/EC amending Directive 94/62/EC and setting derogations for those Members States which signed the accession Treaty in April 2003, Hungary had to recover or incinerate with energy recovery 60% as a minimum by weight of packaging waste by 31 December 2012.

[82] For more details on the PRO-EUROPE, see http://www.pro-e.org/.

management of packaging waste were exchanged (interview 37). As a member of PRO-EUROPE, Öko-Pannon was involved in a five-year project consisting in fifty seminars and workshops in the Accessing countries on ways to implement the European Packaging Directive into national law. NGOs, local authorities and business representatives of all the CEE candidates have also been involved in this organisation (interview 3). Moreover, PRO-EUROPE "stood in close contact with its industry members" to provide them with experience, data and know-how and close contacts were also kept through the exchange of letters and calls and through further visits to these countries by PRO-EUROPE members (interview 3). Unlike what postulated by the transnational communication hypothesis in which the sole exchange of information and best-practices between external and domestic actors influenced an increase in the implementation compliance, the information exchange with Öko-Pannon has resulted as particularly effective thanks to its dominant position on the Hungarian market (at first boosted by market incentives) and the cooperative strategies enforced in its system between producers, collectors and recyclers.

A second example of the role of cooperative strategies established among industry, NGOs and government is offered with the analysis of the discussions within the OKT concerning exemptions to the payment of the product fee. Following the adoption of the Product Fee Exemption Decree in 2003, an on-going dialogue was engaged between business representatives and the government on the topic (interview 34; interview 35). Over the years, indeed, the business associations were particularly effective in lobbying directly the Ministry of Environment on draft legislation[83] (interview 8; interview 13). However, while the Ministry of Environment could be lobbied directly by business actors in the legislative draft-making, it also strongly relied on the broad discussions (and common opinions) between private and societal representatives occurring during the plenary sessions of the OKT (interview 26). In particular, in the common opinion adopted on 15 January 2004, the OKT representatives proposed to cancel the percentage of product fee to be paid by producers delegating to ROs because, in their view, this did not oblige the producers to pay for the neutralization of packaging waste, and thus it had to be considered as "against the EU legislation". For the OKT members, this system ran counter to the European environmental principle of "polluter pays", but was also considered as "irrational" from an economic point of view. Following these discussions, in 2006, Ministerial Decree No. 91 further harmonised the Hungarian packaging legislation to the European one by setting the amount of product fee

[83] For example, CSAOSZ and IKSZ provided substantive comments and modifications on Hungarian packaging legislation (interview 26; interview 35).

that producers had to pay annually (interview 26) and clarifying the exceptions on the payment of the fee for those producers joining the recovery organisations (interview 13; interview 35).

In the period between 2003 and 2009, with the creation of recovery organisations, Hungary moved from the implementation of the packaging legislation to defining a system which allowed for full compliance performance to be sustained over time. The presence of strong business actors recognising a competitive advantage in achieving EU compliance such as Öko-Pannon was highly instrumental in this process. Despite the shortcomings in the Hungarian packaging legislation, which possibly affected the choice of packaging producers to delegate their obligations to recovery organisations, Öko-Pannon reassured all involved parties about the costs of recovery and recycling packaging waste and achieved a dominant position in the Hungarian packaging market. Furthermore, thanks to its position on the packaging waste fraction, Öko-Pannon was the main recipient of external assistance and therefore established assistance alliances with international packaging stakeholders such as PRO-EUROPE. In this period, the presence of cooperative strategies played also a substantial role in the sustainability of compliance. In particular, the cooperative discussions between business representatives, NGOs and the government in the OKT strongly impacted amendments in the Hungarian packaging legislation, which fully aligned this country with the EU packaging legislation and requirements.

3.3 Conclusions

Beginning in 1999 with a non-compliant performance, Hungary adopted on a gradual basis the requirements set out in the European Waste Framework, Landfill and Packaging Waste Directives. This culminated in 2009 in the achievement of full conformity and the level of sustainable compliance. The process of implementation compliance of the selected municipal and packaging waste requirements comprised three phases: from the *status quo* to the transposition into national law; from the transposition to the implementation “on the ground”; and sustainability of municipal and packaging waste measures of implementation compliance. The transposition of the European municipal waste requirements contained in the

European Waste Framework and Landfill Directives into the Hungarian legislation was deeply influenced by two mechanisms. On the one hand, the role played by the market incentives mechanism involving market penetration by foreign firms strongly impacted the definition of a compliant municipal waste management and treatment system in 1995. Taking into consideration Caves (1974) and Blomstrom and Kokko (2003), the market incentive hypothesis elaborated in the theoretical chapter suggested that more developed foreign firms entering less-regulated markets could shape these markets by providing technology transfers and regulatory knowledge to their affiliates when recognising profit in exporting their high standards. In the case of Hungary, the multinationals entering the market recognised profit in providing compliance of their technology and services with EU standards and, since the early 1990s, they modernised and invested in EU-compliant landfill disposal sites and maintained EU standards when providing waste collection services. On the other hand, the role played by the cooperative strategies mechanism influenced the definition of stricter and clearer principles in Hungarian legislation on municipal waste. Researchers of Europeanisation and policy implementation have, in fact, underscored how cooperative and consensual policy-making positively influenced the development of strategies of cost-sharing, making the adoption and implementation of policies more likely (Richardson et al., 1982; Lundqvist, 1980; Börzel and Risse, 2000; Börzel, 2002; Jordan and Liefferink, 2004). In this period, cooperative strategies were particularly established within the National Council on Environment, an advisory body to the Ministry of Environment, which brought together representatives from academia, business and the civil society organisations.

Implementation of the Act on Waste Management which, in 2000, transposed the European requirements of the municipal waste dimension was achieved thanks to three mechanisms. First, the presence of market incentives where foreign firms recognised a competitive advantage in exporting costlier but EU-compliant municipal waste treatment technology and machinery instead of lowering their standards upon penetrating the Hungarian waste market. Second, the cooperative strategies established between private and municipal companies with the creation of joint-ventures and partnerships for the management of regional municipal waste facilities. And, third, the role of assistance alliances between domestic and external actors in the adoption of PHARE-funded twinning projects and ISPA projects on the modernisation and construction of treatment disposal facilities. In the theoretical chapter, I referred to the work of Stark, Vedres, Bruszt and Jacoby who analysed the quality of assistance in fostering compliance at the domestic level and specifically “the capacity of external actors to generate alliances with domestic actors” (Jacoby, 2008; (Stark,

Vedres and Bruszt, 2006; Stark and Vedres, 2006; Bruszt and Vedres, 2013). In this phase, however, these three mechanisms have not worked distinctively. The market incentives which influenced the strategies of foreign companies in exporting EU-conforming standards enhanced the sharing of EU-conforming technology and standards when cooperative strategies between municipal and foreign firms were established in joint-ventures for the collection and treatment of municipal waste. Furthermore, cooperative strategies between domestic and external actors have enhanced the establishment of assistance alliances in the development of EU-funded knowledge-based and capacity building projects.

Full-conformity and sustainability of implementation compliance related to the municipal waste dimension were achieved in the period between 2003 and 2009. The achievement of sustainable compliance was strongly influenced by the interrelation between market incentives, cooperative strategies and assistance alliances. In the 2003-2009 period, cooperation was established between stakeholders through the institution of public-private-partnerships (PPPs) made for efficacious management of joint-disposal facilities, including those EU projects funded by ISPA and the Cohesion Fund in Post-Accession. Moreover, the sustainability of compliance was also influenced by the fact that foreign firms recognised gains in exporting and investing in EU-conforming technology which was then adopted in the management of compliant treatment facilities and the re-cultivation of old and obsolete landfill disposal sites.

As in the case of municipal waste, the Hungarian process of compliance with the packaging waste management dimension went through three phases of evolution, with market incentives and cooperative strategies playing a major role in all of them. The transposition of the European packaging waste requirements, in particular, was influenced by broad discussions between the government, various stakeholders from business circles and environmental NGOs. These discussions led to an agreement between the parties which was then formalised as the 1995 Product Fee Act, the first Hungarian regulation partially transposing the EU packaging requirements. From this agreement followed also the development of cooperative strategies pursued within the OKT which influenced the adoption by the Hungarian packaging legislation of stricter requirements and principles in line with the EU Packaging directive through the adoption of the 2002 Governmental Degree on Packaging.

Furthermore, market incentives were particularly relevant in this transposition phase; particularly, in the definition of the Hungarian packaging management and treatment system. As mentioned in the theoretical chapter, Vogel (1995) and Vogel and Kagan (2004) refer to

the model known as “the California Effect” which proposed that domestic firms, having access to better regulated markets, adapted to these stricter requirements and asked their governments to enforce them at the domestic level (on this point, see also Bradford, 2012). Following the adoption of the Product Fee Act, packaging producers and practitioners established Öko-Pannon as the first public utility company in charge of recovering and recycling packaging. Moreover, recognising the compliance with the EU packaging requirements as profitable, György Viszkei started to explore models found in other European Member States that would suit the Hungarian reality, and elaborated one that had producers delegating to recovery organisations the recovery and recycling of packaging waste in exchange for payment of a licence fee. In 1998, the system elaborated by Viszkei was adopted by Öko-Pannon through voluntary pilot projects for its members.

The 2002 Governmental Decree on Packaging did not refer to specific implementing measures but set out the principles for the management and treatment of packaging waste. Implementation of European packaging requirements was then measured with the establishment of a system to manage and treat packaging waste. The Decree recognised two different options that packaging entrepreneurs could follow: payment of a penalty to the government or payment of a licence fee to recovery organisations; only in the latter case the European recycling and recovery obligations could be fulfilled. In the establishment of a packaging recovery and recycling system through recovery organisations the mechanism of market incentives played a substantial role. Unlike other waste fractions in which firms lowered their standards to be competitive and gain larger profits, packaging firms recognised profitability of conformity with EU requirements thanks to early adoption of EU requirements through the Öko-Pannon voluntary pilot projects. As a result, Öko-Pannon established itself as the largest recovery organisation for packaging and acquired a dominant position in the Hungarian packaging market. Furthermore, the system of packaging recovery and recycling established in Öko-Pannon was based on cooperative strategies between packaging producers and fillers, packaging waste collectors and recyclers for the fulfilment of EU packaging requirements.

After 2003 and establishment of the recovery organisations, Hungary was in full compliance with the packaging waste management dimension. The sustainability of the compliance has been related to market incentives which made Öko-Pannon recognise profit it the compliance with the EU packaging requirements. Acting as facilitator between the packaging producers and the contracted collectors and recyclers and enhancing the pursuit of cooperative strategies among these actors, Öko-Pannon encouraged producers to fulfil, and

sometimes over-fulfil, the EU packaging targets with the reduced payment of a licence fee. Considering its dominant position on the packaging market, Öko-Pannon was also the main target of initiatives organised by external actors such as PRO-EUROPE with which it established assistance alliances for improvement of the Hungarian packaging system. Furthermore, the presence of cooperative strategies between business representatives, NGOs and the government in the OKT strongly influenced modifications in the Hungarian packaging legislation, which further and fully aligned Hungary with the EU packaging requirements.

Chapter 4
Poland

Poland rapidly followed Hungary in establishing formal relations with the European Community, then the European Union. In 1989, Poland joined Hungary in the European Trade and Cooperation Agreement, and was recognised together with Hungary as a beneficiary of the PHARE aid programme. In 1991, Poland signed the European Agreements, and on 5th April 1994, a few weeks after Hungary, it formally applied to become member of the European Union. According to Professor Balazs, who at that time was the Hungarian Ambassador in Copenhagen, after the application to the EU, Hungary and Poland started to jointly organise press conferences on the EU accession, while Polish and Hungarian Ambassadors specifically got "the same instructions from their capitals of presenting in joint initiatives their willingness to become Members of the European Union" (interview 7). In 1994, Hungary and Poland elaborated what Professor Balazs has termed a "naïve" timetable for accession by assuming that the procedure of accession would take only a couple of years, starting in 1996 and concluding with their membership in 1998 (interview 7). Nevertheless, as Professor Balazs has further noted, Poland and Hungary rapidly realised that the EU strategy for the accession of the CEE countries "was not to enlarge to a small group of countries from the region but to take together as many countries as possible" which meant that "practically Hungary and Poland waited for the rest of the CEE countries to be ready for accession" (interview 7).

Sharing the leading position with Hungary in relations with the EU, Poland's compliance performance with the European legislation was also marked by similar teething problems and delays. In the sector of waste management, and specifically in the implementation of the European Waste Framework, Landfill and Packaging and Packaging Waste directives, the first Commission Annual Reports documented a weak compliance performance that initially was similar for both countries, but with differences growing over time. As in the Hungarian chapter, Polish progress in the dimensions of municipal and packaging waste management is presented through a chronological analysis over three phases, namely from the *status quo* to law "on the books", the implementation of the national legislation and, lastly, sustainability. Unlike the Hungarian case, however, the Polish

performance in the two dimensions does not achieve the condition of "full compliance" and thus, in the decade under consideration, it develops only to the phase of transposition of the EU requirements in domestic legislation without full implementation.

The chapter is structured as follows: the first section focuses on the municipal waste management dimension. After a revision of the elements of the European Waste Framework and Landfill directives that had to be transposed and implemented at the national level, this section analyses the two phases which characterised the development of the Polish performance: from the *status quo* to the transposition of the European requirements in the Polish legislation, and implementation of national transposing legislation. The second section deals with the packaging waste management dimension. After review of the European requirements to measure compliance with European packaging legislation, the developments occurring in the performance of Poland that saw this country improve from a situation of *status quo* to the transposition and partial implementation of the European packaging requirements are pointed out. In the final and concluding section, I summarise the key findings that emerged from tracing the process of compliance of Poland in the municipal and packaging dimensions which, as in the Hungarian case, will be analysed in detail in the concluding chapter of the dissertation.

4.1. The Polish process of implementation compliance with the municipal waste dimension

The municipal waste management dimension considered in this thesis concerns principles and requirements defined by the European Union on the management and treatment of municipal waste. The key requirement taken into consideration in this dimension deals with the concept of "proximity" of disposal of waste from the source of generation of the environmental damage. This principle was firstly defined in the Treaty of Rome in article 174, and further specified in the Waste Framework Directive, in which it was established that the disposal of waste was to occur at the nearest and appropriate network of installations (Art. 5, Directive No. 91/156/EEC and Art. 16 of Directive 2008/98/EC). Moreover, the Landfill Directive set standards for the new landfills, those in operation and the ones that had to be closed down because old or obsolete. The performance of Poland in this dimension, however,

was characterised by few – but still non-compliant – improvements allowing a shift from stage 1 in 1999 to stage 2 in 2009.

Polish compliance progress in the municipal dimension is analysed following a chronological division of its achievements. The first phase covers the period from the 1980s until 2001, when the Act on Waste transposing the two European directives was approved by the Polish government. This first phase was characterised by limited cooperation between the government and Parliament and the stakeholders in the environmental policy-making. An exchange of knowledge between Polish policymakers and British experts led to the Act on Waste of 2001 which transposed the EU municipal waste requirements in the Polish 'books'. Moreover, despite the establishment of consultative environmental bodies, policy-makers and the stakeholders preferred more direct, informal and bilateral systems of consultation through *ad hoc* meetings in the Ministry or in the Parliament, where only a limited number of experts and interests' representatives were involved. The lack of cooperation in the policy-making process also affected external knowledge-based assistance from European experts who were not capable of establishing assistance alliances with domestic stakeholders with the consequence that many of the EU-funded projects were delayed. Furthermore, after the change from a Communist regime to a market economy, municipal firms and Polish family businesses appeared on Polish municipal waste market while foreign firms penetrated the market. However, neither the foreign firms nor the Polish family businesses saw profit in exporting or adopting the EU higher and costlier standards. Municipal, foreign and Polish private firms then followed cost/benefit calculations and adopted low (or lowered) standards to be competitive in the market and make bigger profits.

The second phase starts from the adoption of the Waste Act in 2001 and the subsequent discussions on the National and Regional Waste Management Plans in which measures to implement the Act had to be specified. In spite of the approval of the 2001 Act and of the National and Regional Plans in 2003 and 2004, the implementation of the legislation transposing the EU requirements was only partially completed by the end of the period under consideration, i.e. in 2009. In this phase, rational cost/benefit calculations rather than market incentives are followed by Polish family businesses, municipal firms and private foreign firms resulting in a fragmented market and a fierce competition for bigger shares of profit. Moreover, the lack of cooperation among stakeholders in the policy-making process further consolidated the development of direct and bilateral contacts with clerks in the Ministry of Environment or Members of the Parliament. This lack of cooperation also

negatively impacted the establishment of assistance alliances between external and domestic actors in carrying out EU knowledge-based and capacity-building projects.

4.1.1 From the 1980s to 2001: moving from the municipal waste *status quo* to the law "on the books"

During the Communist era, the principles and obligations connected to the municipal waste management and treatment had been defined in two legislative measures adopted in 1980. The Polish Environmental Protection Act (hereafter also PEPA), adopted in January 1980 by the *Sejm*, the lower Chamber of the Polish Parliament, was the first to rule in a systematic way on the protection of the environment and the management of waste[84] (Cole, 1995). Moreover, the Executive Order on the Protection of the Environment against Waste and Maintaining Cleanliness and Order in Towns and Villages, adopted by the Council of Ministers in 1980, obliged the owner or operator of a waste disposal site to keep a record of the amount and type of waste to be disposed, and it entrusted such owner or operator for the after-care of the deposit site (REC, 1996).

The PEPA and the Executive Order of 1980 recognised the ownership of the municipal waste to the Communist state meaning that the management and treatment of this waste were responsibility of the state (interview 39). The system of collection and treatment during the Communist era was characterised by state waste-collecting companies, managed by municipalities, and by the state-ownership of disposal facilities in the vicinity of each municipality (interview 39; interview 40). The waste collecting companies were called "Municipal Cleansing Companies" (in Polish: *Miejskie Przedsiębiorstwo Oczyszczenia*, hereafter MPOs). Some MPOs had emerged already at the beginning of the century in a number of Polish cities (for example, in Cracow in 1906 and in Warsaw in 1927[85]) where

[84] Title III recognised the duty of ensuring the protection of the environment that devolved upon economic enterprises and persons involved in economic activities. Moreover, in case they polluted, they could be subject to economic penalties, sanctions from the penal code as well as administrative fines and fees. Furthermore, in Chapter 8, this Act obliged local authorities to ensure the disposal and collection of household waste (Cole, 1995) and it also required that waste-generating facilities and individuals took measures to reduce waste (Cole, 1995) and to recycle it (REC, 1996). In addition, according to this Act, waste that could not be re-used or recycled had to be destroyed or rendered harmless for the environment by collecting and removing it in designated disposal sites compliant with environmental protection requirements (Cole, 1995).

[85] For further details on the history of the MPOs in the cities of Warsaw and Cracow, see

they offered sanitation and cleaning services. Then, they expanded to waste collecting services, operating mostly in cities because, at that time, regulations and collecting systems had not yet been established in the countryside and small villages (interview 39).

After the Round Table Talks of April 1989 and the subsequent transition from the Communist regime, the management of waste that had been established during Communist times changed. The process that brought to the establishment of a system for the management and treatment of municipal waste has been characterised by the emerging of a plurality of waste-collecting firms which, operating in the same cities, adopted or lowered their standards to remain competitive and make higher profits. Following the adoption of the Territorial Self-government Act in March 1990, which introduced the principle of local self-government, the Communist state-owned system of municipal waste collection and treatment rapidly became the responsibility and property of municipalities (interview 42). The waste-collecting MPOs became municipally-owned, as did the majority of the state-owned landfill sites, while a smaller number of sites were privatised into Polish or international ownership (interview 40; interview 42).

In some cases, Polish cities established joint-ventures with private firms. It has been pointed out that the phenomenon of joint-ventures in Poland "happened to a lesser extent in comparison to the Czech Republic or Hungary" but it involved a number of Polish cities (interview 42). The logic followed in the establishment of such partnerships has been twofold: in some cases, municipal firms wanted to "attract to the company an active investor" who would not only increase the capital of the company but also modernise it, provide know-how and improve the standards of waste management services (interview 42). In other cases, the municipal authorities opted for privatising the municipal companies "as a matter of principle" in order to secure adequate standards and capital for the MPOs. In contrast, a number of municipalities firmly opposed the selling of buyouts of the MPOs, such as in the case of the cities of Warsaw and Cracow. In general, however, the view of the individual local authorities prevailed on such decisions, and in many cases these decisions were linked to political and economic considerations and cost/benefit calculations (interview 42).

This period was also characterised by a process of privatization of municipal waste. The liberalization and transformation into a market economy, in fact, enabled Polish individuals and groups of people to start new businesses including waste management endeavours (interview 42). Hence, in the early 1990s, "several hundred" private Polish-

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http://www.mpo.com.pl/o_firmie/historia/ and http://www.mpo.krakow.pl/firma/historia-firmy (available in Polish).

owned waste collecting companies and family business which started to operate from a very small scale emerged (e.g. the ownership of only one truck to collect waste) by offering their services in the Polish cities (interview 42). Among these family businesses, BYŚ[86] and Lekaro[87] were the most important ones (interview 42; interview 43). As well, foreign investors appeared in the Polish market and started to invest in the Polish waste collection. Some of these firms started their operations from scratch by setting up their own subsidiaries and thus "creating structures to assure them further growth on the market" (interview 42). Others acquired buyouts, partial shares or total buyouts of existing municipal waste management companies and later set up companies parallel to existing ones. In some cases they established joint-ventures with municipal firms. These companies were to a large extent from Germany and France, and to a lesser extent, from the Netherlands and Belgium (interview 42). The first foreign company to enter the Polish market was the German REMONDIS[88] which, in 1992 bought partial buyouts of the MPO from the city of Poznan and established the joint-venture REMONDIS-Sanitech[89]. REMONDIS was soon followed by the French companies Sita[90] and Veolia[91] (interview 44), which created their own

[86] This company was created already in 1976 as a family transportation business and in 1980 it signed the first agreement for the transportation of waste with the Central Directorate of the State Rail and purchased the first specialized trucks for the collection of waste. In 1993, the family business was acquired by Wojciech Byśkiniewicza, and since then the company began its operations under the name of "BYŚ". In 1998 new agreements were signed and specialized trucks and machinery to handle waste were bought. Furthermore, in 2000, in the light of the negotiations for the Waste Act of 2001, BYŚ started to offer the collection and export of industrial waste and introduced additional services in the field of waste segregation combined with selective collection of waste paper, glass, scrap metal, plastic and wood. For further details on the company, see http://www.bys.com.pl/portal/menu/50/historia_firmy.html (in Polish).

[87] Lekaro at the beginning focused on large institutional clients, and in 1992 it introduced a range of services for individual clients. Between 1996 and 1999, Lekaro expanded its activities in different areas of Warsaw and since 2003, it has collected secondary waste as well. Moreover, in 2007 it created the first plant for segregation of waste and in 2009 it purchased specialised machinery which allowed to improve the process of classification of recycling materials and gave ability to recovery of a minor faction of waste. The use of newly purchased chipper as last element of segregation process resulted in a reduction of the volume of residual fractions. For further information on Lekaro, see http://www.lekaro.pl/o-firmie/tradycja-i-rozwoj/ (in Polish).

[88] The German company REMONDIS was formed in 2005 when Rethmann AG took over RWE and became a large privately-owned German waste management and logistics multinational (PSIRU, 2006). The company that later became REMONDIS began running its operations in Poland in 1992. It currently has branches in forty-three cities across Poland providing "comprehensive services in the area of collection and transportation of all kinds of waste, development, waste sorting, cleaning of streets, roads, and water and wastewater" (REMONDIS Polska web page). It also claims to be the market leader in the waste management in Poland (PSIRU, 2006). For further information on REMONDIS, see http://www.REMONDIS.pl/rmpl/o-firmie/remondis-w-polsce/ (in Polish).

[89] The REMONDIS-Sanitech joint venture in Poznan has been the first public-private waste management company created in Poland. In 1994, it opened the first modern sorting and recycling plant and in 1998 it extended its services to industrial non-hazardous waste collection and treatment. For further details on the Remondis-Sanitech joint venture, see http://www.remondis-sanitech.pl/remondis-sanitech-pl/o-firmie/historia/ (in Polish).

[90] Sita is the waste management division of Suez Lyonnaise des Eaux, the French water management company (PSIRU, 2000). It entered the Polish waste management market in 1992, at the beginning as ASMA, then

subsidiaries Sita Polska in 1992 and Veolia Poland in 1994. Moreover, in 1995, Sita Polska established a joint-venture with the MPO of the city of Szczecin[92] (interview 42).

Considering a lack of clear recommendations from the government and of a detailed legislation, the system established for the management of municipal waste was characterising by rising competition between a plurality of waste-collecting companies within a specific municipality or city (interview 42). The reasons for the establishment of such a "liberal" and competitive system are partially rooted in a fascination for the market economy held by the Polish post-Communist political elite (interview 42) but also, from a more practical point of view, to the fact that the local governments were entrusted with many responsibilities and, despite their initial satisfaction with the empowered local level, they considered the management of municipal waste as "just an additional task" (interview 42). However, an important motivation stemmed from the strategies pursued by the foreign firms which realised that they would gain more from keeping to the *status quo* "than being regulated from the very beginning" (interview 42). In other words, considering the compliance with the EU requirements as not profitable but simply following the pursuit of higher profits at lower costs, foreign firms lowered their standards when setting up their subsidiaries or when establishing joint-ventures to remain competitive and adapt to the less-regulated Polish market (interview 44).

Parallel to the establishment of a competitive system for the collection and treatment of municipal waste, Polish government applied to the EU on 8 April 1994. Consequently, the Polish government started to amend legislation and define new environmental legislation in line with the European *acquis*. However, the legislative changes introduced in this period did not influence a change in the established system. On the contrary, they strengthened the competition with the consequence of a further regulatory "race to the bottom" of the collecting firms "to remain in the business" (interview 44).

The first legislative changes affected the Executive Order of 1980 which, in 1996, was replaced by a new Act on Maintaining Cleanliness and Order in the Municipalities

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with the logo of the ASMABEL company and provided services in the field of maintaining order and greenery in towns and communes. Since 2000, SITA has heavily invested in activities related to the management of industrial waste. It currently operates in over twenty major cities in Poland, owns fourteen waste processing plants, four sorting lines, five landfills and one composting plant. For further details on Sita Polska, see http://www.sitapolska.pl/historia.html (in Polish).

91 Veolia is a French company providing services in the water, energy and waste management sectors. It entered the Polish market in 1994. Since then it has operated through its Polish affiliates managing different waste streams as well as municipal and industrial pollution problems. For further details on Veolia, see http://www.veolia.pl/o-nas/o-nas/veolia-w-polsce/odpady (in Polish).

92 For details on the joint-venture in Szczecin, see http://mpo.szczecin.pl/?act=ofirmie (available only in Polish).

(Official Journal of Laws, No. 132, item 622). In this new Act, the municipalities were now responsible for the collection of waste by setting up their own waste collecting companies, i.e. the MPOs (Jurasz, 1998). However, this new Act also officially recognised the role of private foreign and Polish entrepreneurs operating in the waste sector (interview 39). According to this Act, in fact, municipalities were now obliged to share the collection, transport and treatment of municipal waste with private organisations (interview 39). The only requirement was that foreign and Polish-owned companies had to obtain a permit from the municipality for their services (interview 39), but it was considered "quite easy" to obtain such permits: companies had to fulfil only very broad minimum requirements, and municipalities never refused these companies permits (interview 38).

Furthermore, the 1996 Act recognised the ownership of waste to citizens and households (Jurasz, 1998). Hence, the selection of the waste collecting company was made directly by the households, who were obliged to sign a contract with a company and pay directly to it the waste collecting service fee, also known as the recycling fee. The contracted waste collecting company was then entrusted with taking care of the removal of the waste produced by these households and it was also obliged to send information on the contracts concluded and submit reports on the management of municipal waste to the municipalities (Deloitte, 2011). The collecting companies could establish their own prices for their services and, generally, private households selected the waste-collecting companies on the basis of the amount of recycling fee to be paid. The removal of waste from households based on contractual terms was generally established in the cities while, due to the lack of detailed regulations for areas outside the cities, households living in the countryside were not obliged to sign any contract, and they commonly dumped their wastes in the forests, roadside areas or inland waters (interview 39; Ariaratnam et al., 1996).

The selection in private contractual terms deeply affected the system of municipal waste management and the strategies of private firms, with the consequence of further lowering the waste collection and treatment standards established in Poland (interview 38; interview 44). According to the 1996 Act, municipalities were obliged to organise the system of municipal waste collection through MPOs only if in a given municipality other companies were not collecting waste from households, but this happened only in few cases (interview 39). The most common situation, was the emergence of a plurality of waste collection companies operating in a single municipality which, considering the direct selection on the basis of the recycling fee, now could even compete for the collection of waste in a single street (interviews 38; interview 45). Unlike MPOs which, in the late 1990s, were already well

established entities with a fifty per cent share of the overall municipal waste collection market (interview 42; interview 46; interview 39), private companies had to share the remaining part of the market. On the one hand, the strategy pursued by Polish family businesses such as BYŚ and Lekaro was to increase their profits and, thus, they focused their efforts mainly on trying to attract the highest number of customers within Poland, on acquiring bigger shares of the market and on becoming viable competitors. On the other hand, foreign waste-collecting companies adapted to the less-regulated Polish system to make bigger profits.

However, it must be pointed out that at first the foreign firms were against the system of direct contracts between households and waste-collecting companies. They were in fact "used to the Western Europe systems" based on the public tender procedure in which municipalities provided to the infrastructure while private companies "just signed a contract with municipalities for the collection of waste" (interview 39). However, after several years, they realised they could make more profits with this less-regulated system, "they were happy" of it and struggled "to keep the status quo as long as possible" (interview 39). In light of the bigger profits that these companies could make by adapting to the existing - non-compliant – provisions, foreign firms did not recognise profit in the compliance with the EU waste requirements. Hence, they did not seek to provide technology transfers or knowledge of the EU rules to their subsidiaries (interview 42) but they also lowered the prices of their services to remain competitive (interview 44; interview 38). The strategy of pursuit of own profits was also influenced by the fact that foreign firms never achieved a dominant position on the market to become a sufficient banded group and impose the adoption of specific standards (interview 39; interview 42). Rough estimates from the mid- and late-1990s, in fact, show that foreign companies had only less than thirty percent (30%) of the Polish waste collection market (interview 42) by that time.

Competition and adoption of low standards also characterised the system of municipal waste treatment. The 1996 Act recognised municipalities as responsible bodies of the separate collection facilities as well as of the waste disposal sites (Jurasz, 1998; MOS, 2005). Furthermore, in 1997, the Act on Waste[93] (OJ No. 96 item 592), adopted by the Polish

[93] This Act specifically considered the safe disposal of waste into landfill sites by establishing restrictions on investments for those infrastructures that did not fulfil sanitary and health requirements, obliging the pre-sorting of waste and recognising the principle of "proximity" in the disposal of waste (MOS, 2000; Luniewski, 2000; Grodzinska-Jurczak, 2001). Furthermore, it "opened new opportunities for reduce the harmful effects on people and the environment associated with waste generation and landfilling" by creating fiscal solutions which could enhance the ability of producers to recycle or re-use the generated waste (Grodzinska-Jurczak, 2001, p. 92).

Parliament to transpose the Basel Convention on the transboundary movement of waste, specified that the entity delivering the waste had to pay a landfill tax[94] to the disposal site in order to discourage the disposal of waste into landfills (MOS, 2000; interview 45). This Act, however, did not stipulate whether or not the collected waste in a given municipality had to be disposed in specific facilities, nor did it oblige waste collecting companies to dispose of the collected waste in the site nearest to the source of waste generation. The Polish legislation created an obligation for municipalities to provide facilities for the disposal of waste; as a result the majority of the facilities were of municipal ownership (interview 40). However, few facilities were also constructed by private firms (interview 38; interview 42).

As a result of weak regulations on the establishment of a regional system to treat municipal waste, municipal and private companies adopted strategies linked to a cost/benefit ratio. On the one hand, pursuing highest profits at the lowest costs, private firms selected the landfill facility according to their on-site landfill tax (interview 38; interview 40). Generally, the nearest facilities were of municipal ownership but farther private facilities generally had lower prices and "waste could then be transported for a hundred or two-hundred kilometres to the facility offering lower financial conditions" (interview 38). On the other hand, municipalities (and municipal firms) with profits in the nearest facilities attempted to impose the selection of the nearest disposal site to the waste collecting companies, but several Constitutional Court cases ruled against these municipalities. Specifically, the Court stated that forcing companies to send waste to certain facilities had to be considered as a distortion of the competition among the different disposal sites (interview 38). As a consequence, the strategies pursued by municipal firms but also private and foreign companies were discouraged from investing in the construction of new and the modernisation of existing facilities, as there was no way to oversee the amount of waste treated within each facility, nor to estimate the possible profits from its operation (interviews 38; interview 45).

In spite the attempts to harmonise the Polish waste legislation with the European requirements, by the end of the 1990s, the European Waste Framework and Landfill directives were not yet transposed in the Polish "books". It was recognised that the definition of "waste" contained in the Act on Waste of 1997 was still very different from the European definition (interview 39). Moreover, despite the adoption of other Acts on specific waste[95]

[94] The 1997 Act followed dispositions already defined in the PEPA of 1980 and the Act establishing the Ministry of Environment of 1989 on the payment of a fee for the dumping of waste materials (Biernat and Wasilewski, 2011).

[95] In particular, the Polish Parliament adopted two Acts on the establishment of a waste classification (OJ No. 162 item 1135 of 24 November 1997) and the definition of competencies of the public administration in the

contained in the two European directives, the Polish legislation was not considered precise in transposing the European definitions and requirements (MOS, 2000) and remained inconsistent with the European one (Grodzinska-Jurczak, 2001).

Impetus for the transposition of the European directives on municipal waste management and treatment in the Polish legislation came from two initiatives in which mostly state actors had been involved. The Polish government took the initiative by deciding on "updating the 1997 Act" with the precise aim of fully transposing the EU waste *acquis communautaire* (interview 39). In 1999, a small group of people from the Environmental Protection and the legal and administrative Departments of the Ministry of Environment was appointed with this objective. After few weeks of work, however, the group recognised that "all the provisions of the Act had to be changed" (interview 39). Parallel to the "upgrading" operation within the Polish Ministry of Environment, a twinning project with the British Ministry of Environment and particularly the Department of Waste Management (hereafter, DEFRA) was formulated. This aimed at strengthening the Polish Ministry's capacity to implement the European waste legislation (project No. PL9806.01). The majority of the activities, however, were focused only on the literal transposition of the European definition of "waste" contained in the European Waste Framework directive into the Polish legislation (interview 39; interview 47; interview 48; interview 42). Thanks to collaboration with British experts, the group within the Ministry in charge of "upgrading" the Polish legislation realised that it was easier and quicker to define a new Act to transpose the European waste requirements, concepts and principles. In 1999 this group started to draft a new Act which was sent for comment to research institutes, business representatives, NGOs and other ministries in early 2000 (interview 39). The draft was then positively evaluated by the Commission for European Integration for its compliance with the European provisions (Grodzinska-Jurczak, 2001) and submitted to the government and then to the Parliament for discussions (interview 39).

In April 2001, the Act on Waste (OJ No. 62 item 628 of 27 April 2001) was adopted by the Parliament and entered into force in October of the same year (interview 39). The Act set out the main waste management rules, the definition of waste and waste operations and the rules for the treatment of waste such as waste incineration and disposal into landfills. Additionally, it established the principles of governing waste management in order to protect human health and the environment, and it required that waste whose generation that could not

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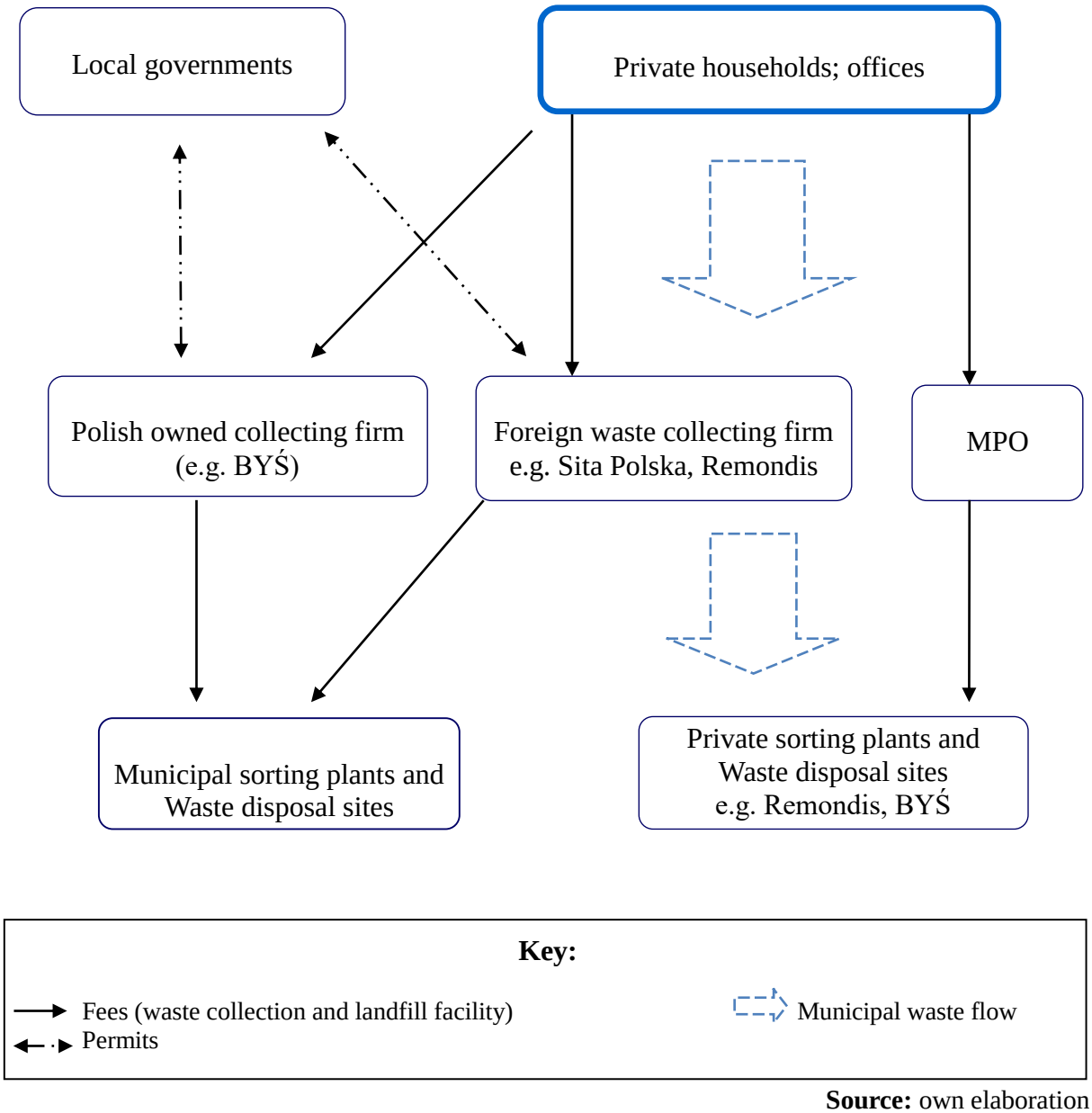
management of non-hazardous waste (OJ No. 106 item 668 of 24 February 1998).

be avoided be recovered or recycled, neutralised and landfilled. It also required the selection of the option of disposal into landfills only for wastes which could not be disposed of in any other way (Grodzinska-Jurczak, 2001). Moreover, it set the division of competencies between national and local authorities, the obligations for the waste holders and waste carriers, the penal provisions in case of bad management of waste and the fines and permits systems (Czepieł, 2013).

This Act, however, did not change the system of municipal waste management and treatment. Within this process of legislative harmonisation, the Polish government attempted to change the competitive model of municipal waste collection and treatment that had been established in the early 1990s. For the Polish government it was in fact clear that the extremely liberal market had to be changed in light of the EU accession, and a group of experts within the Waste Management department of the Ministry elaborated a draft (interview 39). This draft was blocked, however, by various private Polish and foreign firms who, fearing profit loss and higher costs, lobbied the government and successfully achieved the maintenance of the existing competitive and less EU-conforming system (interview 39). Figure 5 summarises the system established by the 1996 Act on Maintaining Cleanliness and Order in the Municipalities, the 1997 Act on Waste and the new Act on Waste adopted in 2001 as well as the actors that operated within a single municipality.

Figure 5: The Polish municipal waste management system



Source: own elaboration

The transposition of the European Waste Framework and Landfill directives with the new Act on Waste of 2001 was strongly influenced by the discussions that had taken place between the Ministry's experts as well as by the twinning with DEFRA. In achieving transposition, however, neither assistance alliances between external and domestic stakeholders nor cooperative strategies among state actors and various stakeholders occurred. Instead, the

DEFRA knowledge transfer and exchange of best-practices was provided only at a peer-ministerial level while discussions in the Ministry involved only a limited number of experts. Nevertheless, since the early 1980s Poland had established environmental consultative bodies in which more broad discussions and cooperative strategies between stakeholders could have occurred. In fact, following the creation of the Solidarity movement and of independent ecological groups such as the Polish Ecological Club[96] (in Polish: *Polski Klub Ekologiczny*, hereafter also PKE), in 1981, the Communist government established the State Council for Environmental Protection (PROS).

Characteristics of PROS may explain weak cooperative strategies in the Polish environmental policy-making. First, the appointment of PROS' members. PROS was initially created as an advisory body to the prime minister, who directly selected and appointed the members among the representatives from the regional administrations and the academics and scientists dealing with different sectorial environmental issues (interview 41). In 1990, PROS became an advisory council to the Minister of Environment, and this implied that the Minister of Environment had to consult this body before any decision, but he/she was also directly in charge of the members' selection[97] and required them to prepare positions and opinions only upon his/her direct request (interview 41). Second, the effectiveness of PROS activity in the Polish environmental policy-making. The official goal of the PROS was to handle all crucial environmental issues, and for this task it was established that the Ministry of Environment strictly cooperated with the Prime Minister. On the ground, however, it was perceived as a "political move" and thus constituted "political propaganda" of the regime (interview 41). Throughout the years of PROS, the Environmental Ministers used this body as a way "to have some social support to unpopular decisions" (interview 41). The real reason for such a body, in fact, was to "substitute and feign social consulting of environmental law and action" (interview 41), meaning that the advice and comments provided by PROS rarely had a strong impact on the Polish legislation[98].

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[96] Additionally to the Polish Ecological Club, there were also the Ecological Movement of Saint Francis (*Ruch Ekologiczny Świętego Franciszka z Asyżu*) created by the Catholic clergy with the aim of developing the environmental information (Hicks, 1996), the group "I prefer to be" (*Wolę Być*) which organised ecological camps for young people and the group Liberty and Freedom (*Wolność i Pokój*) characterised as a pacifist and anti-military movement. The Communist regime attempted to channel the environmental movement through the creation of the Patriotic Movement for the National Rebirth in 1982 and, within this, the Social Ecological Movement in 1986.

[97] It happened, for example, that the Deputy Chairperson of PROS, Professor Tomasz Winnicki suggested to the Minister of Environment around twenty names, twelve of whom were appointed, the rest directly selected by the Minister accordingly to political motivations (interview 41).

[98] For example, in the 1990s, there were Parliamentary discussions on the construction of the first atomic power plant in Poland. PROS was involved in these discussions and advised to continue the investments for

In addition to consultations at the ministerial level, there existed the possibility of consulting different non-state actors and experts at the parliamentary level[99]. During first reading[100] of a draft law, individuals invited by the MPs and stakeholders could participate in the parliamentary committee discussions[101] (interviews 49; 43; 50). Within the parliamentary committees, the Committee on the Environment Protection, Natural Resources and Forestry in the *Sejm* (OSZ) and the Environmental Committee of the *Senat* have particularly dealt with issues related to waste management as well as with the control of the compliance with the requirements of environmental protection and monitoring. Different stakeholders[102] could participate to the public hearings of the OSZ and of the Environmental Committee, or send a letter stating their positions which would have been read and discussed in these Committees

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the construction of such plant. Nevertheless, the Minister and the government did not take into account its opinion and the plant was not constructed (interview 41). On other occasions, PROS provided some critical advice on small scale legislation concerning, for example, investments potentially in conflict with the environmental protection and it has been successful in promoting the construction of the water dam in Czorsztyn which prevented a big flood in 2001 (interview 41).

99 The internal regulation of the *Sejm* of 1992 recognised the importance of public consultation in terms of discussion and information and exchange of different opinions (Art. 31, par. 3, Resolution of the *Sejm* of the Republic of Poland, 1992). These provisions were also underlined by the revised version of the *Sejm* internal regulation of 1998, according to which, any draft legislation had to be accompanied with a justification which should have resulted from these consultations (Art. 27, Decree of the Marshall of the Sejm, 1998 and the Decree of the Marshall of the Sejm, 2002). Further, in 2005, it was defined a specific regulation on the act of lobbying in the Ministries and the Parliament which, for the first time, set specific rules to the lobbying activity in Poland. For more details on the lobbying system established in Poland and on the Law adopted in 2005, see http://orka.sejm.gov.pl/przeglad.nsf/xWgRokuAng/2010/$File/ps4_2010_eng.pdf.

100 The first reading usually took place at a plenary sitting of the Sejm or at a sitting of a committee having jurisdiction over the subject matter of the proposed bill. This first reading included justification of the bill by its sponsor, a debate on the general principles of the bill, questions of the deputies and response of the sponsor. Following this phase, there is the second reading at a Sejm sitting and included the presentation of the committee report on the bill to the Sejm and, subsequently, carrying out a debate during which other motions and amendments may be submitted. Moreover, there is also a third reading of a bill which took place at a Sejm sitting. The deputy-rapporteur could present an additional report of the committee or, if the bill has not been referred to the committee, the amendments submitted during the second reading. Subsequently, the deputies voted in a certain order on the submitted amendments and motions, either passing or rejecting them. For details, see http://opis.sejm.gov.pl/en/procesustawodawczy.php.

101 These committees were auxiliary bodies of the *Sejm* which dealt with "the examination and preparation of matters falling within the remit of the *Sejm*'s work" (Sejm web page). The composition of each Committee was established at the beginning of the *Sejm*'s term and the distribution of seats between MPs was defined on the basis of their political affiliation and accordingly to "the principle of representation of all deputies' clubs" in proportion to their political size in the Parliament. Parliamentarians belonging to the same political group created their parliamentary "clubs" within the Sejm and the Senate. These "clubs" played an important role in the legislative system because most of the bills and the legislative amendments were brought to the Parliament through these clubs. For further details, see http://en.polska.pl/The,Legislative, Authority,387.html.

102 The Sejm internal regulation recognised the possibility for experts and stakeholders to participate and seek opinions during the Committees sessions' (Art. 42). Moreover, the Senate's internal regulation recognised the possibility to the chairmen of the committees to request the preparation of opinions and to invite experts, representatives of groups and organisations interested in the subject of a committee's work (Art. 60). However, there existed a distinction among the stakeholders invited to the Parliament: the non-registered stakeholders who could participate in the Committees sessions without an invitation were entities such as the Chambers of Commerce (e.g. KIGO, PIGO, KIG and OIGR in the waste sector); the registered lobbyists were, instead, experts and representatives from business associations and also private people and members of NGOs who had to be invited by the MPs (interview 50).

(interview 50).

Despite the existence of arenas of policy-making discussions, the number of stakeholders participating in these years in the Polish environmental policy-making on draft laws was small and this discouraged the establishment of cooperative strategies between environmental stakeholders and the state actors. On the contrary, because changes in the legislation generally occurred when direct contacts and bilateral meetings were established, stakeholders preferred to lobby directly the Ministry of Environment and the MPs to achieve preferred policy options. An example is the strict relationship established during the 1990s between the pro-environment NGOs and ministries' clerks or MPs which culminated in the participation of representatives of the environmental NGOs [103] in the drafting of the Environmental Protection Law adopted on 27 April 2001 (interview 51). In this period, a specific unit within the Ministry of Environment was established that was responsible for cooperation with environmental NGOs (Jendrośka, 1998), but this unit was managed on a personal level, and information was given mostly when direct contacts between employees from the Ministry and NGOs were established (Jendrośka, 1998). For example, the PKE was invited often and collaborated with the Ministry of Environment and the Parliamentary Committees on environmental issues. This is so because of personal relations between members of the PKE and clerks from the Ministry of Environment or Members of the Parliament (interview 53; interviews 51; interview 77; interview 52). Likewise, the group Green Mazovia from the Mazovia Region was involved in bilateral discussions on specific requirements in the municipal waste system and promoted campaigns and initiatives in cooperation with the Ministry of Environment (interviews 44; interview 54; interview 39).

In the period from the 1980s until 2001, Poland pursued the transposition of the European requirements concerning the management and treatment of municipal waste. This objective was accomplished only because of bilateral and peer-cooperation between experts in the Polish Ministry of Environment and the British DEFRA. The lack of broad cooperative strategies between state actors and stakeholders in the Polish environmental policy-making

[103] The Polish Environmental Law Association (or PELA) participated to the discussions on the Environmental Protection Law as representative of the Polish environmental movement (interview 51). A report by the Regional Environmental Center defined PELA "as the first independent organization of environmental lawyers in Central and Eastern Europe" (REC, 1996, p. 21) established since 1987. The PELA served "as a center for information, education, research and publishing in the fields of environmental law and policy" (REC, 1996, 1996, p. 21). Moreover, the PELA's Environmental Law Information Service, provided "free legal counselling to NGOs and the public" and "established itself as an important part of the ecological movement in Poland" (REC, 1996, p. 21).

influenced the establishment of bilateral and direct contacts in the process of consultation of draft legislation, which was preferred by stakeholders to the existing wider consultative bodies at the ministerial and parliamentary levels for discussing draft versions of environmental legislation. Moreover, the establishment of a system of municipal waste management and treatment was highly influenced by cost/benefit ratio in the achievement of higher profits at the lowest costs. On the one hand, private foreign firms did not recognise a competitive advantage in exporting costly EU-conforming standards when setting up subsidiaries or establishing joint-ventures with municipal firms, but adapted to existing lower standards. On the other hand, Polish family businesses strived to become viable competitors on the Polish market and, as such, did not recognise a competitive advantage in adopting costly EU-standards and lobby for their adoption at domestic level. Finally, also municipal companies (MPOs) pursued profit-oriented strategies. Owning most of the nearest landfill disposal sites managed by MPOs, municipalities lobbied the government to force waste-collecting companies to use only their disposal sites. However, they were not successful because of strong opposition from private firms.

4.1.2 From 2001 to 2009: the difficult implementation compliance of the Polish municipal waste law

The 2001 Act on Waste contained measures for its implementation. First, it introduced the concept of regionalisation of waste management and required the preparation of regional waste management plans every four years. Second, it required the creation of "an integrated and sufficient network of installations and equipment for recovery and disposal of waste" (Art. 14, par. 1). The accomplishment of these measures and the overall implementation of the Act, however, have been characterised by problems and delays. As a consequence, in 2009, the implementation compliance of Poland was still not-compliant and the two implementing measures not fully adopted.

In article 14, the 2001 Act established the development of waste management plans with the aim of achieving "the objectives determined in the state ecological policy" and implementing the European directives on waste in preparation for the EU membership (National Waste Management Plan, 2002). By 2002, the National Waste Management Plan

was adopted by the Polish Parliament[104] and focused on the achievement of "the tasks necessary to ensure integrated waste management in the country" (Grzesik, 2005, p. 705). However, the 2001 Act on Waste also specifically referred to the definition of regional and local waste management plans, which had to be prepared by the regional and local authorities (interview 52; interview 55). These plans had to monitor the situation of waste management and treatment at the regional and local levels. Hence, the localization proposals of new waste treatment facilities and modernisation of old facilities had to conform to these plans (Grzesik, 2005). However, while the Polish legislation set the deadline for the adoption of regional plans for the end of June 2003, by that time only three of the existing sixteen regions had defined the plans; the rest were adopted only by April 2004 (Grzesik, 2005).

The delayed regionalisation of waste management through the adoption of regional waste management plans was partly connected to the "immense undertaking" of the public administration reform of the late 1990s, which concerned administrative, political and fiscal decentralisation and territorial reorganisation. Since the end of the 1990s, Poland had been in the process of reforming its administrative structure. The Constitution of the Republic of Poland of 2 April 1997, together with a number of Acts[105], reduced the number of regions from forty-nine to sixteen and created the level of counties. These new administrative levels were entrusted with duties previously under the responsibility of the central government. New responsibilities were then delegated to the regions, which now became responsible for the definition and enforcement of the environmental law at the regional level, and the counties which were now in charge of the implementation of the environmental law at the county level. Moreover, these new administrative structures had to ensure the implementation "of those aspects of the *acquis*" which fell within their competencies (Fact sheet of project No. 2000/IB/OT03), among which there was the adoption and implementation of regional and local waste management plans. At the beginning of the 2000s, the initial outcomes of the administrative reform resulted in many ways as "unmet goals and unintended

[104] The need for a rapid definition and implementation of a national waste management plan was specified in the Act No. 100 item 1085 of July 2001 (Act on the Adoption of the Environmental Act, of the Act on Waste and Amending Certain Acts adopted at the end) which, at article 31 set the date for the adoption of the National Waste Management Plan to 31 October 2002.

[105] In particular, the Counties Self-government Act of 5 June 1998 (Official Journal of Laws No. 91 item 578), the Regions Self-government Act of 5 June 1998 (Official Journal of Laws No. 91 item 576), the Government Administration Sectors Act of 4 September 1997 in its uniformed text of 1999 (Official Journal of Laws No. 82 item 928), the Act establishing a three tier territorial division of the country of 24 July 1998 (official Journal of Laws, No. 96 item 603) and the government administration in Voivodeship Act of 5 June 1998 (Official Journal of Laws No. 62 item 627).

consequences[106]" (Kerlin, 2002, p. 2).

To upgrade the capacity and capabilities of these new administrative structures, in 2000, the European Union adopted a technical assistance twinning funded by PHARE with the aim of strengthening the *acquis* implementation at the regional level (project No. PL2000/IB/OT03). However, the lack of alliances established between domestic and external actors hampered its effectiveness. In particular, the twinning had the precise objective of developing the skills of the authorities at the county and municipal levels in the implementation of the EU *acquis* as well as of ensuring "the sustainability of these efforts" (Fact sheet of project No. 2000/IB/OT03, p. 2). Nevertheless, a Polish report on the ex-post results of the technical assistance financed by PHARE in the years 2002-2004 documented problems in the outcomes of this project. Specifically, this Report highlighted the irregular and non-systematic knowledge of the projects by the Polish managing authorities, and noted that only a small number of actors were engaged in specialised workshops and seminars promoted by the EU.

Following the 2000 twinning project, in 2001 the EU Commission approved a new project aimed at strengthening local administrative capacity in the environmental sector with particular reference to the definition of local and regional waste management plans (project No. PL 01/05/07). The EU recognised that the Polish local environmental authorities were small units, generally under-staffed and with limited resources. They feared that they would not been able to develop waste management plans without external assistance (project fiche No. PL 01/05/07). Furthermore, the EU underscored "a lack of adequate training and practical experience" as well as a lack of guidelines and models to be followed (project fiche No. PL 01/05/07, p. 2). Hence, according to the plan of the project, the twinning would firstly include a period of technical assistance and training of personnel from cities and rural counties and staff from the Marshall and Regional Offices. Secondly, these trained staff and personnel would transfer their knowledge to municipalities by organising seminars and workshops with the aim of developing three waste management plans at provincial level, nine waste management plans at municipal level and one waste management manual (Financing Memorandum, 2001).

European reports clarified that while properly designed, the 2001 twinning was

[106] According to Janelle Kerlin, in fact, the process of decentralisation occurring with the administrative reform was not completely enforced and "a number of functions […] remained centralized limiting the scope of new sub-national governments". Moreover, the poor funding at these levels did not improve the services, with the unintended consequence of an "increased disparity in services across urban and rural areas" (Kerlin, 2002, p. 2).

riddled with problems and failed to achieve its objectives (EC, 2005; EMS, 2004). The lack of assistance alliances between domestic and external actors has particularly influenced the lack of a clear identification with the project by the local authorities, which did not get sufficiently involved in the management of the programme (EC, 2005). In other words, the efficiency of this twinning was limited by inadequate cooperation between external and domestic actors in the phases of programming, planning and implementation, and also to the insufficient exchange of information between the domestic actors at central, regional and local levels (EMS, 2004). Furthermore, while beneficiaries at the central and regional levels "were usually well prepared for the absorption of the EU funded assistance", the beneficiaries at the local level were "often not prepared to cooperate with the EU structures" (EMS, 2004, p. 7). European interviewees particularly emphasised the lack of "chemistry" established between the European and the local actors in the development of the projects, with the result that local authorities did not sufficiently cooperate with the European partners for the development of the twinning (interview 56). Moreover, the lack of a "long-standing cooperation" between Polish authorities and European experts hampered the sustainability of the twinning also with respect to "securing twinning partnership" (EMS, 2004).

The second objective for the implementation of the Act on Waste of 2001 was the creation of "an integrated and sufficient network of installations and equipment for recovery and disposal of waste" (Art. 14, par. 1). As in the case of the regional and local plans, external assistance from the EU played a crucial role in addressing this second aspect, and between 2000 and 2004 the EU Commission approved eight projects funded by ISPA on the modernisation and construction of municipal waste sorting and treatment plants[107]. From the beginning, however, these projects were marked by problems and delays. Some projects contained errors in the projects submitted to the EU Commission for approval[108]. For example, the first project proposal submitted to the Commission to receive ISPA funding from the city of Cracow (No. 2000/PL/16/P/PE/005) contained out-dated data on the circumstances and scope of the project. Errors such as this pushed the project start date to 2007 (interview 57; MRR, 2007), and continued to riddle the planning phase of ISPA

[107] The first Polish cities to submit projects to the European Commission were Cracow, Wrocław and Dolina Redy i Chylonki near Gdynia in 2000. Furthermore, in 2001 and 2002, the cities of Łódz, Radom and Kalisz also submitted three projects to modernise their solid waste treatment plants. Moreover, in 2004, the cities of Leszno and Toruń submitted to the Commission projects on the realisation of municipal waste management plants.

[108] According to the EU funding procedure, in fact, the beneficiaries of ISPA had to submit their projects to the Commission to be approved and, at the end of the funding period, they had to have achieved all the declared objectives, otherwise the Commission could block the last instalment or, in the worst case scenario, could ask back all the EU funding of that project (interview 55).

projects[109].

Delays in other EU-funded projects were linked to financial aspects such as the co-financing of the European projects which uncovered a more broad problem linked to the pursuit of higher profits. Given the availability of the EU pre-Accession funds, many Polish municipalities prepared a large number of project proposals to submit to the Commission. Nevertheless, the local authorities and municipalities had financial difficulties and generally could not contribute entirely to the co-financing (interview 57). Many of the approved projects were then "frozen", to be implemented after the accession with the anticipated availability of the Cohesion and Structural funds (interview 58). In other cases, Polish municipalities established a network of beneficiaries of ISPA funds and created a number of associations of municipalities [110] to cover the costs of co-financing and manage EU-conforming joint treatment facilities[111]. The rationale for the selection of the joint-facility was linked to a cost/benefit ratio. Municipalities and municipal firms, in fact, generally selected the joint-facility location in areas where, among the various waste-collecting companies, municipal firms had the biggest shares of the market and made bigger profits. In this way, they guaranteed that the joint-facility would receive enough waste to cover its construction costs (interview 59). In many cases, however, the competition in the number of existing treatment facilities (interview 38) and the common practice of illegal dumping of municipal waste by households (Tojo, 2008) did not allow to the EU-conforming joint-facilities to receive enough waste to cover the costs of operation. As a result, municipalities which could have had invested in new and EU-compliant facilities through ISPA were discouraged from applying for EU funds because of the uncertainties in making profits that would allow the covering of the costs of constructing EU-conforming facilities (interviews 45, 59, 58).

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[109] For example, projects proposed by the cities of Kalisz, Leszno and Toruń between 2002 and 2004 (respectively No. 2002/PL/16/P/PE/030, No. 2004/PL/16/C/PE/035 and No. 2004/PL/16/C/PE/023) contained errors in the application procedure and had to be changed (interview 56). These projects were prepared correctly according to Polish legislation, but when the European auditors went on-site and checked the projects, they found systemic errors linked to the tender procedure documents for selecting the contractors. These were not ready when the project was submitted to the Commission for review (interview 55). In the case of Kalisz, in particular, as a consequence of the weak tender evaluating system, there were problems in obtaining building permits and the selected contractor had to be changed (EMS, 2004; MRR Report, 2007).

[110] These associations included the Union of the Polish Metropolis, the Union of the Rural Municipalities and the Union of the Cities (interview 39; interview 77; interview 57).

[111] For example, in the implementation of the ISPA project in Doliny Redy i Chylonki near Gdynia (No. 2000/PL/16/P/PE/002), soon after the approval by the Commission, the municipality realised that did not have enough investments for co-financing and the project was blocked. Then, in 2005, the association of municipalities "Eko-Dolina" took over the construction of sorting waste facilities and green waste composting and the ISPA project was finally implemented. For further details on Eko-Dolina, see http://ekodolina.pl/text_pages/historia-zakladu,49.html (in Polish).

Parallel to the establishment of associations of municipalities, the European Commission has favoured the development of public-private-partnerships (PPPs) between municipal and private waste-collecting companies to overcome the problems of co-financing the modernisation and construction of EU-conforming waste treatment facilities (interview 56). Nevertheless, Poland has been "running late" in the development of PPPs for the management of joint waste treatment facilities[112] (interview 60). Reasons for the scarce development of PPPs in Poland[113] were partly linked to a lack of management expertise of the Polish municipalities at the local level (interview 73). However, the main reason was a lack of trust in the private counterparts of the PPPs. Municipalities were, in fact, generally not willing to establish PPPs with private firms because they feared that their partners could be involved in corruption cases (interview 61), or because they feared that private firms could find ways to profit more from the partnership[114] (interview 73).

In many cases, however, delays in the establishment of EU-compliant waste disposal facilities in Poland were influenced by the lack of market incentives in the extremely competitive system of municipal waste collection and treatment (interview 59; interview 58). For example, in 2002, the Commission approved an ISPA project to be developed in Radom concerning the development of recycling and education activities (No. 2002/PL/16/P/PE/034). The project aimed at establishing a system for the collection of batteries in the schools, and it was based on the idea of creating a similar collection system in different parts of the city (interview 57). The success in the outcome of the project was then linked to the cooperation between different collecting companies in the adoption of higher EU standards. However, the lack of market incentives and specifically the recognition of profit in the compliance with the EU requirements did not allow for any harmonisation of the system, and the project was implemented only with delay (interview 57). Similarly, the lack of cooperation among waste-collecting companies created an overcapacity of treatment

[112] Only one attempt has been made in the water management sector by the city of Poznan (interview 57). This project was submitted and approved by the Commission and the European Bank for Reconstruction and Development for the grant in 2000. Shortly before the municipal elections of 2001 and the official signing of the contract, however, the project fell apart because, according to interviewees, it was probably "too politically ambitious for that time" (interview 57)

[113] Since 2011, there was another attempt to create a PPP in Poznan in the waste sector but even if the contract had been signed, there were many delays in starting the project (interview 44; interview 74; interview 62). For further details on the recent PPP for the waste-to-energy project in Poznan, see http://www.eib.org/epec/resources/poznan_case_study_eu_funds_in_ppps_public.pdf.

[114] It has been recognised by the EU Commission that the definition of such PPPs in the CEE countries could be a difficult task or, at least, not always straightforward (interview 56). As a matter of fact, before and immediately after the EU accession, in many CEE countries had been common that many private multinational companies signed contracts with small municipalities to create partnerships but such contracts were defined only to favour the private partners and increase their profits (interview 56).

facilities in some regions (interview 42). For example, in the 1990s, the city of Bydgoszcz in the region of Kujawsko-Pomorski sold its municipal company to a foreign firm, which built its own sorting plant. After several years, however, a new local administration decided to re-establish the municipal waste-collecting company and applied for EU funding for the construction of a treatment facility in the same area of the already existing private one (interview 42). The existence of an overcapacity and of weak Polish regional waste planning did not influence the recognition of profitability in the compliance with the EU requirements but rather discouraged many international firms from investing in the construction or modernisation of treatment facilities compliant with the EU requirements (interview 44; interview 50).

In the early 2000s, the government realised that with the EU accession Poland would not be able to fulfil the EU objectives and would have to pay fines to the Commission and the ECJ (interview 42). The primary problems concerned the fulfilment of the Landfill Directive requirements on the disposal facilities. The majority of the disposal installations were municipally owned but over the years foreign companies had established their own facilities as a result of total buyouts of MPOs or, in a few cases, because they constructed new facilities. Moreover, mindful of the fact that the Polish waste market would grow with the EU accession, in the early 2000s foreign companies intensified their presence in Poland and increased their shares of the waste collection and treatment market (interview 42). At the same time, these companies strongly lobbied the Polish government to keep the competitive system "intact", assuring the government that they would provide enough capital to build sufficient compliant disposal installations to enable Poland to reach the EU disposal targets (interview 42). Nevertheless, this "did not come true" and the government soon saw that the foreign private sector was "not performing on its own premises" (interview 42). In fact, foreign firms generally did not recognise the compliance with the EU requirements as profitable and only few invested in compliant waste treatment facilities, the rest lowered their standards in the construction and modernisation of waste treatment facilities or selected landfills with a lower landfill tax and lower standards (interview 38).

In 2003, realising the need to change the competitive system of municipal waste collection in light of the EU accession, the Polish government proposed an amendment to the Waste Act of 2001 which would have favoured municipalities (interview 42). However, this attempt was blocked during the third voting in the Parliament by the strong lobby of private waste collecting companies. Shortly after the adoption of the Waste Act of 2001, in fact, associations of waste collecting companies were created to lobby on the implementation of

the Act. Foreign firms had been "wise enough to not separate from the few local private companies" in this lobbying effort (interview 42) and created associations together with Polish family businesses. At the same time, municipal waste collecting companies, favouring the establishment of a system based on public procurement and the tendering procedure (for the selection of collecting companies and treatment facilities within a municipality), started to organise themselves in lobbying associations (interview 42). In 2003 two chambers of commerce were established, which operated as lobbies: the Polish Chamber for Waste Management (*Polska Izba Gospodarki Odpadami*, hereafter PIGO) and the National Chamber for Waste Management (*Krajowa Izba Gospodarki Odpadami*, hereafter KIGO). PIGO was established with the assistance of Dutch and German waste collecting companies operating in the country (interview 4) and was composed of one hundred forty-five companies of international or Polish private ownership[115]. In the same year, municipally owned waste-collecting companies established KIGO which grouped one hundred thirty-five municipally owned enterprises[116]. The effective lobbying of these two Chambers representing the two edges of discussion did not encourage the development of cooperative strategies in the development of a compliant system of municipal waste collection and treatment. Contrariwise, due to this lobbying the preference for market liberalisation and competition in the waste collection system prevailed until recently (interview 39; interview 42).

Despite efforts to establish a regional planning and management of municipal waste, at the eve of the EU Accession, in early 2004, Poland still had not approved regional waste management plans and provided to the construction of regional integrated networks of disposal installations. The Polish government, in particular, was concerned with the situation of the non-compliant landfill disposal sites (interview 42). To resolve this problem, after the EU accession, Polish municipalities applied for Cohesion and the Structural funds, and the number of EU-funded projects concerning waste management increased from eight to forty-six (interview 62; interview 55). In parallel to the ISPA projects, which continued to be implemented[117], municipalities resubmitted many of the "frozen" pre-Accession projects to receive funding from the Cohesion Fund[118] (interview 58; interview 55) which now mostly

[115] For further information on PIGO, see http://www.pigo.org.pl/index.php?p=111.

[116] For further details on KIGO, see http://www.kigo.pl/index.php?option=com_content&view=article&id=99:o-nas&catid=44:o-nas&Itemid=85 (but available only in Polish).

[117] According to the Annual Report on the Cohesion Fund for the year 2009, Poland had not yet closed any of the eight ISPA projects on waste in 2009. For more information, see Table 4 at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52010DC0589&from=EN.

[118] For further detail on the projects approved and financed by the Cohesion Fund, see http://www.pois.gov.pl/WstepDoFunduszyEuropejskich/Documents/LPI_POIS_VIII_10_eng.pdf.

focused on the establishment of Regional Municipal Waste Treatment Installations (in Polish, *Regionalna Instalacja Przetwarzania Odpadów Komunalnych*, hereafter RIPOK). The RIPOKs included the construction of new composting and mechanical and biological treatment facilities as well as the modernization, closure and after-care of old landfill disposal sites (interview 63; interview 62; interview 74).

Existing associations of municipalities and new associations were established with the specific goal of managing a number of RIPOKs, generally owned by the Council of municipalities that grouped the different associations of municipalities (interview 42; interview 55). These associations, however, were obliged to guarantee a constant amount of waste to be treated and disposed in each RIPOK, so as to cover the costs (interview 42). Nevertheless, as in the case of the joint-facilities in the pre-Accession period, municipalities which could have invested in new and EU-compliant facilities were not encouraged to construct of a large number of RIPOKs because of their inability to secure the streamline of waste into a specific facility and make profits to cover the costs (interview 59).

A second obstacle to the successful establishment of integrated systems for the management of municipal waste was linked to an overcapacity of waste treatment facilities. In a number of Polish regions, in fact, RIPOKs or alternative sorting plants built and managed by municipal firms co-existed with private landfill and composting installations (interview 42). The lack of cooperative strategies between waste-collecting companies and individual firms' cost/benefit calculations in the regional planning and management of municipal waste had two implications: first, a number of RIPOKs lacked sufficient volume of waste to cover their costs and operate efficiently. This problem occurred in different Polish regions such as in Małopolskie in the south, in Warmińsko-Mazurskie in the north and in Kujawsko-Pomorskie in the centre (interview 42). Second, in the regions in which RIPOKs were not established, municipalities invested in sorting facilities by constructing alternative plants (interview 61). Nevertheless, the small size of these plants did not allow them to become “regional” infrastructures and receive EU funding (interview 61). Neither they received investments from private firms. Private firms, in fact, did not recognise profit in investing in costly EU-compliant technology considering the cheap disposal of waste into landfills. Therefore, they did not invest in these small sorting and recycling facilities which, in recent years, have been struggling to stay open (interview 42; 61).

The problematic compliance with the European waste requirements was influenced too by the lack of cooperative strategies in the environmental policy-making discussions. Polish stakeholders, in fact, preferred bilateral contacts in the consultations on waste

legislation. While the environmental NGOs were gradually less consulted at the ministerial level and they started to direct their activities on the implementation of EU waste requirements to the local level [119], the channel of unofficial consultations has been increasingly used by representatives from local authorities, associations of municipalities and representatives of the business sector. Representatives of the local authorities have established direct channels with politicians and have been able to effectively lobby[120] the Minister of Environment and, in some cases even the Prime Minister or the President of the Republic who could ultimately veto the legislation adopted by the Parliament (interview 39). The business sector has also participated in these unofficial consultations in which members from KIGO and PIGO were individually invited and consulted in the Ministry of Environment (interview 49).

The preference for direct contacts also characterised the discussions on waste legislation at the parliamentary level. In particular, before the discussions in the parliamentary committees and between the first and the second reading in the Parliament, it was common practice for many stakeholders and experts to be invited to unofficial meetings around the *Sejm*[121] or in the "Clubs" in which Polish Members of the Parliament from specific political parties discussed the draft law or changes in the legislation (interview 43; interview 64). The associations of municipalities have been very active at the parliamentary level[122], especially by participating in the discussions within the committees and subcommittees in the Senate and the *Sejm.* However, as in the case of the ministerial consultations, in recent years, business representatives have become the main interlocutors of the Parliament in comparison to the academic environmental experts (interview 43) or the environmental NGOs (interview 51). This can be attributed to the common practice of business stakeholders of lobbying at the parliamentary level by directly approaching the MPs

[119] For example, PKE members advanced campaigns on the modernisation or closure of old landfill sites and against the construction of incinerator treatment plants (interview 52). Moreover, the Mazovian Branch of the PKE lobbied the local authorities for integration into the regional and local waste management plans the concepts of reduction, neutralization and recycling of waste, including the reduction of biodegradable waste sent into landfills. These plans have been adopted by the majority of the Polish regions from 2007 and the PKE has participated in the implementation of these plans offering also educational programmes to citizens and local authorities (interview 52).

[120] For example, municipalities and associations of municipalities have been particularly effective in lobbying for the provision of European funds (mainly Structural Funds) and, afterwards, for the construction of treatment facilities such as sorting or incineration waste-to-energy plants in different cities in Poland (interview 42; interview 77).

[121] Interviewees have generally referred to these meetings by calling them as the "*Wiejska* meetings" which took place in a building situated in Wiejska Street, next to the entrance of the *Sejm*.

[122] Self-governments and municipalities were often invited to parliamentary discussions because, as elected bodies, they could claim the political support of the people (interview 49; interview 39; interview 50; interview 44).

(interview 49; interview 50). Many lobbyists from the business sector or representatives from KIGO and PIGO have, in fact, gone directly to the MPs to discuss draft legislation, preferring this informal type of consultation to the public consultations in the Ministry of Environment or in the Committees in the Parliament (interview 50). As a result of this informal but common practice, many cases of political corruption in the *Sejm* involving MPs and different business stakeholders were identified and prosecuted over the years[123].

Considering the lack of cooperative strategies given the stakeholders' preference for direct contacts, the environmental advisory body PROS has played only a marginal role in the Polish environmental policy-making. On some occasions, PROS provided critical advice to the Minister on small-scale legislation concerning investments potentially in conflict with the environmental protection[124] (interview 41). Moreover, members of PROS were often invited by MPs to present their opinion as experts on different environmental issues in the OSZ and the Environmental Committee in the Senate (interview 41). However, the Minister of Environment left only a small role in the decision-making process to PROS. As a consequence, PROS then started to promote its own initiatives and statements on environmental issues, which, however rarely concerned the advancement of waste legislation towards the EU requirements[125] (interview 41). A rare example took place in March 2009 when PROS members supported the efforts of Minister of Environment Maciej Nowicki to improve the Polish implementation compliance of the European waste legislation. In this case, the Minister and PROS cooperated in the discussion for a change in the Polish waste legislation[126]. Nevertheless, lacking a broader cooperative strategy in the environmental policy-making and broad discussions on environmental policy drafts, PROS was not able to influence any substantial modification of the system of municipal waste management, nor did

[123] For more details on the corruption cases in the *Sejm*, see http://www.coe.int/t/dghl/cooperation/economiccrime/cybercrime/cy%20activity%20interface2006/143%20_2006_-if-rep%20jasie.pdf and also http://www.againstcorruption.eu/uploads/rapoarte_finale_PDF/Poland.pdf.

[124] During the years between 2001 and 2006, in particular, PROS was engaged in the adaptation of the Polish environmental legislation to the European one.

[125] For an overview of the agendas of the discussions on municipal waste, see for example http://ekorozwoj.pol.lublin.pl/no8/n.pdf and http://ekorozwoj.pol.lublin.pl/no7/n.pdf.

[126] By that time, PROS expressed the need for a clear division of competencies between the government departments as regards waste management issues, with predominance given to the Minister of Environment. Moreover, it also recommended the adoption of essential "EU organisational and logistical principles" in the management of municipal waste in Poland through better regulation of the ownership of waste, the responsibilities of local authorities as well as the mechanisms for an efficient management such as the introduction of higher fees for the disposal of waste. PROS then emphasised the need for the removal of these systemic obstacles in order to introduce the remaining elements which would bring Poland into full compliance with the European municipal waste legislation (PROS, 2009).

it play a substantial role in effectively upgrading the Polish implementation compliance with the EU requirements (interview 39; interview 41).

In the period between 2001 and 2009, Poland undertook the delayed and never completed implementation of the 2001 Act on Waste. As we have seen, external assistance to Poland through knowledge-based and capacity-building projects had been promoted by the Commission since the early-2000s. However, the extremely competitive system for waste collection and selection of municipal waste disposal sites deeply affected the outcomes of this assistance, as well as the strategies of municipal and private companies involved. On the one hand, not recognising a competitive advantage in achieving conformity with EU requirements (market incentives) and focusing solely on the pursuit of immediate profits, private companies were disincentivised from investing in compliant technology, exporting EU standards and building compliant or modernising existing disposal infrastructures. On the other hand, the *lack of* cooperative strategies and specifically the distrust between municipal and private companies negatively affected the creation of PPPs for financing the construction of regional joint-facilities, creating an over-capacity of infrastructures in many Polish regions. The existence of weak cooperative strategies between stakeholders was further influenced by the establishment of direct contacts at the ministerial and parliamentary levels, which were preferred to broader discussions in the existing consultative bodies and committees. As a matter of fact, policy-making consultations and discussions have only bilaterally involved some stakeholders, to the exclusion of others. It follows that the lack of cooperative strategies negatively affected the establishment of assistance alliances in the adoption of EU-funded assistance projects. Moreover, the lack of cooperative strategies and of market incentives further exacerbated the permanence of a competitive waste collection and treatment system which did not allow Poland to effectively implement and comply with the European municipal waste requirements by 2009.

4.2 The Polish process of implementation compliance with the packaging waste dimension

The packaging waste dimension focuses on the key concept of "polluter pays" and specifically on the principle according to which producers of specific goods are responsible for the after-care of these products. As mentioned in the *explanandum* chapter, the "polluter pays" principle was first defined in Article 174 of the Treaty of Rome, and then in Article 15 of the Packaging and Packaging Waste Directive. Moreover, this Directive regulated the setting up of systems for the collection, return and reuse of packaging waste as well as establishment of economic measures to encourage the fulfilment of the prescribed targets. The performance of Poland was characterised, though, by delays and shortcomings in the decade 1999-2009. As in the municipal waste management dimension, the little progress achieved by Poland did not allow it to rise above the sustainable compliance threshold, moving from stage 0 in 1999 only to stage 2 by 2009.

The dubious achievements of Poland in the process of implementation compliance with the packaging waste dimension were measured using a chronological three-phase analysis. However, similarly to the municipal waste dimension, in the 1999-2009 decade, Poland only achieved transposition of the EU packaging requirements on the Polish "books" but failed miserably in their implementation. The first phase covers the period from the 1980s to the adoption of the Acts on Packaging and on Duties of Entrepreneurs in 2001, which transposed the European packaging requirements in the Polish legislation. In this phase, discussions between the government and business representatives in the form of direct contacts through lobbies or within the EPR advisory body to the Ministry of Environment, influenced the elaboration of a draft of legislation, which was finally adopted by the Polish government in May 2001. However, the strategies pursued by packaging firms in the legislative discussions follow own cost/benefit calculations, that is, to adopt a legislation on packaging waste that would allow high profits at the lowest costs, thus, with low standards.

The second phase covers the period from the definition of the national legislation on packaging to its implementation compliance which, however, was still incomplete by 2009. This phase comprised the establishment of a system that recognised the possibility for packaging producers and fillers to fulfil recovery and recycling requirements individually, by

paying a product fee or by delegating the obligation to recovery organisations. However, the preference for direct contacts between stakeholders and ministry officials or Members of Parliament adversely affected strengthening of cooperative strategies. Moreover, the lack of market incentives or recognition of profit in the compliance with the EU requirements influenced the creation of a wide number of recovery organisations, which competed for shares of the packaging collection and treatment market at the lowest cost. The competition among recovery organisations encouraged the growth of a number of entities that operated only "virtual" recovery and recycling of packaging waste to avoid costs, thus fulfilling only "on paper" the implementation compliance with the European packaging requirements.

4.2.1 From the 1980s to 2001: the transition from the *status quo* to the packaging law "on the books"

The problem of packaging recovery and recycling emerged in Poland after the end of the Communist regime (interview 39). Until then, packaging and plastic containers were not commonly used (interview 39). Nevertheless, the PEPA of 1980 recognised the European "polluter pays" principle in a form that obliged the polluting person or organisation to keep pollution within the limits set up by law, made the polluter responsible for the damage caused and obliged the polluter to pay charges for the use and fines for the illegal use of the environment (REC, 1996). In particular, the PEPA obliged the polluter to pay environmental charges for the deposit of waste and fines for its illegal deposit. The fees and fines paid by polluters were then gathered into the accounts of the National Fund for the Environmental Protection and Water Management (*Narodowy Fundusz Ochony Srodowiska i Gospodarka Wodnej*, hereafter NFOSiGW) and the regional and local branches of this Fund[127] (REC,

[127] In 1989, the NFOSiGW was established as a result of the merging of two existing funds (i.e. the Environmental Protection and the Water Management funds). The NFOSiGW was conceived as an institution which had structural independence but the Ministry of Environment had supremacy over the selection of the Fund's Supervisory Board composed by representatives from the Ministry of Environment, other Ministries and representatives from the academics and the business sector. The NFOSiGW, however, collaborated with other ministries such as those of Finance, Foreign Affairs, Foreign Economic Relations and Privatisation, but the cooperation was less formalised than in the case of the Ministry of Environment (REC, 1994). This Fund was established as earmarked fund and it was later followed by the establishment of funds at the regional level i.e. the Regional Fund for the Environmental Protection and the Water Management (in Polish: *Wojewody Fundusze Ochrony Srodowiska I Gospodarka Wodnej*, hereafter WFOSiGW) and at the municipal level i.e. the Municipal Fund for the Environmental Protection and the

1996). Despite the recognition in the PEPA, however, this principle was "ill-suited" and "meaningless" in a command economy such as existed in Poland at that time, in which the main entity responsible for environmental pollution was the same Communist government that owned the polluting infrastructures and defined the legislation (Cole, 1995).

In the 1980s some elements of selective collection such as deposit and bring-back systems for packaging waste and bottles organised at the local level and in small scale were also established. There were specifically glass and paper collection systems which were financed through the mechanism of bring-back, and the people received basic goods at the moment of bringing back the waste to the collection point (interview 42). After the change in the regime, however, the selective collection of packaging waste was characterised by a "gap" (interview 42). The bring-back systems defined during the Communist era collapsed "immediately" after the introduction of a market economy and the withdrawal of the Communist subsidies (interview 42). Moreover, until the mid-1990s, Poland did not establish any selective systems for the collection of packaging. These were only introduced at the end of the 1990s in the form of recycling stations and recycling programmes in several Polish cities for plastics, paper, glass and metal (GIOS, 1998).

Furthermore, until the late 1990s, the definition of a specific packaging legislation was not discussed. Packaging was then regulated within the general legislation on environmental protection (Zakowska, 2008), and packaging waste was considered as a component of municipal waste (Grodzinska-Jurczak et al., 2004). Also, the lack of "processing technologies and the poorly developed selective segregation system" (Grodzinska-Jurczak et al., 2004, p. 212) and "the lack of organizational and legal system that would define sources of financing the selective collection" (Zakowska, 2003, p. 3), meant that over eighty percent of packaging waste was disposed into landfill sites. The only exceptions were the packages made of hazardous substances which were ruled by a specific law on hazardous waste (Grodzinska-Jurczak, 2001).

The official preparatory work for the definition of the EPR system in the Polish legislation took place between the mid-1990s and the year 2000 (interview 42; interview 65). During these years, discussions occurred at two levels both characterised by the establishment of only limited cooperative strategies. On the first level, the packaging fillers

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Water Management. These funds were modelled on the NFOSiGW and, as the National Fund, received revenues from pollution charges (air emission, waste water, water use, waste disposal), penalties for non-compliance with the environmental legislation and natural resource use fees (REC, 1994) as well as re-payments of soft loans and allocations from foreign/international institutions (EU questionnaire replies, 1996).

and producers started to discuss the establishment of a system for the collection, recovery and recycling of packaging (interview 42). Realizing that the system of packaging waste could develop in Poland as in the rest of the EU members, packaging producers and fillers started to organise themselves into lobby structures (interview 42) which, establishing direct contacts with the government, would be more effective in influencing the upcoming legislation and system based on the principle of EPR[128]. Among these lobbies, a substantive role was played by the Polish Industrial Coalition Association for Environmentally Friendly Packaging[129] (hereafter, EKO-PAK) which has taken part in the discussions on the creation of a system for the management of used packaging (interview 42; interview 65). The lobbying strategy of EKO-PAK regarding the definition of the Polish packaging collection and treatment system was influenced by the external assistance received from the Brussels-based association PRO-EUROPE. Thanks to cooperation between EKO-PAK and PRO-EUROPE in the form of joint study trips and conferences, the packaging producers and fillers evaluated models already established in Germany, France, Belgium, Netherlands and the UK and were "quite effective" in introducing the knowledge of the EU systems at the national level (interview 42).

Thanks to the knowledge transfer from PRO-EUROPE but being "anxious" for possible outcomes of the designed packaging system, EKO-PAK strongly lobbied the government in the definition of the packaging waste management and treatment system (Grodzinska-Jurczak, 2001; interview 42). At that time, the Polish government was evaluating different system established in the EU, including the German system. This system forecast a dual system for packaging in which the separate collection system for packaging would be entirely financed by the industry. By adopting this system, the packaging producers and fillers operating in Poland would have had to entirely finance the collection and treatment services for packaging waste (interview 42). However, fearing that its introduction would impair the competitiveness of the packaging industry and raise costs, EKO-PAK successfully lobbied the Polish government and prevented the introduction of this model in Poland (interview 42).

[128] In its web site the OECD defines Extended Producer Responsibility (EPR) as "an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle". Therefore, the system of EPR is characterised by: (1) the shifting of responsibility upstream toward the producer and away from municipalities; and (2) the provision of incentives to producers to take into account environmental considerations when designing their products. For further details on the EPR definition, see http://www.oecd.org/env/tools-evaluation/extendedproducerresponsibility.htm.

[129] EKO-PAK was created in 1995 and since then had represented and lobbied for Polish and international packaging producers and fillers (interview 50).

On the second level, discussions on packaging waste legislation occurred in an advisory board. At the beginning of the 2000s, an advisory body to the Minister of Environment also known as the EPR Advisory Group was established (interview 42). The aim of this body was to get advice and expertise on the EPR system and on how to implement the European legislation on the topic in Poland. This Advisory Group was established through a Ministerial decree and brought together different actors such as academics from technical universities, managers from the recovery organisations and managers from PIGO and KIGO (interview 42). Within this body, members were invited to give their opinions on the system and advise the government on ways to implement the legal provisions linked to the EPR system. However, the EPR Advisory Group proved to have too-large membership, its organisation and its discussions quite unstructured. It was based on occasional meetings with a large number of participants - usually between forty and fifty people - with different interests and promoting competing compliance schemes without any attempt to achieve a consensus (interview 42). Furthermore, the government was not officially committed to taking into consideration such advices for ministerial decisions (interview 66).

The strategies pursued by the stakeholders involved in these two levels of discussion on EPR legislation aimed at establishing a legislation on the topic at the lowest costs and without profit loss. The lobbying by EKO-PAK, in fact, prevented the establishment of a system in which the packaging recovery and recycling costs were entirely borne by producers. Furthermore, while the goal of the EPR advisory group was to analyse the EPR systems already existing in Europe and discuss the best option to be established in Poland, this body was instead used as "another platform where to promote each of the members' interests" (interview 42).

Nevertheless, influenced by these discussions the Polish government elaborated a draft legislation which was voted on May 2001 and entered into force in January 2002 (interview 42). This legislation consisted of two Acts, one on Packaging and Packaging Waste (OJ No. 63 item 638 of 11 May 2001) and the other on Duties of Entrepreneurs concerning waste management, product fees and deposit fees (OJ No. 63 item 639 of 11 May 2001). The Packaging Act determined the obligations regarding the prevention of packaging waste creation and the minimising of its impact (Grodzinska-Jurczak, 2001); it also established specific requirements for the packages and ways of dealing with packaging waste. In fact, it obliged entrepreneur manufacturers or importers of packaging to attain recovery and recycling targets set in the European Packaging Waste Directive; if they failed to attain these levels they were subject to the payment of a product fee. The Act on Duties specifically

established the duties of entrepreneurs concerning the introduction of products in packages and establishing systems for the collection of the product fee (Zakowska, 2003; Zakowska, 2008).

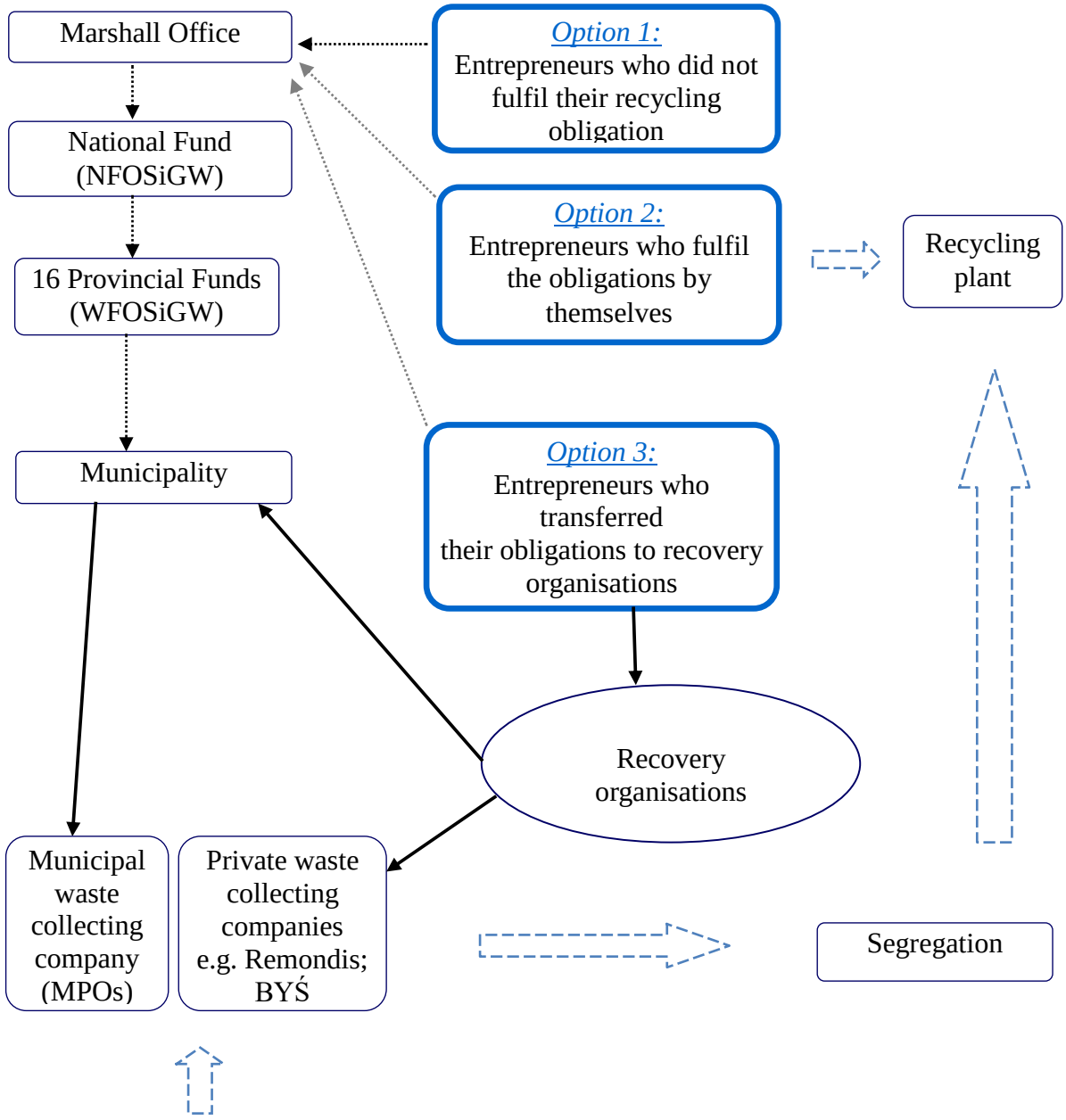
In the period between the 1980s and 2001 there was a move ahead in the transposition of the European packaging requirements in the Polish legislation. The two parallel levels of discussion at the ministerial level influenced such improvements. In fact, the direct lobbying of EKO-PAK and the wider but less-structured discussions within the EPR Advisory Group provided information on the existing European models. In both cases, the discussions with the government (and the Ministry of Environment) involved only representatives from the business side. Hence, the transposition of the European packaging requirements was the consequence of discussions between government and business representatives which pursued cost/benefit calculations and limited assistance alliances provided to EKO-PAK by PRO-EUROPE in the form of exchange of information and best-practices (transnational communication). Contrariwise, we have not seen any specific role played by market incentives or by cooperative strategies among stakeholders.

4.2.2. From 2001 to 2009: the "virtual" implementation compliance of the Polish packaging law

The Act on Packaging, adopted in 2001, required the achievement of specific recovery and recycling targets for packaging producers and fillers. Moreover, the Act on Duties set charges linked to the collection of used packaging. The recovery and recycling targets for packaging waste set in these two Acts were subject to changes over the years, and they also allowed entrepreneurs latitude in selecting the methods to achieve these targets (interview 42). In particular, entrepreneurs could choose among three options: firstly, entrepreneurs could achieve the recycling and recovery targets by directly collecting and sending the packaging waste to the recycling and recovery plants without paying any fee (interview 65). Secondly, they could pay to the Marshall Office an annual product fee as a penalty for not achieving the obligations and in this case they were not required to attain the recovery and recycling targets. The Marshall Office would then transfer the amount of the fee to the National Fund

for Environmental Protection and Water Management (NFOSiGW), then to the Provincial Fund for Environmental Protection and Water Management (WFOSiGW) and finally to the municipalities. Thirdly, they could pay a recycling fee to recovery organisations (ROs) in charge of the collection and recycling of such waste. These Acts allowed for the delegation of the entrepreneurs' duty to recovery organisations, which would organise on their behalf the recycling and recovery of packaging. The recycling fee, paid by the entrepreneurs to the recovery organisations would cover the costs for organising the waste collection by financing municipalities (and MPOs) or foreign and Polish private waste collecting companies (Zakowska, 2003). Moreover, the recycling fee had to cover the ROs' overhead expenses as well as subsidise the operations necessary to organise the recycling and recovery of packaging (Zakowska, 2008). Its amount was set independently and varied among ROs in accordance with the weight of packaging, the level of recycling set for specific groups of materials and the recycling rates achieved (Zakowska, 2008). Nevertheless, if entrepreneurs individually or through ROs failed to attain the recovery and recycling targets, they were subject to payment of the product fee based on the difference between the required and the achieved level of recovery and recycling of packaging (Kulczycka et al., 2011). Figure 6 summarises the key actors and the organisation of the packaging waste management system emerged after the two Acts of 2001.

Figure 6: The Polish packaging waste management system



Source: adapted from Zakowska, 2003, p. 6; Zakowska, 2008, p. 86.

The packaging management and recovery system introduced with these Acts was based on the UK Packaging Recovery Note (hereafter also PRN) model[130] but, according to experts, it also significantly differed from it because of the strong competition for the packaging waste collection which characterised the Polish system (interviews 42; interview 67; interview 3). Furthermore, interviewees concur that the Polish system for packaging recovery and recycling was established with the sole initial objective of fulfilling, at the least possible cost, the obligations arising from the Packaging Act adopted in 2001 by the Polish Parliament (interviews 42; interview 66). Moreover, these Acts had to be amended several times to be in compliance with EU legislation, because considered as "not precise" and needed "additional interpretation or even correction" (Zakowska, 2003, p. 5). In fact, despite the adoption of the Acts at the beginning of 2002, the Polish packaging legislation was still associated with the general rules concerning the environmental protection i.e. the Act on Environmental Protection of 2001, and concerning the waste management i.e. the Act on Waste of 2001 and the Act on Maintaining Tidiness in Cities and Communes of 1996 (Zakowska, 2008). Amendments on the packaging law were then adopted in December 2002 (OJ No. 7 item 78 of 19 December 2002) and further revised in the amending Act of 2003[131] (OJ No. 11 item 97 of 18 December 2003).

Soon after the 2001 Acts went into force, problems occurred in the establishment of mechanisms to increase the recovery and recycling of packaging (Grodzinska-Jurczak et al., 2004) because of difficulties in the establishment of a system of collection of recyclable materials (Grodzinska-Jurczak, 2001; Kulczycka et al., 2011). The collection and recycling of packaging waste developed through two parallel systems: on the one hand, the collection system from households for all types of waste considered responsibility of the municipalities; on the other hand, the collection of packaging waste from commercial sources considered responsibility of the packaging producers and fillers (Kulczycka et al., 2011). Hence, while single entrepreneurs and compliance schemes concentrated mainly on commercial packaging

[130] The EPR system established in Poland was based on British Packaging Recovery Note (hereafter also PNR) approach with, however, a strong focus on competition and the cheapest possible implementation (interview 3). The PRN is a document that provides evidence that packaging waste material has been recycled and, according to the British regulation, "producers of packaging waste are obligated to purchase a number of PRNs every year based on the type of their business and the amount of packaging waste they handle". For detailed information on this system, see http://www.legislation.gov.uk/uksi/2007/871/contents/made and http://www.t2e.co.uk/packaging-recovery-note.html.

[131] These Acts obliged producers, importers and entrepreneurs to collect from salesmen on their own cost the packaging of multiple use and packaging wastes of these products. It also obliged salesmen to collect from customers packaging of multiple use and packaging wastes of hazardous products and deliver them to producers and importers.

waste from the shops (interview 3), municipalities collected the packaging waste from households but not always did they "proper[ly] divide municipal waste from packaging waste" (Kulczycka et al., 2011, p. 86).

The major problems arose for the development of systems of packaging waste collection at the municipal level, where low profits and high costs discouraged municipalities in investing in them. Municipalities had the responsibility of "keeping their region clean" (Kulczycka et al., 2011, p. 80) and this implied that they had to finance the selective collection of packaging waste through local budget sources. However, the establishment of selective collection systems in the municipalities and their costs were "fully dependent on market conditions which [were] changeable" (Kulczycka et al., 2011, p. 82). In general, these costs were considered as too high and with low profits for municipalities[132] and most communes rapidly concluded that the separate packaging collection "is not […] profitable" to invest in it (Kulczycka et al., 2011, p. 82). Furthermore, considering that the collection of waste in municipalities was organised in private contractual terms, local authorities had no real responsibility to collect packaging waste from households (interview 3). Moreover, the "low prices offered by retail collection facilities for scrap paper or cullet and for returnable bottles […] do not make it easy for companies dealing with waste or encourage users to reclaim packaging paper and glass" (Grodzinska-Jurczak, 2001, p. 95).

Therefore, in spite of a recognised "high capacity of recycling companies" (Kulczycka et al., 2011, p. 89), the "poorly organised systems of recyclables collection in individual municipalities, residents' reluctance to segregate waste and insufficient funds" did not encourage the recycling industry to "make the effort" to establish recycling systems (Grodzinska-Jurczak, 2001, p. 95). The recycling industry was then "unable to bear the high costs of the selective collection" with the result that there was no general interest in investing in new EU-compliant recycling technologies (Kulczycka et al., 2011, p. 95). In other words, the Polish recycling industry did not recognise the compliance with the EU requirements as sufficiently profitable to invest in costly technology. As a result, the selective municipal collection of packaging accounted for only 3% of the total amount of waste collected in 2004, and this amount increased to only 8% in 2011 (Grodzinska-Jurczak et al., 2004; Kulczycka et al., 2011).

Contrariwise, Poland supposedly fulfilled the recycling levels for packaging when this

[132] According to calculations made by Kulczycka et al. for the period between 2004 and 2006, municipalities would have received only 1 Polish złoty after having spent 4 Polish złoty for the operation of separate collection (Kulczycka et al., 2011, p. 82).

operation was performed "by large institutions using grouped and transport packaging for that matter" (Grodzinska-Jurczak et al., 2004, p. 212), that is, by packaging recovery organisations. The Act on Packaging of 2001, in fact, recognised the establishment of recovery organisations to which packaging producers and fillers could delegate their obligations of separate collection, recovery and recycling of packaging waste. The first RO set up in Poland for the fulfilment of packaging requirements was Rekopol[133], founded in 2001 and in full operation since 2002. Following Rekopol, many other ROs were established in Poland such as EKO-Punkt, Polski System Recyklingu, Recal and ISOO Stolica (Zakowska, 2008). Differently from the other European systems, the only requirement for the establishment of the ROs in Poland was based on the disposition of sufficient initial capital by the shareholders (Zakowska, 2003; Zakowska, 2008) and no other practical regulation was introduced (interview 42). Moreover, each RO established its own recycling fee which corresponded to the main source of profit for the ROs, considering that Poland had only low levels of investments for the business sectors (interview 68).

The system established in Poland was characterised by extreme competition between a multitude of recovery organisations, selected by producers on the basis of their recycling fee (interview 42). Following own cost/benefit calculations and not recognising the profitability in adopting the EU requirements, in the first years ROs strongly competed in offering their services at the lowest prices, often disregarding the purpose of environmental protection (interview 64; interview 49; interview 65, interview 42). This also resulted in an overcapacity of these ROs which dramatically increased from twenty-six (26) in 2004 to forty-one (41) in 2007 for the sole packaging waste fraction (interview 71; Grodzinska-Jurczak et al., 2004; Kosc, 2007). Hence, the system established in Poland was characterised by a "competitive liberal market" in which the many recovery organisations competed for bigger shares of the market (interview 66; interview 42). According to Andrzej Grzymala, Project Manager at Rekopol between 2008 and 2013, the breakdown of the packaging market in 2011 shows that Rekopol had a slight majority, with 34% of the market share while the rest of the packaging recovery organizations had a market share of between 10% and 15% each (interview 67).

The establishment of a competitive and uncoordinated system for the management and treatment of packaging waste from commercial sources was also strongly influenced by the lack of cooperative strategies in the phase of policy-making for the Polish packaging

[133] For further information on Rekopol, see http://rekopol.pl/english_summary/about_us.

legislation. The EPR Advisory Group to the Minister of Environment, itself characterised by competition, has not proven to be "effective" in the Polish environmental policy-making. Among the members of the group, there were a number of managers of the newly established and competing ROs (at that time, only for packaging) who used this forum to promote themselves and their interests. Mr Korkozowicz, former member of this body, while considering the failure of this group, he primarily pointed to elements linked to an inefficient organisation of the meetings and to the lack "of genuine interest from the policy-makers and the people in command at governmental and ministerial levels" (interview 42). The policy-makers from the government, did not instruct the members of the group on the policies they intended to pursue, nor did they consider "the implications of putting together different interests and positions without providing any kind of coordination" (interview 42). Hence, even if policy-makers established such a group as a forum of discussion on EPR, "they did not probably think what they could get from it" (interview 42). This advisory body was then used as "another platform where to promote each of the members' interests" (interview 42). The EPR Advisory Group was then dissolved without a formal decision in 2003. After the Minister of Environment left office[134], in fact, the new Minister of Environment "simply forgot that this advisory body existed" and the members stopped to be invited (interview 42).

The EPR advisory body was soon replaced by direct and bilateral discussions between clerks in the Waste Management Department of the Ministry of Environment and the waste collecting companies, individual Chambers and packaging associations. In fact, the majority of the business packaging stakeholders believed they would "get more" from the policy-makers if they would "go by themselves and seek their own institutional and associations' interests" (interview 42). Among the industry associations, in particular, EKO-PAK has played an important role in promoting the positions of the recovering organisations and the producers of packaging and packaged goods (interview 40; interview 69; interview 70). Additionally, discussions on waste became very specific, involving single actors representing each type of waste which, ultimately, resulted in non-transparent and non-monitored discussions between policy-makers and the thousands of producers registered in Poland[135]

[134] During the government of Leszek Miller from the Democratic Left Alliance party which lasted from 19 October 2001 to 2 May 2004, the appointed Minister of Environment had changed. Stanislaw Zelichowski was Minister from 19 October 2001 to 3 March 2003 and he was replaced by Czeslaw Sleziak which was in office until 2 May 2004.

[135] The establishment of direct contacts in policy-making also reduced the possibility of a horizontal approach for discussion in the development of the legislation connected with the EPR, which covers different products such as packaging, tyres, oils and WEEE (interview 42). This has concretely resulted in less transparent and comprehensible legislation on the issue, but also in a lack of monitoring by the government. The government, in fact, has been reluctant to introduce measures that would impose a strict control over the

(interview 42).

In 2009, the implementation compliance performance of Poland was not compliant with European packaging requirements. It has been noted that, when the collection, recovery and recycling of packaging waste was operated by the ROs, the required levels of recycling for all types of material were considered "not only achieved, but, in a number of years […] even significantly exceed[ed]" (Kulczycka et al., 2011, p. 84). However, it has also been mentioned that the Polish system has been characterised by terrific competition among the existing ROs. To remain competitive with high profits at the lowest costs (and lowest standards), several ROs began to operate in dishonest ways (Arcadis, 2008; Kosc, 2007). According to a report elaborated by Arcadis (2008), some recovery organisations "have offered their services for extremely low prices without taking into consideration the full costs of their activities" (Arcadis, 2008). As a consequence of offering services at "rock-bottom prices" (Kosc, 2007, p. 1), many ROs enabled the recycling and recovery of packaging "on paper only" (Grudzinska-Jurczak et al., 2004). It was common for ROs to sell "virtual receipts" which contained false data on the annual amount of packaging waste recycled and recovered without real recycling and recovery of packaging (interview 67). The compliance reported to the EU on the achievement of the recycling and recovery targets by the ROs was then only "virtual" because the economic instruments which would have allowed a real compliance were considered "too painful" for the industry (interview 42). Then, while some of the ROs tried to do "what[ever] possible to avoid the payment of those charges" (interview 42), the ROs that followed the rules had difficulty in surviving on the market and covering the costs and eventually had to exit from the business (interview 68; interview 44).

In the years between 2001 and 2009, Poland only partially implemented the national packaging legislation and did not achieve the sustainable compliance with the requirements of the European packaging directive. A lack of market incentives and of cooperative strategies among stakeholders strongly and negatively impacted the Polish performance. The establishment of a system for the collection and treatment of packaging waste from households was considered too costly and unprofitable for both municipalities and private companies. As a result, Poland achieved very low levels of recycling and recovery for

recovery organisations (interview 42). An example of such lack of monitoring is that, with the exception of Rekopol, which had as members leading Polish and international entrepreneurs and packaging fillers such as Coca Cola and Tetra-Pack, many other ROs had as shareholders other entities such as recyclers or physical people. In the view of Professor Zakowska, this did not encourage the development of the packaging recovery and recycling system in Poland (interview 65).

packaging from municipal sources. Moreover, despite the fact that reports have emphasised the Polish fulfilment of the EU packaging recycling targets when packaging waste was collected and treated through recovery organisations, this system was characterised by extreme competition and ROs overcapacity. Consequently, ROs found ways to remain competitive working at lowest possible cost and selling "virtual" receipts for the recovery and recycling of packaging waste. The establishment of a competitive system among the ROs was influenced as well by the lack of cooperation among stakeholders in the process of policy-making. In spite of the existence of the EPR Advisory Group to implement the EPR system in Poland, discussions at the ministerial level mostly occurred through direct contacts between packaging lobbies and the government. Hence, cost/benefit ratio calculations by packaging stakeholders, the absence of market incentives and cooperative strategies negatively affected the Polish achievement of sustainable compliance and full-conformity in the packaging waste management dimension by 2009. These factors also negatively impacted the external assistance which, as we have seen, did not play any role in this period.

4.3 Conclusions

Poland implemented only partially the European legislation on the treatment and management of municipal and packaging wastes. The little progress achieved from stage 1 in 1999 to stage 2 in 2009 in the municipal waste dimension and from stage 0 in 1999 to stage 2 in 2009 in the packaging waste dimension were below the sustainable compliance threshold. As in the Hungarian case, the analysis of the progress of Poland in the implementation compliance along these two dimensions has been analysed chronologically in three phases. However, despite the transposition of the European municipal and packaging requirements (by means of the Act on Waste of 2001 for municipal waste and the Acts on Packaging and on the Duties of Entrepreneurs of 2001 for the packaging waste), Poland experienced difficulty in properly implementing these Acts by the end of the period considered. Hence, Poland did not achieve full conformity with the European municipal and packaging requirements as well as sustainable compliance.

In the first phase of the municipal waste management dimension Poland progressed from a Communist state-led system in the late 1980s to the transposition of the European Waste Framework and Landfill directive in the Act on Waste of 2001. The achievement of this objective was influenced by *limited* assistance alliances and transnational communication. In 1999, the government appointed a small group of experts within the Ministry of Environment to revise the Polish waste legislation with the aim of harmonising it with the EU requirements. Parallel to this process, the EU Commission approved a twinning carried out by DEFRA. Nevertheless, these legislative discussions and exchange of knowledge took place only at the ministerial level, limiting the consultation to ministry experts and, when involving external actors, peer-experts. Moreover, despite the fact that the process of privatisation of the early 1990s enabled the advent of Polish family businesses while foreign companies entered the Polish market, neither the domestic nor the foreign firms pursued market incentives strategies which recognised profit in the adoption or export of costly EU standards. On the contrary, the strategies of these private firms were rooted in the cost/benefit ratio and a pursuit of maximisation of profits at the lowest cost, resulting in a regulatory "race to the bottom". Exactly as postulated by researchers of the regulatory approach (Rechtschaffen, 1998; Winter and May, 2001) and of enforcement (Olson, 1965; Axelrod, 1984; Axelrod and Keohane; 1986; Yarbrough and Yarbrough, 1992; Bayard and

Elliot, 1994; Downs, Roche and Barsoom, 1996; Dorn and Fulton, 1997; Maniokas, 2009; Trauner, 2009; Leiber, 2007), stakeholders would act "to maximise profits" and, wherever the costs outweighed the benefits, that is, when stakeholders feared profit loss, they would always strive to avoid the costly compliance.

The second phase of the Polish process of implementation compliance with the municipal waste management dimension focused on the implementation of the Act on Waste of 2001. Still, delays occurred during this phase and, by 2009, Poland had not yet fully implemented this Act. On the one hand, the problems revolved around the development of regional waste management plans through two EU-funded twinning projects. As postulated by the approaches adopting a constructivist perspective and analysing the circumstances for policy transfer (Haas, 1990; Rose, 1991; Sabatier and Jenkins-Smith, 1993; Levy, 1994; Börzel and Risse, 2000; Holzinger and Knill, 2005; Knill and Lenschow, 2005; Börzel and Risse, 2012), referred to in this thesis as transnational communication hypothesis, information exchange and mutual learning would have positively impacted a policy change (or policy compliance). However, EU ex-post reports highlight that these twinning projects were characterised by delays mainly resulting from a *lack of* assistance alliances between external actors and domestic stakeholders which would have ensured the achievement of the projects' objectives. On the other hand, the establishment of a network of regional waste disposal installations was delayed due to strategies following a cost/benefit ratio and to a *lack of* cooperative strategies which resulted in extreme competition between municipal waste stakeholders. In particular, private companies strongly lobbied for the maintenance of the existing non-compliant system in which they believed they could make more profits. Moreover, the preference towards direct lobbying in the decision-making at the ministerial and parliamentary levels and at the expenses of the PROS strongly impacted on the perdurance of only partial compliance with EU legislation by the end of the decade under examination.

Similar to the municipal waste dimension, the Polish implementation compliance with the packaging waste management dimension was characterised by problems in the implementation of the Acts transposing the EU packaging requirements. In the first phase, Poland progressed from weak and locally based systems of packaging selective collection in the Communist times to the transposition of the European packaging legislation in the Act on Packaging and the Act on Duties of the Entrepreneurs, both adopted in May 2001. The achievement of transposition was mostly influenced by cost/benefit ratio and transnational communication. Legislative discussions on packaging occurred directly in the Ministry of

Environment and the Parliament with the establishment of EKO-PAK, and with the creation in the early 2000s of the EPR Advisory Group within the Ministry of Environment. These discussions, however, followed the logic of cost/benefit calculations and were limited to the business representatives' members of EKO-PAK and of the EPR Advisory Group. Moreover, limited assistance has been provided in the form of knowledge transfer by PRO-EUROPE to EKO-PAK which used this knowledge to lobby directly the government.

The second phase then began with an analysis of the mechanisms which would have allowed the implementation of the two Acts adopted in 2001. However, in 2009, Poland had not yet fully implemented the 2001 Acts. On the one hand, the *lack of* market incentives and the presence of a logic following cost/benefit ratio hampered the establishment of a packaging collection and recovery system in the municipalities for the packaging waste from households. On the other hand, cost/benefit ratio pursued by packaging recovery organisation influenced the establishment of a competitive system for the collection and recovery of packaging from commercial sources. To remain competitive within this system, a broad number of recovery organisations began selling only "virtual" receipts to entrepreneurs indicating the amount of recycled and recovered packaging waste for the current and the following years, while those that followed the rules hardly covered the costs of the recovery and recycling operations. Hence, the reported fulfilment of EU targets for packaging waste collected and treated by ROs indicated a "virtual" implementation compliance with EU packaging requirements. The problematic implementation of the 2001 Acts and the competitive system of ROs were also linked to a *lack of* cooperative strategies in the policy-making due to the strengthening of direct contacts. The EPR Advisory Group was dismantled without a formal decision in 2003. Moreover, the direct lobbying of business representatives forestalled horizontal discussions on EPR legislation with other packaging stakeholders.

Chapter 5
Reflections on compliance and its sustainability

This dissertation has examined the variation in the implementation compliance of the European legislation and in its sustainability in two similarly rule-taking countries, namely, Hungary and Poland. Focusing on the implementation of three European directives in the sector of waste management, this dissertation sought to explain the observed variation in the respective performances of Hungary and Poland. Nevertheless, the dissertation has taken some distance from the existing studies on compliance with EU legislation and implementation "on the ground". In the *explanandum* chapter, in fact, the concept of *implementation compliance* was introduced and operationalised. This term was coined by merging the word *implementation*, used by scholars to refer to the phase of concrete adoption "on the ground" of the EU directives' requirements at the national and local levels, and the word *compliance* which referred to conformity with a given legislation. In spite of the fact that both concepts had been used – and according to Hartlapp and Falkner (2009), also misused – in the existing literature, they still remain under-explored. Most of the literature on the implementation of EU legislation has analysed the phase of legal transposition of European directives and regulations in domestic legislation rather than their actual adoption in the Member States. Moreover, to measure the transposition of EU legislation in its Member States, scholars have used the ECJ Infringement Database, which contains information on "lack of compliance" with specific EU requirements, thus detecting non-compliance rather than compliance itself. Hence, by adopting *implementation compliance* as a key concept, this dissertation has aimed at switching the issue of interest from "non-compliance" to "compliance" in order to better account for variations over time in the adoption of EU legislation. Furthermore, it has attempted to move the study from the stage of "transposition in the books" to the one of "implementation on the ground", contributing to this still under-explored field of research.

Additionally, while attempting to explain the performances of Hungary and Poland in the decade that saw them advance from candidates to Members of the EU, this dissertation has explored the mechanisms that made the implementation compliance performance of Hungary, as compared to that of Poland, sustainable over time. In doing so, this dissertation

has gone beyond the analysis of the CEE countries which distinguished between a pre- and a post- accession compliance performance. On the one hand, scholars of conditionality have honed in on the existence of an incentive structure, which influenced the process of approximation with the EU legislation of the CEE candidate countries. On the other hand, post-Accession scholars explored the mechanisms "whereby the EU continues to exert an influence on the new members 'after conditionality'" (Pollack, 2009, p. 251). The extension of the time-frame of analysis has then permitted to explore the mechanisms which not only favoured the achievement of compliance with EU legislation, but also those which enhanced sustainability in the implementation compliance performance regardless of the EU accession incentive. Hence, this extension has allowed the analysis on CEE countries to shift the gaze from the mechanisms to achieve EU membership to the mechanisms to achieve (and maintain) compliance with the EU legislation, introducing in the study the concept of "sustainability of compliance".

The aforementioned consideration of the "sustainability of compliance" after accession had important implications for the definition of the explanatory factors developed in this dissertation. Building upon Sedelmeier's (2012) concept of institutional lock-in, this dissertation has explored the mechanisms that led compliance to be sustainable. The supply-side prism pointed to state actors supplying compliance, that is, with capacity to transpose and monitor compliance. As we have seen in the theoretical chapter, however, supply-side mechanisms related to pre-existing capacities and European incentives and threats to compliance do not explain variation in the performances of Hungary and Poland which have instead been characterised by similar capacities and administrative traditions and similar European threats and incentives despite changes in the incentive and treat structure with the EU Accession. Nevertheless, supply-side approaches have also considered explanations linked to the existence of mechanisms of transnational communication and stakeholders' cost/benefit calculations. As such, preliminary studies and empirical data suggest the existence of a difference in how these mechanisms operated in the CEE countries which may have impacted also the variation in sustainable compliance of Hungary and Poland.

Focusing on the sustainability of compliance, the dissertation has also explored demand-side approaches which analysed situations in which stakeholders, with capacity to hinder or support the supply of compliance, might instead demand actions towards a strengthening of compliance. The analysis of stakeholders in the policy making process had been already included by George Tsebelis and Europeanisation researchers who, defining them as "veto players" implied a negative connotation of these players and a negative

correlation between the number of domestic veto players and policy compliance. Nevertheless, few works have highlighted the role played by domestic stakeholders in "pulling-in" and shaping domestic compliance (Vachudova, 2005; Innes, 2002; Westney, 1987; Jacoby, 2000). Building upon these studies which challenged the negative implications linked to the veto players, in this dissertation I elaborated three hypotheses where stakeholders with the capacity to influence incumbents and operating in the implementation 'on the ground' phase may have been, or may have become supporters of rule-taking.

Firstly, I considered the existence of market incentives which could boost the adoption of EU requirements in less-regulated markets. I then hypothesised that implementation compliance was more likely to occur where private actors recognised a competitive advantage, that is, a profit in adopting or exporting stricter EU regulatory standards. Secondly, I considered the policy-making process and the relation among stakeholders and between stakeholders and incumbents. I then hypothesised that implementation compliance was more likely if stakeholders were reassured on the sharing of the compliance costs through cooperative strategies. Thirdly, I considered the influence of external assistance through European/international knowledge-based and capacity-building projects in the domestic implementation compliance. I then hypothesised that the implementation compliance was more likely if were created assistance alliances between external and the domestic actors.

The theoretical chapter features five testable hypotheses to explain the observed variation in the implementation compliance and in its sustainability in Hungary and Poland. To summarise, these concern: a) transnational communication; b) stakeholders' cost/benefit ratio; c) market incentives; d) cooperative strategies; e) assistance alliances. These five hypotheses have then been tested through process-tracing methodology in the two empirical chapters on Hungary and Poland. Data has been analysed chronologically in three phases: 1) from the *status quo* to the domestic transposition of the European municipal and packaging waste requirements; 2) from the transposition to the implementation of the acts transposing the EU legislation; 3) the sustainability of compliance. Tables 3 and 4 summarise the improvements and mechanisms that influenced progress from one stage to the other in Hungary and Poland in the municipal and packaging waste management dimensions.

Table 3: Mechanisms enhancing implementation compliance in the municipal waste management dimension

Municipal waste management dimension			
		Hungary	**Poland**
Transposition	Transnational communication	Absent	**Present**
	Stakeholders' cost/benefit ratio	Absent	**Present**
	Market incentives	**Present**	Absent
	Cooperative strategies	**Present**	Absent
	Assistance alliances	Absent	**Present**
Transposition outcome		*Present*	*Present*
Implementation	Transnational communication	Absent	**Present**
	Stakeholders' cost/benefit ratio	Absent	**Present**
	Market incentives	**Present**	Absent
	Cooperative strategies	**Present**	Absent
	Assistance alliances	**Present**	Absent
Implementation outcome		*Present*	*Absent*
Sustainability	Transnational communication	Absent	Absent
	Stakeholders' cost/benefit ratio	Absent	Absent
	Market incentives	**Present**	Absent
	Cooperative strategies	**Present**	Absent
	Assistance alliances	**Present**	Absent
Sustainability outcome		*Present*	*Absent*

Note: Poland does only partially achieve the phase of implementation by 2009.

The first phase begins with the analysis of the *status quo* characterised by a state-owned model established during the Communist period and analyses the progress to the transposition

of the European municipal waste requirements in the Hungarian and Polish legislation. The transposition of the European municipal waste legislation at the national level occurred in Hungary with the Act on Waste Management of 2000 and in Poland with the Act on Waste of 2001. The performance of both Hungary and Poland at the time when transposition was completed must still be deemed as non-compliance, despite the fact that the two countries slightly differed in their respective stages of sustainable compliance with the EU municipal waste requirements (i.e. 3 for Hungary, 2 for Poland). Nevertheless, the mechanisms that allowed the transposition of the Waste Framework and Landfill directives in Hungary and Poland differed significantly.

Transposition in Hungary was influenced by the presence of market incentives and cooperative strategies. In particular, the Hungarian system and stakeholders rapidly adapted to the EU standards because of market penetration by foreign waste collecting companies, who recognised profit in exporting costly EU standards to Hungary. Since the early 1990s, in fact, the foreign waste companies acquired a dominant position in the municipal waste treatment operations by constructing new or modernising obsolete disposal facilities. Their position in the market allowed the assumption that their costs would be covered by anticipated profits, hence they implemented costly EU technology and also exported the EU standards in the collection of municipal waste. Furthermore, cooperative strategies established within the OKT influenced the discussion of legislation that would be in line with the EU requirements. This arena of discussion, in which business representatives, NGOs and academics could discuss the draft legislation, served to reassure the different parties about the sharing of the costs, resulting in consensus on the adoption of stricter and costlier EU standards.

Transposition in Poland has been influenced mostly by transnational communication which generated limited assistance alliances. Since the end of the 1990s, the UK Department of Food, Environment and Rural Affairs (DEFRA) established a twinning project with the aim of strengthening the Polish Ministry of Environment's capacity to implement the European waste legislation. This twinning fostered the exchange of knowledge and best practices between British and Polish experts and influenced the elaboration of a draft, approved in 2001 as the Act on Waste. However, the assistance arising from this twinning was limited to a bilateral exchange of information and knowledge between British and Polish experts at the ministerial and governmental level, with the sole aim of transposing the EU requirements to the Polish legislation. Moreover, since the early 1990s foreign waste collecting companies and family businesses emerged on the Polish waste market that

favoured cost/benefit calculations. Not recognising a competitive advantage in adopting or exporting costly EU standards, Polish family businesses focused on increasing their market share at the lowest possible cost, while foreign companies, to become viable competitors, adapted to the existing reality and did not strive to export the EU standards to the Polish system.

The second phase begins after the transposition of the Waste Framework and Landfill directives in the Hungarian and Polish legislation and comprises the implementation of this national legislation 'on the ground'. In particular, the Hungarian Act on Waste Management of 2000 demanded the establishment of compliant operating disposal sites and the closure and after-care of those old and obsolete. Similarly, the Polish Act on Waste of 2001 required the development of national and regional planning through the adoption of National and Regional waste management plans as well as of a network of regional disposal installations. In 2003, Hungary successfully completed implementation of the objectives contained in the Waste Management Act, progressing further towards sustainable compliance. In contrast, Poland still struggled with implementation of its respective legislation and by 2009 it still had not progressed beyond stage 2.

The implementation of the Hungarian Waste Management Act of 2000 was influenced by three interconnected mechanisms: market incentives, cooperative strategies and assistance alliances. In 2000, PHARE financed a survey to acknowledge the number of sites operating in Hungary, their ownership and degree of compliance with EU requirements. This survey determined that disposal sites constructed or managed by private foreign companies were compliant with EU requirements, whereas the majority of municipally-owned sites had to be closed or modernised. Foreign companies investing in the treatment of municipal waste, in fact, recognised a competitive advantage in exporting the EU standards when building, managing or modernising disposal sites. Municipal companies instead applied for EU funding to improve their facilities. Despite some problems linked to an initial poor level of municipal expertise and poor level of project planning Hungarian stakeholders were able to establish assistance alliances with external actors and cooperative strategies. These assistance projects had not been limited to the provision of expertise on the planning phase of specific ISPA projects, or to the adoption of the Regional Waste Management Plans. Instead, the good cooperation established between domestic and external actors allowed, in a number of cases, to expand the scope of the project to other environmental and waste issues. Furthermore, when cooperative strategies were established in the form of public-private-partnerships, and to a minor extent through associations of municipalities, the implementation of the ISPA

projects was very effective.

The pathway to implementation of the Polish 2001 Act on Waste was riddled with problems. In particular, the lack of assistance alliances with external actors, the lack of cooperative strategies between stakeholders and in the policy-making as well as the private actors' pursuit of strategies favouring the cost/benefit ratio negatively impacted the implementation of the European requirements, rendering Poland unable to achieve full conformity with the EU municipal waste requirements by 2009. While exchange of information and best-practices (transnational communication) was ensured by various EU PHARE and ISPA projects, the lack of assistance alliances among Polish and external experts and the participation of only a small group of stakeholders delayed the accomplishment of the EU projects. Moreover, the lack of cooperative strategies among stakeholders, and specifically between municipalities, foreign waste collecting companies and Polish family businesses, delayed the implementation of the ISPA projects. Specifically, the lack of cooperation influenced the establishment of overcapacity of treatment facilities in a number of regions, and did not favour the definition of public-private-partnerships (PPPs) to cover the co-financing costs arising from the modernisation or construction of waste disposal facilities through ISPA. Furthermore, not recognising profit in the EU compliance but rather the pursuit of higher profits at the lowest costs (cost/benefit ratio), foreign and Polish private firms were discouraged to invest in compliant but costly technology in the construction or modernisation of waste treatment facilities. The lack of cooperative strategies was influenced as well by the establishment of direct and bilateral contacts between stakeholders and the Polish government, or the Parliament in the policy-making phase. Environmental NGOs and particularly waste-collecting lobby associations, in fact, preferred to discuss draft legislation outside the arenas of consultation such as PROS or the environmental parliamentary Committees by establishing direct and bilateral interrelations with Ministry of Environment officials or MPs.

Contrariwise, since 2004, Hungary achieved sustainable compliance with the European municipal waste legislation (stage 4). The factors that allowed achievement of sustainability were assistance alliances, cooperative strategies among stakeholders but also the market incentives and the profit recognised by foreign companies exporting EU standards in the construction and modernisation of disposal sites. After the adoption of the National and Regional Waste Management Plans in the early 2000s, some problems persisted in the location of certain disposal facilities and the existence of overcapacity in specific regions. These problems were, however, limited to cases in which there had not been sufficient

coordination and cooperation among the existing operating concessions. In the majority of cases, coordination was achieved through public-private-partnerships. Foreign and municipal companies recognised a number of benefits in establishing such partnerships: while municipal companies could now avail themselves of foreign capital and internalize EU standards exported by foreign companies; those, in turn, had a certainty of return on capital invested in the construction and modernisation of these joint facilities.

Table 4: The mechanisms enhancing compliance in the packaging waste management dimension

Packaging waste management dimension			
		Hungary	**Poland**
Transposition	Transnational communication	Absent	**Present**
	Stakeholders' cost/benefit ratio	Absent	**Present**
	Market incentives	**Present**	Absent
	Cooperative strategies	**Present**	Absent
	Assistance alliances	Absent	**Present**
Transposition outcome		*Present*	*Present*
Implementation	Transnational communication	Absent	**Present**
	Stakeholders' cost/benefit ratio	Absent	**Present**
	Market incentives	**Present**	Absent
	Cooperative strategies	**Present**	Absent
	Assistance alliances	Absent	Absent
Implementation outcome		*Present*	*Absent*
Sustainability	Transnational communication	Absent	Absent
	Stakeholders' cost/benefit ratio	Absent	Absent
	Market incentives	**Present**	Absent
	Cooperative strategies	**Present**	Absent
	Assistance alliances	**Present**	Absent
Sustainability outcome		*Present*	*Absent*

Note: Poland does only partially achieve the phase of implementation by 2009.

The first phase begins with the analysis of the *status quo* characterised by non-existent packaging legislation and very few and locally based selective collection systems from the Communist era. The transposition of the European packaging waste legislation at the national level occurred in Hungary with the Governmental Decree on Packaging of 2002 and in Poland with the Acts on Packaging and Packaging Waste and the Act on Duties of Entrepreneurs of 2001 which, however, entered into force in the following year. By the time of transposition, the performance of both Hungary and Poland was still considered as non-compliant (i.e. stage 2 for Hungary, stage 0 for Poland). However, the achievement of transposition of the European Packaging Waste directive was based on different mechanisms for each of the two countries.

In Hungary, the first impulse towards the adoption of a specific legislation on packaging was a result of the country's application to become a member of the OECD. Recognising the need for establishing a law to transpose the OECD decisions on packaging, discussions occurred between the government, environmental NGOs, packaging stakeholders and business associations. These discussions were characterised by cooperative strategies between parties which led to a preliminary agreement and influenced the adoption of the Product Charge Act in 1995. Nevertheless, this Act did not oblige the packaging producers and fillers to meet European packaging recovery and recycling targets. Cooperative strategies were also pursued within the OKT where discussions occurred between the business representatives, NGOs and academics on modifications to the Packaging Charge Act of 1995 for a full transposition of the EU packaging requirements. Nevertheless, the definition of a compliant packaging recovery and recycling system was mostly influenced by the market incentives mechanism. In 1996, striving to fulfil the European packaging targets, in the absence of relevant Hungarian legislation, thirty-five Hungarian packaging stakeholders with a dominant position on the packaging market founded Öko-Pannon which would fulfil the EU packaging obligations on their behalf. Moreover, recognising profit in the adoption of stringent EU requirements, György Viszkei visited the EU countries to learn about the existing models for recovery and recycling of packaging waste and for preparing a draft that would fit the Hungarian reality. This draft was then introduced in the form of pilot projects for members of Öko-Pannon, who could join the system on a voluntary basis. In 2000, the Act on Waste Management created confusion on the packaging objectives to be fulfilled by private actors. Business representatives, recognising profit in the compliance with the EU packaging requirements strongly lobbied the government for the establishment of clear legislation for the management of packaging waste. As a result, in 2002, the government

adopted the Governmental Decree on Packaging Waste that fully transposed the EU packaging legislation.

The transposition of the European packaging requirements in the Polish national legislation was driven by discussions that took place between packaging stakeholders and the Polish policy-makers. On the one hand, the government and the packaging lobby associations, such as EKO-PAK, directly discussed the definition of detailed legislation and of a system for the recovery and recycling of packaging waste. Limited assistance alliances were also established between EKO-PAK and PRO-EUROPE that provided assistance in the form of transnational communication. In parallel to these direct contacts, the Ministry of Environment established the EPR Advisory Group with the specific aim of discussing the implementation of the EPR system in Poland. However, these discussions involved only a limited number of stakeholders, mainly business representatives, which pursued strategies strongly based on the cost/benefit ratio and focused on the promotion of their own interests. Nonetheless, both levels of discussion influenced the adoption, in 2001, of the Act on Packaging and Packaging Waste and the Act on Duties of Entrepreneurs, which transposed the EU legislation on packaging.

The second phase begins after the transposition of the European Packaging Waste directive in the Hungarian and Polish legislation and comprises the implementation of this national legislation ‘on the ground’. In particular, the Hungarian Governmental Decree did not mention concrete measures for its implementation 'on the ground'. However, by defining the system for the management and treatment of packaging waste it required the establishment of recovery organisations. The Polish Act on Packaging and on Duties of the Entrepreneurs set packaging recovery and recycling targets and the charges to be paid on a yearly basis by packaging producers and fillers in the event that they failed to achieve the targets. By the time of implementation of the objectives contained in these Acts, the performance of Hungary and Poland must still be considered as non-compliant (stage 3 for Hungary, stage 2 for Poland). However, while Hungary implemented the objectives in 2003, by the year 2009 Poland had still not fully implemented the objectives set in the 2001 Acts.

The implementation of the national packaging legislation was influenced in Hungary by cooperative strategies among packaging stakeholders, as well as market incentives and the competitive advantage achieved by Öko-Pannon members through early adoption of the EU packaging system in the course of voluntary pilot projects. Soon after the adoption of the Governmental Decree, Öko-Pannon registered as the first recovery organisation in the packaging waste fraction which, considering its membership, soon had a dominant position

on the packaging market. It then continued to follow its already EU-compliant packaging recovery and recycling system as established earlier via its voluntary projects; this system was also adopted as model in the 2002 Decree. Moreover, Öko-Pannon's establishment of cooperative strategies between packaging firms, collecting companies and recycling firms influenced the adoption of a 'collective' system which fulfilled the EU packaging targets. In contrast, in those waste fractions subject to EPR where packaging stakeholders operated on the basis of cost/benefit calculations, the EU targets were not always attained.

The process of implementation of the Polish packaging legislation was plagued by defects. Collection of packaging waste from households was the responsibility of the municipalities which, following cost/benefit calculations and specifically considering the high costs in the establishment of such a system and the lack of interest on the part of households, implemented only highly imperfect systems achieving low rates of packaging recovery and recycling. The collection of packaging waste from commercial sources was the responsibility of the newly created recovery organisations which were selected directly by the packaging producers and fillers on the basis of a collection fee. Hence, soon after the adoption of the 2001 Acts, a wide number of recovery organisations following a cost/benefit ratio were created and a "competitive liberal market" was established. This competition was influenced too by a preference for direct and bilateral policy-making negotiations. The EPR Advisory Group was dismantled and rapidly replaced by direct lobbying of the Ministry and the Parliament from business associations. The lack of cooperative strategies among stakeholders in the policy-making process had serious policy implications: the absence of horizontal discussions on the EPR legislation further strengthened the lobbying for single interests, as well as a lack of governmental monitoring. Consequently, Poland was characterised by over-capacity in the number of recovery organisations, which either operated at the lowest cost and using fraudulent practices by trading in "recycling papers", without fulfilling the recycling and recovery packaging obligations, or followed the rules but then struggled to remain in the market. As a matter of fact, by 2009, Poland had still not yet fully implemented the European packaging legislation.

As against this, by 2004, Hungary achieved full conformity with the European packaging legislation and sustainable compliance. This achievement was strongly influenced by the market incentives mechanism pursued by Öko-Pannon which, recognising profit in EU compliance and having a dominant position in the packaging market, was able to establish a stable system for the collection, recovery and recycling of packaging waste and to monitor the achievement of the EU packaging targets by its affiliates. Furthermore, considering its

position on the market, Öko-Pannon was recognised as the main beneficiary of initiatives promoted by PRO-EUROPE with whom it also established assistance alliances. Moreover, participation in these European initiatives was not limited to Öko-Pannon; on the contrary, Hungarian NGOs, local authorities and business associations participated in activities organised by PRO-EUROPE[136] (interview 3). In addition, the environmental NGOs such as HUMUSZ cooperated with the Öko-Pannon on a number of activities while the government took into account its policy proposals and comments. These three-way cooperative strategies were further strengthened within the OKT. Since the mid-2000s, the OKT has proposed modifications of packaging legislation to further harmonise the Hungarian packaging legislation with the EU requirements which further strengthened the compliance performance of Hungary.

Necessity and sufficiency conditions of the hypotheses and reference to QCA testing

The summary of the five tested hypotheses shows differences in the mechanisms that influenced, by the end of the period considered, a full-conformity and sustainable compliance level in Hungary and a partial conformity and non-compliance in Poland for both municipal and packaging waste dimensions. Considering the research question defined at the beginning of the dissertation, the process-tracing suggests that explanations for variation in the implementation compliance of Hungary and Poland are linked to the presence or absence of specific mechanisms. In particular, what emerges from the analysis of Tables 3 and 4 emphasises that the positive case of Hungary is influenced by the presence of market incentives, cooperative strategies and assistance alliances. In contrast, the negative case of Poland is influenced by the absence of market incentives and cooperatives strategies, limited assistance alliances and mostly by the presence of the two alternative explanations of transnational communication and cost/benefit ratio. This analysis, however, does not clarify which interaction of these mechanisms influenced the sustainable compliance of Hungary as against the non-compliance of Poland.

In order to determine the fit between the five hypotheses and the compliance outcomes for each phase of the implementation process, I elaborated a QCA truth table and

[136] For further details, see http://www.kooperation-international.de/detail/info/itut-internationales-transferzentrum-fuer-umwelttechnik-gmbh.html.

minimisation analysis of the findings for each phase. For the purposes of the truth table, the five conditions derived from the hypotheses considered in the analysis are: 1) transnational communication (COMM); 2) cost/benefit ratio (BEN); 3) market incentives (MKT); 4) cooperative strategies (COOP); and 5) assistance alliances (ALL). Following a linear dichotomy logic, I assigned the value 0 when such conditions were absent and 1 when they were present. Such assignment has been done for each phase of the implementation compliance process, namely transposition (T), implementation (I) and sustainability (S). Table 5 displays this dichotomy.

Table 5: Cases by explanatory conditions in each stage

	COM-T	**BEN-T**	**MKT-T**	**COOP-T**	**ALL-T**	***OT***	**COM-I**	**BEN-I**	**MKT-I**	**COOP-I**	**ALL-I**	***OI***	**COM-S**	**BEN-S**	**MKT-S**	**COOP-S**	**ALL-S**	***OS***
H-MW	0	0	1	1	0	***1***	0	0	1	1	1	***1***	0	0	1	1	1	***1***
H-PW	0	0	1	1	0	***1***	0	0	1	1	0	***1***	0	0	1	1	1	***1***
P-MW	1	1	0	0	1	***1***	1	1	0	0	0	***0***	0	0	0	0	0	***0***
P-PW	1	1	0	0	1	***1***	1	1	0	0	0	***0***	0	0	0	0	0	***0***

Key: *For the cases:* H = Hungary; P = Poland; MW = municipal waste; PW = packaging waste.
For the conditions: COM = Transnational communication; BEN = Cost/benefit ration; MKT = market incentives; COOP = cooperative strategies; ALL = assistance alliances; OT = outcome transposition; OI = outcome implementation; OS = outcome sustainability.

The table shows that, in the phase of transposition, the lack of negative instances of the outcome generates an incongruent image. The presence and the absence of each explanatory factor is sufficient to the occurrence of the transposition for half of the cases whereas the necessity of the relationship between each factor and the breakdown of the transposition process is vague. Hence, the case selection in this phase renders any evidence inconclusive. In the phase of implementation, the occurrence of market incentives, cooperative strategies and assistance alliances is connected to the occurrence of the outcome, while the occurrence of transnational communication and cost/benefit ratio leads to the non-occurrence of the

outcome. From the analysis of the individual relationships we also learn that market incentives and cooperative strategies are both necessary and sufficient to successful implementation; while market fragmentation and competition are equally necessary and sufficient to failing implementation. Moreover, alliances are here proven sufficient to ensure the positive outcome. Furthermore, transnational communication and cost/benefit ratio are necessary conditions to the non-compliant outcome and, therefore, are excluded as explicative variables. In the phase of sustainability, market incentives and cooperative strategies maintain their ability to explain the positive outcome while assistance alliances reinforce their contribution to its achievement. However, the QCA analysis carried out in Annex 2 emphasises that assistance alliances are not required for the implementation to occur, but that are an *insufficient but necessary* condition for sustainable compliance. Therefore, the condition of assistance alliances is rejected as explicative for the sustainable compliance outcome of Hungary.

The "business" of compliance

This dissertation tackled implementation compliance and the achievement of sustainable institutional change from the outside. In doing so, it has recounted two different stories of compliance with the European legislation and its sustainability over time in similarly rule-taking countries: Poland progressed, but only partially fulfilled the EU requirements while Hungary fully achieved and sustained compliance over the decade 1999-2009. As shown by the analysis of table 5, market incentives and cooperative strategies are necessary and sufficient conditions for the achievement of sustainable compliance. Moreover, assistance alliances is a necessary, but not a sufficient condition for sustainable compliance. In other words, the study proves the significance of market incentives and pre-existing cooperative strategies in fostering sustainable compliance while showing how the two strong explanatory variables are interlinked: compliance is not a "business" *per se*. It has, nevertheless, a grand potential to be made a "good deal" via cooperative strategies among diverse stakeholders, thus creating a win-win situation. This research, in fact, highlighted that there must be mechanisms in place to guarantee that those who are to comply with the European – external – rules are granted an increasing return (or at least: some return) from compliance; then, as

they profit from compliance, they become agents of locking-in externally induced institutional change.

When considering stakeholders, Europeanisation researchers have generally referred to them as 'veto players', capable of blocking or delaying the implementation of EU legislation (Börzel and Risse, 2000; Featherstone and Radaelli, 2003; Héritier et al., 2001; Green Cowles et al., 2001). Moreover, when looking at the stakeholders involved in the implementation of European environmental policies, within the "push-and-pull" framework, Tanja Börzel engaged mainly with the topic of societal non-state actors (Börzel, 2003 and Börzel and Buzogány, 2010). However, while this framework emphasised the active role of the domestic mobilisation or "pull" by the social actors and specifically the environmental NGOs, it also highlighted that the other domestic actors and specifically the policy-makers, administrators and business actors "who have to bear the costs of EU environmental policies" often resisted the implementation of such policies (Börzel and Buzogány, 2010, p. 721).

As against this, the findings of this dissertation shed light on the primary role of private actors as promoters and "demanders" of domestic compliance. In this sense, the findings contribute to the work of Liliana Andonova who integrated open-economy and Europeanisation approaches in her work on the effects of the dual forces of EU markets and institutions on domestic political processes, and who concentrated on the role of industries, international norms and domestic institutions in linking international and domestic politics (Andonova, 2004). Furthermore, these findings also contribute to the work of Julia Langbein who, in her doctoral dissertation and in a recent book, has analysed the link between the competitive pressures faced by domestic and foreign firms and the compliance with transnational market rules (Langbein, 2010; Langbein, 2015).

The first hypothesis considered in this dissertation then concerned the existence of specific market incentives which influenced the strategies of private actors. The underlying assumption for the adoption of stricter and costly EU standards was the converging preferences that these profit-oriented firms had and the recognition that EU compliance was the only way to make profits. This dissertation has particularly demonstrated that ***strategies of private firms were shaped by their dominant position in terms of holding bigger shares of the market*** which allowed them to recognise the benefit of EU compliance. In the packaging waste dimension, the Hungarian Öko-Pannon brought together the largest Hungarian and international packaging producers and fillers, representing approximately half of the existing packaging market at that time. Moreover, it had contracts with a vast number of packaging collectors and recyclers. The position of Öko-Pannon on the Hungarian

packaging market was the trigger for creating awareness of the systems already established in Europe and the definition by Viszkei of a draft system of recycling and recovery in line with the European packaging legislation. Contrariwise, the Polish packaging reality fragmented the market between a high number of ROs, which influenced the establishment of an overcapacity of infrastructures but also affected the quality of services offered by the ROs which, to remain competitive, in some cases operated without actually fulfilling the packaging recovery and recycling requirements and at the lowest possible price.

Similarly, in the municipal waste dimension foreign firms entering less-regulated markets exported EU standards only if they had (or rapidly acquired) a dominant position in the market. Despite the fact that foreign companies could decide to adopt lower standards in the treatment and collection of municipal waste, international companies in Hungary maintained EU standards by constructing new and modernising obsolete treatment facilities or by using EU technology and machinery in the collection of waste. On the contrary, the fragmented municipal waste market established in Poland contributed to a "race for survival" rather than boosting compliance strategies. This survival race was a direct consequence of the extreme competition between municipally-owned companies, Polish private companies and international companies for shares of the collection and treatment market. As a result, Polish private companies developed strategies to attract the highest number of customers at the lowest possible cost, striving to stay in business. Similarly, foreign companies strived to adapt to the existing provisions by lowering prices and standards. Furthermore, waste disposal sites were selected by waste-collecting companies based on in-site landfill tax, with the result that most of the selected sites were among the cheapest and geographically distant, frequently not fulfilling the EU requirements. This also influenced the strategies of many international companies, which had no incentive to invest in modernising and building EU-conforming disposal facilities.

This dissertation also demonstrated that other factors shaped the interests of private actors as well. In particular, it highlighted the role of ***cooperation between stakeholders*** in enhancing the adoption of EU requirements at the domestic level. The cooperative strategies hypothesis assumed that the existence of mechanisms of cost-sharing would positively affect the strategies of stakeholders towards EU requirements compliance. However, while both countries established advisory bodies to the Ministry of Environment and parliamentary committees for the discussion of environmental draft legislation, discussions were effective when they involved a broad number of actors with their interests at stake. In Hungarian policy- and decision-making, the OKT, which grouped representatives from business, NGOs

and academics played a leading role. With the mediation of academics, NGOs and business representatives sought cooperation and compromise and elaborated numerous common opinions in plenary sessions and in the permanent waste policy working group. In Poland, instead, despite the existence of consultative bodies at the ministerial and parliamentary levels, only a limited number of stakeholders became involved, and the most common method of consultation was the establishment of direct contacts. However, the consultations were limited to only a small number of stakeholders among the representatives of business, NGOs, the Chambers of Commerce and representatives of local authorities. Moreover, the broad number of stakeholders involved in the Hungarian policy- and decision-making had implications also on the strategies of private firms which, directly participating in the policy-making process acknowledged the costs of EU compliance and established partnerships and joint-ventures to share these costs.

The mechanism of cooperation between stakeholders also positively influenced external assistance. This dissertation particularly shows that the definition of assistance alliances between external and domestic actors was linked to ***cooperation*** considered as a relevant ***pre-condition for the successful implementation of external assistance***. In Hungary, the PHARE twinning with OVAM on the definition of Regional Waste Management Plans was particularly successful, because, alongside experts from the Ministry of Environment, Hungarian regional and local authorities were also involved. Moreover, the construction and modernisation of landfill sites financed with EU funds were successfully implemented when there was sufficient cooperation among foreign and municipal companies through the establishment of PPPs. Contrariwise, the lack of pre-existing cooperative strategies negatively impacted the development of external assistance programmes in Poland. Indeed, the 2001 twinning project on the preparation of waste management plans at the county and municipal levels failed to achieve its objectives because EU experts were not able to establish alliances with their Polish counterparts to influence an "ownership-feeling" of the project by the Polish beneficiaries (EC, 2004). Furthermore, in the implementation of the ISPA projects, lack of cooperation between foreign and municipal companies in the management of EU-funded disposal facilities prevented the establishment of PPPs. This finding contributes to the work of Jacoby, Stark, Vedres and Bruszt (Jacoby, 2005; Stark, Vedres and Bruszt, 2006; Stark and Vedres, 2006; Bruszt and Vedres, 2013) who first analysed the relationship between external and domestic actors in assistance programmes.

Everlasting compliance?

The dissertation has treated the period covering the pre- and the post-Accession years in Hungary and Poland. As mentioned at the beginning of the dissertation, the decade selected for the analysis of the compliance of Hungary and Poland began in 1999, the year in which the European Commission released its first reports screening the situation in Hungary and Poland (and the other CEE countries together with Malta and Cyprus) before accession. The analysis ended in 2009, five years after the date of the accession of Hungary and Poland and the year of the latest available data contained in the Tri-Annual Monitoring Reports. The data from Poland and Hungary were collected between 2011 and 2014, thanks to periods of intense fieldwork in Warsaw, Budapest and other cities of Hungary and Poland. During my visits, I witnessed the introduction of policy and legislative measures affecting the municipal and packaging waste management systems of Hungary and Poland which, considering the novelties introduced might have an impact on the mechanisms that influenced the variation in compliance and allowed Hungary to sustain its compliance in the post-Accession period.

In July 2011, the Polish government adopted a new Act which introduced a system of public tenders in appointing the waste collecting company collecting waste within a municipality. The Polish municipal waste management system was modified following the initiative of Professor Andrzej Kraszewski, former Minister of Environment (from February 2010 until November 2011). In 2010, PROS supported the attempts of Minister Kraszewski to change the law on waste management by promoting a specific statement on the topic[137]. However, the major interlocutors in the discussions on the draft Act were KIGO and PIGO, which represented the two ends of the discussion. On the one hand, KIGO represented MPOs and municipally owned companies which favoured the adoption of the Act because it moved the ownership of waste from households to municipalities and recognised the pre-eminent role of municipalities in the establishment of public tenders for the selection of the waste-collecting companies within a municipality. On the other hand, PIGO represented the private and foreign waste-collecting companies, which opposed the changes in the non-regulated and competitive system because they feared that they would lose big shares of the market (interview 44). After an agreement was drawn up between these two lobbies, in 2011, the

[137] For further details on the PROS' role in supporting the recent changes in the municipal waste management system, see http://ekorozwoj.pol.lublin.pl/no10/pros.pdf.

draft was approved by the Parliament as the new Act on Maintaining the Cleanliness and Order in Communes (No. 152 item 897 of 2011). This Act aimed at re-organising and rationalising the system of municipal waste management by granting the ownership of waste to the municipalities and requiring public tenders for the selection of waste management companies operating within a single municipality (interview 44; interview 42). Despite the fact that the EU Commission as well as Brussels-based interest groups have positively welcomed these changes (interview 3; interview 76), the implementation of the Act was still incomplete at the end of 2014. Polish, municipal and foreign waste-collecting companies have, in fact, lobbied to preserve the existing competitive system in which they could do business at lower costs (and in some cases also in dishonest ways).

At the close of 2011, the Hungarian government adopted a new Product Charge Act which established the National Waste Management Agency (hereafter also NWMA). The aim of this Act was "basically to coordinate the Hungarian selective waste collection and treatment system in a transparent way based on uniform criteria" thus establishing the NWWA as the sole coordinator in charge of managing, organising and controlling "the public and industrial separate waste collection" (NWMA website) and monitor the data on the generation of this type of waste. This Act served to change the system of licensing fee system because the organisation and management of waste was subject to EPR. For instance, packaging was now the responsibility of the NWMA while the recovery organisations were out of the system, and could either close down or modify their objectives. Öko-Pannon, for instance, chose the latter opinion, and become a consultant for "compliance with the environmental product charge[138]". Furthermore, at the end of 2012, the Hungarian Parliament adopted a new Act on Waste to transpose the dispositions and the principles contained in the new European Waste Framework Directive. This Act, however, contained additional provisions that restricted the collection of municipal waste exclusively for collecting companies with a majority interest held by municipalities. Thus, only those companies owned in at least fifty-one per cent by municipalities were permitted to collect waste, which weakened the market position of multinational and foreign waste-collecting companies.

Recent legislative developments, then, have impacted strongly on the system of collection and treatment of municipal and packaging waste in Hungary and the municipal collection system in Poland. Despite the fact that it is still too early to assess precisely the effects on the compliance performances of Hungary and Poland, it is plausible that, in the

[138] For more details on the recent services provided by Öko-Pannon, see http://www.okopannon.hu/en/our_services/.

case of Poland, recent changes could influence the development of more consolidated markets and positively impact on its compliance performance. Yet, progress may still be hampered by the persistent bilateral and adversarial strategy of policy-making at the ministerial and parliamentary levels. Contrariwise, the changes occurring in Hungary could strongly impact on the dominant position on the market of private actors in both municipal and packaging systems, implying also possible changes in the sustained compliance of Hungary. Indeed, private actors may have fewer incentives to comply with the EU legislation and may either disappear from the market or find other ways to make their voice heard. At the moment, the search for new arenas of discussion seems to be the main strategy followed by the private actors operating in Hungary. During the discussions on the new Act on Waste, the strongest reactions to the legislation were at the European level, mostly voiced by Germany, Austria and France, who raised objections to the Hungarian draft during the phase of notification of new legislation to the European Commission. These reactions showcase the strong international interests operating in the Hungarian municipal waste management sector, which in 2012 created a paralysis in the legislative process for the adoption of the draft Act on Waste. Moreover, in 2011, the Brussels-based PRO-EUROPE released a position paper on Öko-Pannon after the adoption of the new Product Charge Act[139]. There, it recognised the achievements obtained in Hungary through the system of packaging recovery and recycling defined by Öko-Pannon. As well, it expressed concern that with the adoption of the Act, "the major achievements of Öko-Pannon over the last 15 years would fade away" meaning "a massive step backwards" in the compliance of Hungary with the EU requirements because, according to Mr Quoden, "since the establishment of, a collection and recycling system has been established all over Hungary which has always fulfilled (and exceeded) all national and European targets." (PRO-EUROPE Press Release, 2011)

Limitations and further directions

This dissertation may be limited by the generalisability of the theoretical insights linked to the empirical findings. The thesis demonstrated the role played by private actors who, bolstered by their dominant position on the market, either lobbied for the introduction of

[139] For details on the Press Release of PRO-EUROPE on the Hungarian changes, see http://www.pro-e.org/files/PRO-Europe-Hungary-Press-release-on-15-year-anniversary_23-June-2011.pdf

stricter standards or exported the standards and technology when penetrating less-regulated markets. To explore the conditions which made compliance "profitable" for private actors, I chose to focus on the waste management sector, which was strongly market-driven and in which a wide number of domestic and foreign firms operated. The thesis offers as well an analysis of the mechanisms which made the achievement of compliance "profitable" for other stakeholders. The thesis, in fact, demonstrated that the existence of cooperative strategies and the decision-making involvement of a wide range of stakeholders assured not only private actors but also environmental NGOs and local authorities of the sharing of costs, thus boosting requests for the introduction of stricter standards in national legislation (e.g. through the OKT) or investments in costly technology (e.g. in the recultivation of old disposal sites). Furthermore, the existence of cooperative strategies influenced the implementation of external assistance projects, as in the establishment of public-private-partnerships for the management of joint facilities or the knowledge-based activities which involved a wide number of stakeholders and further strengthened knowledge of EU requirements at the domestic level.

The second limitation of the dissertation may pertain to the generalisability of the findings with respect to the research design and the methodology. Scholars have emphasised "the difficulty of practitioners of case study research to articulate their epistemological and methodological contributions" (Della Porta and Keating, 2008, p. 224). In particular, when considering a small-N research design, the case studies approach allows for an in-depth empirical investigation of a phenomenon or event, but it also has implications "on extracting generalisable knowledge actually or potentially related to other cases" (Della Porta and Keating, 2008, p. 226). Moreover, when adopting the methodology of tracing causal processes in small-N research designs, scholars have highlighted problems in the generalisability of the findings (Blatter and Haverland, 2012; Bennet and Checkel, 2015). In order to test the soundness and the nature of the relationship between the characteristics hypothesised as causal and the differences in compliance across cases it has been provided some formalization and further treatment of qualitative data with the aid of csQCA truth table. Nevertheless, the csQCA conclusion maintains its validity within the strict boundaries of the two cases under analysis. A future widening of the cases selected and a wider variability in outcome and explanatory factors could surely improve the scope of results.

Despite these possible limitations, this dissertation offers important insights on the theoretical hypotheses and the mechanisms which allowed the "sustainability of compliance" in only one of the two similar countries under examination. Focusing on the "sustainability"

over time triggered by the idea of making compliance a “business” with concrete gains and profits for policy-makers transposing EU legislation at a domestic level and for the stakeholders in charge of the implementation “on the ground”, the empirical and theoretical insights of this dissertation may be generalisable to other sectors and a broader number of cases. Indeed, scholars have emphasised that “a researcher focusing on one or [a] few cases might uncover a new hypothesis that is broadly applicable” (Bennet and Checkel, 2015, p. 14). With this quote I do not mean to imply that I have discovered a new theory, nor clear-cut explanations of the phenomenon of variation in European legislation compliance. However, I propose that this dissertation offers a key to understanding the mechanisms that made compliance sustainable over time. Having uncovered the primary role played by private actors and the link between private actors and cooperative strategies in explaining the sustainability of compliance with EU rules (in this case: waste management), the possible directions of analysis then may lead my research to study the role of other factors in shaping the interests of private actors.

Annex 1:
Hungary's and Poland's performance in the two dimensions according to the European monitoring reports

This Annex provides the analysis of the data used to measure the performances of Hungary and Poland in the municipal and packaging waste dimensions. It contains the information on how the performances of Hungary and Poland were measured using as sources the Commission's 1999 Screening Report, the Annual Monitoring Reports for the years 1999-2003, the Tri-Annual Monitoring Reports for the periods 2004-2006 and 2007-2009 and the related National Questionnaires of Hungary and Poland. In particular, Figures 1 and 2 of the *explanandum* chapter elaborated from the data contained in Table 6 and 7 of this Annex. Table 6 summarises the performances of Hungary and Poland in the implementation compliance of the municipal waste management dimension in the period 1999-2009.

Table 6: Performances of Hungary and Poland in implementing the municipal waste dimension

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Municipal waste management dimension	**HU**	*2*	*3*	*3*	*3*	*3*	**4**	**4**	**4**	**4**	**4**	**5**
	PL	*1*	*1*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*

Source of the data: Commission Annual Reports (1999-2003), National questionnaires for Hungary and Poland (2004-2009)

According to data from the 1999 Screening Reports and 1999 Annual Monitoring Reports, Hungary and Poland did not initially comply with the municipal waste management dimension. The performance of Hungary was characterised by a duality of compliant and

non-compliant elements; thus, the country only reached stage 2 at the time. On the one hand, the Reports documented the existence of approximately two thousand landfills that did not fulfil the environmental standards, as well as the absence of any framework legislation on waste. On the other hand, Hungary constructed ten new and compliant regional landfills and defined an environmental legislation which set specific requirements for the management of waste (1999 Annual Report). The performance of Poland was characterised by its "difficulty in establishing networks of disposal installations", the issue of "one third of existing landfills" having had exhausted their capacity and the old landfill sites in a technical condition that raised "many objections" (1999 Screening Report). Furthermore, it was recognised that Poland only partially transposed the European Waste Framework Directive with the 1997 Act on Waste (1999 Annual Report). Considering these elements, the performance of Poland was coded as achieving stage 1 with the EU requirements.

In the years 2000 and 2001, the performance of Hungary allowed it to advance to stage 3 but was still not sufficient to achieve sustainable compliance. The European Annual Reports for these years accounted for the improvements, such as the adoption of the Act on Waste Management in June 2000, considered as "an important step in aligning with the relevant *acquis*", and the establishment of "four modern regional landfills" (2000 Annual Monitoring Report for Hungary). Moreover, they reported the transposition of the Landfill directive and the setting up of "four modern regional landfills" as well as the launching of several training programmes for local authorities to facilitate the implementation of the Act on Waste Management (2001 Annual Monitoring Report for Hungary). However, these Reports also acknowledged that only 30% of the disposal facilities in operation were compliant in 2000. In other words, there were not enough compliant facilities and it was necessary as well to provide for the closure and after-care of the old and obsolete sites (2001 Annual Monitoring Report for Hungary). Hence, considering the co-existence between measures stepping-up in the compliance and those non-compliant, the performance of Hungary in the years 2000 and 2001 was coded as stage 3. The 2002 Report did not specifically mention the elements considered to measure compliance changes in the municipal waste management dimension. The Report only mentioned that Hungary adopted the National Waste Management Plan and required further improvements in the definition of regional and municipal plans as well as individual plans.

The 2000 Annual Monitoring Report for Poland did not evaluate the municipal waste management dimension; thus, the performance of Poland for that year was coded as stage 1. Furthermore, despite changes in the Polish performance over the years 2001 and 2002,

sustainable compliance was not achieved. In particular, while the 2001 Annual Monitoring Report noted the adoption of the Act on Waste transposing the EU legislation, the 2002 annual report urged an improvement in compliance with the European waste requirements. The 2002 report, in particular, called for the adoption of national and regional waste management plans and the upgrading of landfill disposal sites. Therefore, considering the number of elements that Poland had to improve, its performance for the year 2001 and 2002 qualifies as stage 2.

The 2003 Annual Monitoring Reports for Hungary and Poland did not evaluate in detail the municipal waste management dimension. In fact, these Reports considered the adoption of the waste management legislation only to be "in place" and "in line with the *acquis*" and required both countries "to continue" with the establishment of collection systems and recovery and disposal facilities. Some minor differences were reported on the issue of waste management planning. In particular, the Report for Hungary specifically required "the completion" of the setting up of local plans while the Polish Report required "the preparation" of regional, provincial and local plans (2003 Annual Monitoring Reports for Hungary and Poland). Considering the lack of detailed information, the degree of conformity was coded as stage 3 for Hungary and stage 2 for Poland.

By contrast, the post-Accession national questionnaires sent by Hungary and Poland on the progresses in the implementation of the European Waste Framework and Landfill directives contain greater information on the performances of these two countries in the municipal waste management dimension. These questionnaires were aggregated by the European Commission in the Tri-Annual Implementation Reports for the years 2004-2006 and 2007-2009. Specifically, the Hungarian national questionnaire for the years 2004-2006 reported the existence of national legislation implementing the European directives. Moreover, it was also assessed that all the existing disposal sites had been examined by 2003 and that a schedule had been developed for the modernisation of the operating sites. In light of these improvements, the performance of Hungary for the years 2004-2006 reached sustainable compliance and was coded as stage 4. The Polish national questionnaire for the years 2004-2006 also reported the adoption of national legislation implementing the European directives. However, the implementation of these requirements was conditional to the transitory periods granted by the European Commission[140] in relation to the European Landfill directive which, in 2006, still needed "remarkable efforts" to be implemented in

[140] In particular, in the accession Treaty of 2003, a transitory period until the year 2012 was negotiated in relation to the modernisation of the disposal sites in operation and the closure and after-care of the old ones.

Poland (ETCRWM, 2006; interview 75). Moreover, the Polish national questionnaire reported the compliance of only 40% of the existing landfill in the year 2006 (Polish national questionnaire, 2009). Hence, the performance of Poland for the years 2004-2006 was still coded as stage 2.

The data for the period 2007-2009 showed a sustainable compliant performance for Hungary and a partially compliant performance for Poland. Data from the national questionnaire of Hungary, in particular, highlighted the transposition and implementation of the European requirements contained in the Waste Framework and Landfill directives thus determining a maintenance of stage 4 for the years 2007 and 2008. A step forward in the performance of Hungary was achieved in 2009 with the closure of all the existing non-conforming landfill sites and the compliance of all the existing and operating landfill sites[141], 80 in number by 2009 (National Questionnaire for Hungary, 2010). Moreover, since Ministerial Decree No. 20/2006 IV. 5, adopted in 2006, landfill operators were obliged in the closure of obsolete sites and had to report to the Inspectorate during the after-care period. Therefore, by 2009, Hungary had achieved stage 5 in the municipal waste management dimension.

Data for the period 2007-2009 indicated a number of improvements but also drawbacks in Poland's compliance with the municipal waste management dimension. On the one hand, the Polish questionnaire documented the adoption of legislation implementing the Waste Framework and Landfill directives in Poland. Moreover, it noted a reduction in the number of existing landfill sites and an increase in the compliant ones in 2009. On the other hand, the questionnaire did not reflect modifications in the implementation of the requirements on the closure and after-care of old and obsolete landfill sites. Furthermore, in 2007, the European Commission started legal action against Poland on the “inadequate implementation of the Landfill directive” (Commission's Press Release[142]). Therefore, despite improvements in compliance with the Waste Framework Directive, Poland's performance in the municipal waste management dimension was still coded as stage 2 for the years 2007-2009.

Table 7 summarises the performances of Hungary and Poland in the implementation compliance of the packaging waste management dimension in the period 1999-2009.

[141] The Hungarian National Waste Management Plan set the total number of existing and operating landfill sites for Hungary to a maximum of 100 landfills and an incinerator per region to be achieved by 2009.

[142] For further details, see Commission's Press Release (IP/07/387) of 21 March 2007 (http://europa .eu/rapid/press-release_IP-07-387_en.htm).

Table 7: Performances of Hungary and Poland in implementing the packaging waste dimension

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Packaging waste management dimension	**HU**	*2*	*2*	*2*	*3*	*3*	**5**	**5**	**5**	**5**	**5**	**5**
	PL	*0*	*0*	*0*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*

Source of the data: Commission Annual Reports (1999-2003), National questionnaires of Hungary and Poland (2004-2009)

In 1999, Hungary and Poland diverged markedly regarding compliance with the packaging waste management dimension. Hungary had already adopted measures such as the Product Fee Act (Act LVI 1995), which partially transposed the European packaging directive by obliging producers of specific waste streams (e.g. batteries, packaging and tyres) to pay an annual tax on the amount of products put on the market (1999 Screening Report for Hungary). Moreover, Hungary had established systems for the collection and recovery of packaging waste which, in 1997, reached the rates of 25% for the collection and of 15% for the recovery (1999 Screening Report on Hungary). Additionally, in the mid-1990s, Hungary had established a deposit refund system on glass and plastic bottles. The Screening Report underscored a need for major efforts and important investments for Hungary to achieve full compliance with the European directive. As such, the performance of Hungary for the year 1999 was coded as stage 2.

The Screening Report for Poland assessed a very low degree of conformity with the packaging waste management dimension. According to this Report, by 1999, Poland had transposed the European packaging directive "to a very minor degree", systems for the collection, recovery and recycling of packaging waste had not been established and "recovery and recycling quotas" were considered as "low" (1999 Screening Report for Poland). Furthermore, in the Report, the Commission invited Poland to "start working on cost assessments and implementation planning immediately" (1999 Screening Report for Poland). Thus, the performance of Poland in 1999 was coded as stage 0 due to failure to commence

the implementation compliance process.

The respective compliance performance of both Hungary and Poland remained substantially unchanged until 2001. The Annual Monitoring Report for Hungary mentioned several improvements associated with the 2000 signing of a joint declaration with Ukraine, Romania and Slovakia on the need “to cooperate in averting ecological disasters based on the 'polluter pays' principle” (2000 Annual Monitoring Report) and the adoption of the Act on Waste Management in June 2000, which recognised the “polluter pays” concept. The 2001 Report on Hungary, however, documented the need for “further efforts” in the harmonisation with the EU legislation on packaging and packaging waste. Hence, considering the improvements, but also the Commission's admonition to adopt further compliance measures vis-a-vis the European packaging legislation, Hungary's performance in the years 2000 and 2001 was coded as stage 2. The 2000 Annual Monitoring Report for Poland did not mention the packaging waste management dimension and, therefore, the conformity degree for this year was coded as stage 0. Contrariwise, the 2001 Report acknowledged that Poland had adopted two Acts transposing the European packaging legislation, namely, the Act on Packaging and Packaging waste and the Act on Duties of Entrepreneurs; however, these Acts did not enter into force until 2002. Moreover, the Report did not document efforts for the setting up of collection, recovery and recycling waste. As a result, the conformity degree for Poland was coded as stage 0.

In 2002, Hungary and Poland had made limited progress in complying with the packaging waste management dimension. The 2002 Report for Hungary emphasised progress in the transposition of the European packaging directive with the adoption of the Governmental Decree on Packaging waste in May 2002. Nevertheless, this Report also noted the need to create “a comprehensive system on the selective collection of packaging waste from communal sources”. Therefore, the performance with the EU requirements for Hungary in 2002 was coded as stage 3. In January 2002, the two Polish Acts transposing the European packaging legislation entered into force. However, the 2002 Report for Poland highlighted the need to adopt ministerial regulations to complete transposition in the European packaging directive. According to the ETCRWM, in 2002, the big retailer shops were obliged to operate at their own expense collection systems for non-returnable packed products (ETCRWM, 2006). Nevertheless, the 2002 Annual Report did not mention the establishment of collection, recovery and recycling systems for packaging waste established at the national level. Thus, considering the improvement in transposition but also the continued absence of a system to collect and recover packaging, the performance of Poland for 2002 was coded as stage 2.

The 2003 Annual Monitoring Reports did not detail the progress of Hungary and Poland in the packaging waste management dimension. These Reports determined that

legislation in the waste management sector had been put into place but no specific mention was made of the packaging waste legislation and implementing measures. Therefore, the coding of the performances of Hungary and Poland remained as those of the previous year, namely 3 for Hungary and 2 for Poland. More information was offered in the national questionnaires of Hungary and Poland for the years 2004-2006 and 2007-2009. These national questionnaires, did disclose progress made in compliance with the EU packaging legislation but the respective performances of Hungary and Poland did not change between the two reporting periods.

The two Hungarian questionnaires for the years 2004-2009 noted the adoption of implementing legislation for the packaging waste and the establishment of collection, recycling and recovery systems. These systems could be managed either individually by industries or by the recovery organisations that had been established since 2003 and which, upon the payment of a licence fee, would organise the collection, recovery and recycling of packaging waste. The performance of Hungary was therefore coded as of stage 5 for the years 2004-2009.

The two Polish questionnaires for the years 2004-2009 observed some progress in compliance with the EU packaging requirements. In particular, these questionnaires highlighted the adoption of implementing legislation and the establishment of systems for return, collection, recovery and recycling of packaging. Moreover, retailers and wholesalers were obliged to take back reusable packaging while businesses that place packaged goods on the market were obliged to set recovery and recycling rates individually or through recovery organisations; in the event that the firms failed to achieve such rates, they were also subject to the payment of a penalty. However, reports elaborated by BIPRO and PRO-EUROPE highlighted the fact that Poland, at the close of the 2000s, still had an “insufficiently developed scheme for selective collection of packaging waste originated from households” which, according to estimates, covered only 50% of the population (PRO-Europe, 2012) and, in general, it had established only “limited collection infrastructure for packaging waste” (BIPRO, 2009). According to these reports then, further efforts were necessary in the separate collection of packaging waste in order to fulfil the requirements and achieve the EU packaging recovery and recycling targets (BIPRO, 2009; PRO-Europe, 2012). The performance of Poland in the packaging waste management dimension was therefore coded for the years 2004-2009 still as stage 2. In fact, in spite of the adoption of the implementing legislation on packaging waste, major efforts were still required to achieve the recovery and recycling targets and to establish a nationwide separate collection system for packaging waste.

Annex 2:
Discussing the validity of the hypotheses on implementation compliance and its sustainability

The analysis shows that Hungary and Poland followed two separate causal paths along their road to compliance with European legislation. In particular, the empirical findings demonstrated that the sustainable compliance performance of Hungary was influenced by the existence of market incentives which catalysed economic actors' achievement of compliance with the EU requirements and by a cooperative style of policy-making which also enhanced external assistance alliances. In contrast, Poland's partial and discontinued compliance can be ascribed to the absence of market incentives and to a competitive style of policy-making which hampered the establishment of alliances between external and domestic actors.

The claim is supported by a process tracing analysis that guided the selection of data from contexts on the basis of the driving hypotheses, and gave them the sense of a causal story. However, whilst the applied strategy can provide a plausible story, it is also little suited to prove that it is a sound one. Proof requires some formalization and further treatment of qualitative data that can expose and assess the nature of the relationship between the characteristics hypothesised as causal and the differences in compliance across cases. As shown by the process tracing analysis, and further highlighted in Table 5 in the concluding chapter, the hypotheses on transnational communication and cost/benefit ratio do not sufficiently explain the observed variation in the implementation compliance performances of Hungary and Poland nor do they explain the sustainable compliance performance of Hungary. Therefore, explanations for the positive outcome of Hungary revolve around the three demand-side hypotheses, namely market incentives, cooperative strategies and assistance alliances.

For the purposes of the truth table a binary opposition was applied to the presence/absence of these conditions. The condition market incentives <*MKT*> is considered present, and given value 1, when one or a group of private domestic/international actors having a dominant position in the municipal and packaging waste management markets in terms of detaining bigger shares of the collection, recovery and recycling of such wastes in comparison to other existing actors (e.g. municipal waste collecting companies) adopt stricter EU standards or export them when penetrating the market. Otherwise, is considered absent

and given a 0 score. The hypothesis cooperative strategy <*COOP*>, is present (scoring 1) when cooperation was established in the form of joint-ventures and PPPs between private (domestic/foreign) and municipally-owned waste-collecting companies as well as when private actors, NGOs and state actors collaborated in the promotion of municipal and packaging waste measures in environmental consultative bodies and committees. With the absence of joint-ventures, PPPs as well as the lack of cooperation in environmental policy-making, the condition is considered absent and given a 0 score. The assistance alliances hypothesis, labelled <*ALL*>, is present (scoring 1) when external assistance in the form of capacity-building and knowledge-based projects was supported not only by the cooperation between external and domestic actors but also by the involvement of a wide number of stakeholders in carrying out such projects. When cooperation between external and domestic actors is absent the condition is considered absent and given a 0 score. Table 8 shows this dichotomy.

Table 8: Cases by explanatory conditions in each phase

cases	**MKT-T**	**COOP-T**	**ALL-T**	***OT***	**MKT-I**	**COOP-I**	**ALL-I**	***OI***	**MKT-S**	**COOP-S**	**ALL-S**	***OS***
H-MW	1	1	0	*1*	1	1	1	*1*	1	1	1	*1*
H-PW	1	1	0	*1*	1	1	0	*1*	1	1	1	*1*
P-MW	0	0	1	*1*	0	0	0	*0*	0	0	0	*0*
P-PW	0	0	1	*1*	0	0	0	*0*	0	0	0	*0*

Key: *In the first column: H* is for Hungarian case, *P* for Polish case; *MW* is for municipal waste market, *PW* for package waste market. In the first row, *MKT* is the causal factor from HP1, *COOP*, from HP2; *ALL*, from HP3. The suffix *-T* refers a factor to the first phase of the compliance process; the suffix *-I* to the second phase; the suffix *-S*, to the third. *OT, OI, OS* indicate the outcome of the first, second, and third phase respectively.
In cells: the value of the factors and of outcome by case (1=present, 0=absent).

The dataset can be first explored with the aid of "truth tables". Truth tables move the analytic attention from cases to configurations of causal factors. In truth tables, each case is reduced to the presence and absence of the explanatory factors - which allows them to be associated with the outcome. The truth table generated by the original dataset are shown in Table 9

below.

Table 9: Possible observed and unobserved configurations given HP.1, HP.2, HP.3.

MKT	COOP	ALL	*cases in T*	OT	*cases in I*	OI	*cases in S*	OS
1	1	1			H-MW	1	H-MW, H-PW	1
1	1	0	H-MW, H-PW	1	H-PW	1		
1	0	1						
1	0	0						
0	1	1						
0	1	0						
0	0	1	P-MW, P-PW	1				
0	0	0			P-MW, P-PW	0	P-MW, P-PW	0

Key: The first three columns list all the possible combinations of presence and absence of the factors *MKT*, *COOP*, *ALL*. As the explanatory factors are always the same over time, and their possible combinations are finite and constant, they are not referred to any stage. Stages instead qualify the remaining columns. In the "*cases*" column, the cases are ascribed to the configuration (i.e., to the combination of presence (1 scores) and absence (0 scores) of the three factors) that each displays in a given phase (again indicated by *T*, *I*, and *S*). In so doing, cases make the configuration observed and associated to an outcome in that phase - as listed in the next column (under the headings of *OT*, *OI*, *OS* respectively). Empty cells in cases and outcome columns indicate unobserved configurations in that phase.

The truth table provides the answer to the first question about the explanatory potential of the factors of HP.1, HP.2, and HP.3. The factors identify 8 possible combinations:

2 in phase T - i.e., 1-1-0 observed in both the Hungarian cases, and 0-0-1, observed in both the Polish cases;

3 in phase I - i.e., 1-1-1 in the Hungarian municipal waste case; 1-1-0 in the Hungarian packaging waste case; and 0-0-0 in both the Polish cases;

2 in phase S – i.e., 1-1-1 in both the Hungarian cases, and 0-0-0 in the Polish cases.

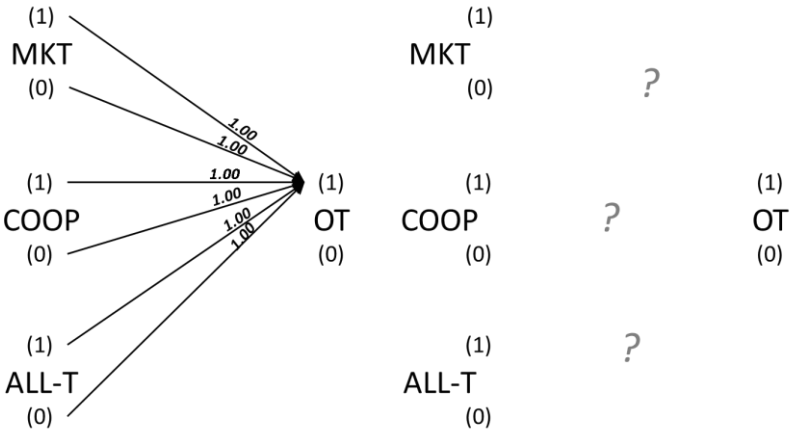
As shown by the table, when two cases share the same configuration of factors, they also display the same outcome. This means that the explanatory factors are truly capable of separating cases with a positive outcome from those with a negative one. The factors hence

prove to be "difference-makers" (Lewis 2001) – a formal property that validates the theoretical assumptions set out in the hypotheses.

The following analysis further shows consistency of causal relationships between individual conditions and the outcome. Table 10 illustrates how, given lack of a negative outcome in phase T, the presence and the absence of each explanatory factor is sufficient to the occurrence of the transposition, while the necessity of the relationship between each factor and the breakdown of the transposition process is indeterminate.

Table 10: Direction and strength of the relationship between factors and outcomes in phase T.

	Outcome: OT$_1$		**Outcome: OT$_0$**	
Factors:	*Necessity*	*Sufficiency*	*Necessity*	*Sufficiency*
MKT$_1$	0.500000	1.000000	-1.#IND00	0.000000
MKT$_0$	0.500000	1.000000	-1.#IND00	0.000000
COOP$_1$	0.500000	1.000000	-1.#IND00	0.000000
COOP$_0$	0.500000	1.000000	-1.#IND00	0.000000
ALL-T$_1$	0.500000	1.000000	-1.#IND00	0.000000
ALL-T$_0$	0.500000	1.000000	-1.#IND00	0.000000

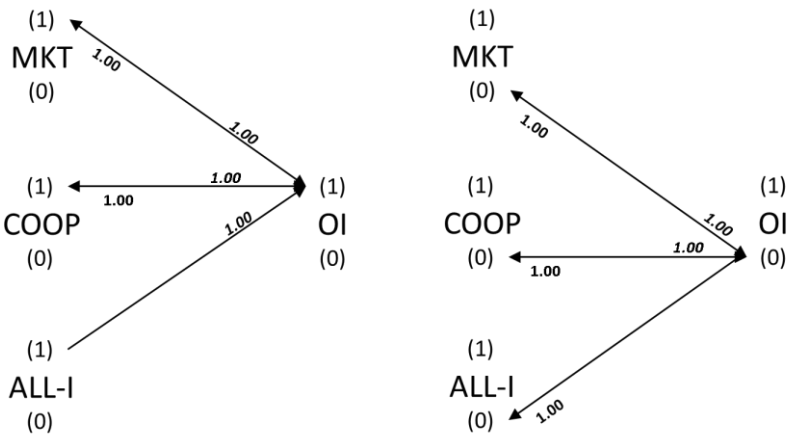


As Table 11 on phase I shows, the occurrence of each explanatory factors is connected to the occurrence of the outcome, while their non-occurrence leads to the non-occurrence of the outcome. From the analysis of the individual relationships we also learn that consolidated economic players, and cooperative practices, are necessary and sufficient to successful administrative implementation; while market fragmentation, and competition, are equally necessary and sufficient to failing implementation. Moreover, alliances are here proven

sufficient to positive outcome, and necessary to non-compliance in this phase.

Table 11: Direction and strength of the relationship between factors and outcomes, phase I.

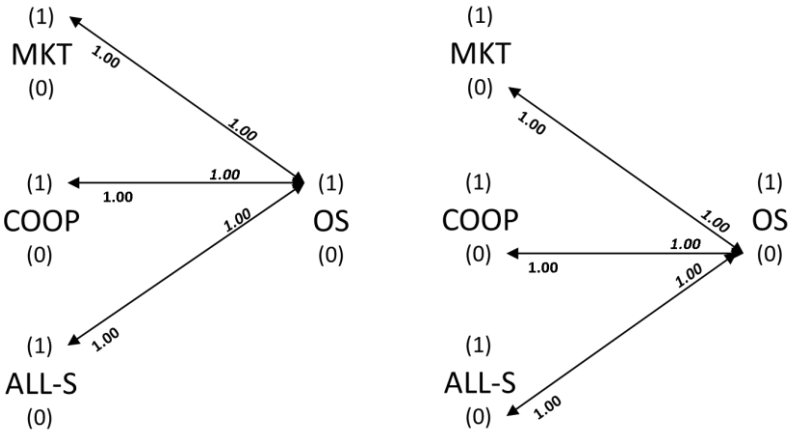
	Outcome: OI_1		**Outcome: OI_0**	
Factors:	*Necessity*	*Sufficiency*	*Necessity*	*Sufficiency*
MKT_1	1.000000	1.000000	0.000000	0.000000
MKT_0	0.000000	0.000000	1.000000	1.000000
$COOP_1$	1.000000	1.000000	0.000000	0.000000
$COOP_0$	0.000000	0.000000	1.000000	1.000000
ALL-I_1	0.500000	1.000000	0.000000	0.000000
ALL-I_0	0.500000	0.333333	1.000000	0.666667



The individual causal relationships become stronger in the sustainability phase. As shown by Table 12, not only market incentives and cooperative strategies maintain their explanatory potential, but also assistance alliances influence the outcome and become a necessary and sufficient condition of the positive outcome when they are present, but also necessity and sufficient condition to the negative outcome when they are absent. Therefore, it fails to provide an explanation on its own.

Table 12: Direction and strength of the relationship between factors and outcomes, stage S.

	Outcome: OS1		**Outcome: OS0**	
Factors:	*Necessity*	*Sufficiency*	*Necessity*	*Sufficiency*
MKT1	1.000000	1.000000	0.000000	0.000000
MKT0	0.000000	0.000000	1.000000	1.000000
COOP1	1.000000	1.000000	0.000000	0.000000
COOP0	0.000000	0.000000	1.000000	1.000000
ALL-S1	1.000000	1.000000	0.000000	0.000000
ALL-S0	0.000000	0.000000	1.000000	1.000000



The QCA analysis seeks to identify the smallest configuration of conditions capable of providing a non-contradictory explanation of an outcome. This is done by comparing pairs of configurations from the truth table that display the same outcome, dropping those conditions which vary in two otherwise identical configurations. This "minimization" is operated in multiple rounds until the minimal configuration is found and proven sufficient to an outcome. Minimizations take into consideration both observed and unobserved configurations. The unobserved configurations are applied under three different assumptions[143] of which the

[143] The three assumptions are: 1) that none could have led to the outcome, thus, only observed configurations are minimized (i.e., "complex" or "conservative" solution); 2) that any could have led to the outcome, thus, any unobserved configuration can enter minimization regardless of its plausibility as far as it can drop a further condition (i.e., "parsimonious solution"); 3) that only those consistent with the starting hypothesis could have generated the outcome thus that only plausible configurations enter minimizations (i.e., "intermediate solution").

intermediate solution alone is worth discussing because its inference reinforces observational findings with counterfactual reasoning, but entrenches such reasoning within the domain of theoretical plausibility. Yet, contrary to many theory-driven strategies, the reliance on theory does not result into confirmation bias, because minimization use theoretically plausible unobserved configurations for establishing the irrelevance of a condition - so that theory is put at work against itself, which secures the validity of findings. When run on the configurations of the second stage, the Standard Analysis returns the intermediate solutions of Output 1.

Output 1: Intermediate solutions, stage I.

a) Model: OI_1 = f(ALL-I, COOP, MKT)

	raw coverage	unique coverage	consistency
	---	---	---
$COOP_1$□MKT_1	1.000000	1.000000	1.000000

Notes: Covered cases: H-MWS (1,1), H-PWS (1,1)
Algorithm: Quine-McCluskey
frequency cutoff: 1.000000; consistency cutoff: 1.000000
Assumptions: ALL-I_1 $COOP_1$ MKT_1 all contribute to OI_1

b) Model: OI_0 = f(ALL-I, COOP, MKT)

	raw coverage	unique coverage	consistency
	---	---	---
ALL-I_0□$COOP_0$□MKT_0	1.000000	1.000000	1.000000

Notes: Covered cases: P-MWS (1,1), P-PWS (1,1)
Algorithm: Quine-McCluskey
frequency cutoff: 1.000000; consistency cutoff: 1.000000
Assumptions: ALL-I_0 $COOP_0$ MKT_0 all contribute to OI_0

Output 1 shows that, in phase I, the joint presence of market incentives and cooperative strategies can alone explain the two positive cases, while the negative cases can be properly accounted only by a combination of lack of market incentives, lack of assistance alliances and competitive strategies. Therefore, the two necessary and sufficient factors are enough to explain positive implementation, while non-implementation requires that the three factors are all absent. The explanatory relevance of the combination of the three factors is supported by the results from the minimizations to the outcome in phase S, as displayed in Output 2.

Output 2: Intermediate solutions, stage S.

a) Model: OS_1 = f(ALL-S, COOP, MKT)

	raw coverage	unique coverage	consistency
	---	---	---
$COOP_1$□MKT_1□ALL-S_1	1.000000	1.000000	1.000000

Notes: Covered cases: H-MWS (1,1), H-PWS (1,1)
Algorithm: Quine-McCluskey
frequency cutoff: 2.000000; consistency cutoff: 1.000000
Assumptions: ALL-S_1 $COOP_1$ MKT_1 all contribute to OS_1

b) Model: OS_0 = f(ALL-S, COOP, MKT)

	raw coverage	unique coverage	consistency
	---	---	---
ALL-S_0□$COOP_0$□MKT_0	1.000000	1.000000	1.000000

Notes: Covered cases: P-MWS (1,1), P-PWS (1,1)
Algorithm: Quine-McCluskey
frequency cutoff: 2.000000; consistency cutoff: 1.000000
Assumptions: ALL-S_0 $COOP_0$ MKT_0 all contribute to OS_0

Output 2 confirms that, in phase S, the explanation of non-compliance in the two Polish markets requires the concurrent absence of the three explanatory factors, while the sustainable compliance in the two Hungarian cases can properly be attributed to the joint occurrence of cooperative strategies, market incentives, and assistance alliances.

The QCA therefore proves that cooperative strategies and market incentives are always required elements of compliance performance in the implementation stages – both of its success and of its failure. Moreover, the technique highlights that assistance alliances are not required for the implementation to occur, but that are an INUS (Insufficient but **N**ecessary part of a condition which is itself Unnecessary but Sufficient for the outcome) condition of enduring implementation and compliance.

Annex 3:

The municipal and packaging waste legislation adopted in Hungary and Poland

The municipal waste management in Hungary and Poland was recognised as the responsibility of the municipalities, and specific legislation mandated the responsibilities of municipalities. These included the Polish Executive Order of the Ministers' Council on the protection of the environment against waste and maintaining cleanliness and order in towns and villages of 1980, which was replaced by a new Act in 1996 and the Hungarian 1990 Act on Local Governments, in turn replaced in 1995 by the Act on the Mandatory Use of Certain Local Public Services. In addition, municipal waste management was governed by specific Acts on Waste Management adopted in Hungary in 2000 and the Acts on Waste adopted in Poland in 1997 and 2001. Table 13 summarises the key legislation concerning municipal waste management in Hungary and Poland.

Table 13: Overview of the municipal waste legislation adopted in Hungary and Poland

Country	Act	Reference to municipal waste
Hungary	Act on the protection of Human Environment of 1976	General reference to waste generation and disposal.
	Governmental Decree of 1986	Municipalities as mainly responsible for the management of municipal waste; reference to the establishment of standards in landfills.
	Act on Local Governments of 1990	Municipalities with responsibility and authority in the collection, disposal and treatment of municipal waste and the selection of the disposal sites.
	Act on Environmental Protection of 1995	Local governments are entrusted with developing municipal programmes, tasks and regulations concerning the disposal of municipal waste.
	Act on the Mandatory Use of Certain Local Public Services of 1995	Municipalities granted the responsibility of municipal waste and households granted the duty of using the waste collection and disposal

		services operating in the municipality and the payment of the collection fees defined by the local governments; private collecting companies have to obtain a permit for the collection of waste within a specific municipalities; the selection of the waste collecting company and the disposal facility are selected through public tender procedure for a period of five years.
	Act on Waste Management of 2000	Waste management as the responsibility of municipalities and households obliged to use the services provided for the collection of waste at local levels; definitions and principles of waste management, the general duties and requirements for the waste management, the requirements for the waste treatment and recovery and the fines and the fees systems.
	Ministerial Decree 20/2006	Requirements on the landfill of waste and the conditions and rules for the waste deposition into the landfill sites.
Poland	Environmental Protection and Management Act of 1980	General duties on the protection of the environment against waste; waste producers (facilities and individuals) were required to take measures to reduce waste; responsibility given to local authorities for the collection and recycling of waste; prioritization of recycling as a waste-treatment option; operators or owners of disposal sites obliged to keep a record of the amount and type of waste disposed; fee for dumping waste materials in a disposal site.
	Executive Order of the Ministers' Council on the protection of the environment against waste and maintaining cleanliness and order in towns and villages of 1980	General principals on the management and disposal of waste from households.
	Act on the protection of the environment against waste and maintaining cleanliness and order in towns and villages of 1996	Tasks of municipalities and obligations on property maintenance in terms of collection facilities and disposal sites.
	Act on Waste of 1997	Waste-related concepts; minimisation of waste; safe disposal; fiscal measures to encourage re-use

		and recycling of waste.
	Act on Waste of 2001	Obligation to prepare waste management plans; disposal of waste as last option and only for those wastes which could not be recycled; division of competencies between national and local authorities; penalties and fines in case of bad management of waste.

Source: own elaboration

The management and treatment of packaging waste was recognised to be responsibility of the producers of such products, accordance with the European producers' responsibility principle. Moreover, it has been generally managed through producer responsibility arrangements which introduce "measures relating to the prevention, reduction and elimination of pollution caused by waste and the management of packaging and packaging waste" (Eurostat website). The management and treatment of this type of waste has been ruled in Hungary since 1995 with the Product Charge Act and with the 2002 Governmental Decree on Packaging and Packaging Waste. Only in 2001 Poland adopted a specific legislation on packaging and packaging waste followed by an Act on Duties of entrepreneurs concerning waste management, product fees and deposit fees. Table 14 summarises the key Hungarian and Polish packaging waste legislation.

Table 14: Overview of the packaging waste legislation adopted in Hungary and Poland

Country	Act	Reference to packaging waste
Hungary	Act on Product Charge of 1995	Established economic instruments to encourage the recycling, recovery and reuse of certain products including packaging goods.
	Act on Waste Management of 2000	Extended Producer Responsibility principle.
	Governmental Decree on Packaging and Packaging Waste	Dual system for the management of packaging waste. Packaging producers and fillers entitled to pay a penalty or transfer the recovery and recycling obligations to recovery organisations upon the payment of a licence fee but not a product fee.
	Governmental Decree on Exemptions to the Product Fee of 2003	Exemptions on product fee and reduced product fee for those producers paying the licence fee.

	Ministerial Decree on the regulations of the environmental compliance assessment of packaging of 2006	Heavy metal content in packaging goods and annual levels of product charge to be paid for not fulfilling packaging recovery and recycling requirements.
Poland	Environmental Protection and Management Act of 1980	Polluter pays principle; the polluter was responsible for damage, and was obliged to pay environmental charges and fines.
	Act on Packaging and Packaging waste of 2001	Prevention of packaging waste creation and minimisation; recovery and recycling targets for packaging manufacturers and importers.
	Act on Duties of entrepreneurs concerning waste management, product fees and deposit fees of 2001	Entrepreneurs were obliged in the payment of fees for the introduction of packages goods on the market.
	Act on Packaging and Packaging waste of 2003	Producers, importers and entrepreneurs were obliged to collect from salesmen at their own cost, while salesmen had to collect from customers.
	Act on Duties of entrepreneurs concerning waste management, product fees and deposit fees of 2005	Requirements for entrepreneurs on weight and amount of reused and recycled packaging waste.

Source: own elaboration

Reference to the interviews

Reference No.	Name	Institution and position	Date and place
1	Andrew Murphy	DG Environment, European Commission; former desk officer for Cyprus.	Brussels, 20.03.2013
2	Peter Dröll	European Commission, DG Enterprise and Industry; former Cabinet member of Enlargement with Commissioner Verheugen; accession negotiator with Poland and coordinator of the environmental negotiations with all the accession countries.	Brussels, 23.06.2011
3	Joachim Quoden	Managing Director of EXPRA; former Managing Director of PRO-EUROPE.	Brussels, 19.09.2013 and by email
4	Unico Van Kooten	Policy Officer at Van Gansewinkel Groep.	By phone, 25.07.2013
5	Stephane Arditi	Policy manager for products and waste, European Environmental Bureau.	Brussels, 14.03.2013
6	Ariadna Rodrigo	Policy manager of resources and consumption, Friends of the Earth Europe.	Brussels, 8.04.2013
7	Peter Balazs	Professor at the Central European University; former Ambassador of Hungary in Denmark (1994-1996).	Budapest, 13.05.2013
8	Csaba Marko	Environmental consultant at EnviCult Kft; former Deputy Head of the Waste Management Department of the Hungarian Ministry of Environment.	Budapest, 21.05.2013
9	Hilda Farkas	Managing director of KSZGYSZ; Member of OKT (business); former Head of the Waste Management Department of the Hungarian Ministry of Environment.	Budapest, 6.07.2011 and 23.05.2012
10	Henrik Balatoni	Head of the FE-Group Invest.	Budapest, 25.04.2012
11	Sylvia Graczka	Head of HUMUSZ.	Budapest, 24.05.2012
12	Eszter Hejja	Environmental and International Relations Manager of the Hungarian Association of Recyclers (HOE).	Budapest, 4.05.2012
13	Judit Pump	PhD on environmental legislation and waste issues, currently working in the Ombudsman office.	Budapest, 29.04.2013 and 22.05.2013

14	László Szilágyi	Member of the Parliament (Politics Can Be Different, LMP); former Head of HUMUSZ.	Budapest, 4.05.2013
15	Csaba Kiss	Environmental Attorney and EU law expert at the Environmental Law Association of Hungary (EMLA); former member of the OKT (NGOs).	Budapest, 24.04.2013
16	Attila Martin	Managing Director of Greenvestor, Environmental Protection &Waste Management LDT.; former Managing Director A.S.A. Hungary.	Budapest, 21.05.2013
17	Gyula Bándi	Professor at the Pázmány Péter Catholic University; Member of the OKT (academics).	Budapest, 30.04.2013 and 8.05.2013
18	Janos Banhidi	Former director of the Waste Incinerator Plant of Budapest.	Budapest, 5.07.2011
19	Eszter Sarosi	Managing Director of the Hungarian Association of Recyclers (HOE).	Budapest, 10.05.2013
20	Attila Bencs	Head of the Hamburger Hungaria Paper Mills, Member of the OKT (business).	By Skype, 2.05.2013
21	Eva Hajba	Former professor at Corvinus University.	Budapest, 8.05.2013
22	Benedek Javor	Member of the Parliament, former leading Member of the Party "Politics can be different" (LMP), Head of the Parliamentary Committee on Sustainable Development.	Budapest, 25.05.2012
23	Miklòs Bulla	Head of the Environmental Engineering Department of the Széchenyi István University; Secretary General of the National Council on Environment (OKT).	Budapest, 25.04.2013
24	Sándor Fülöp	Environmental Attorney and Director of EMLA; former member of the OKT (NGOs).	Budapest, 24.04.2013
25	Vilmos Civin	Member of MGYOSZ and Head of the Committee on Energy of the OKT (business).	Budapest, 25.04.2013
26	Miklos Nagy	Secretary General of the Association of Packaging and Material Handling (CSAOSZ).	Budapest, 3.05.2013
27	Zoltan Illes	State Secretary on Environment appointed in 2010 (Fidesz Party); Associate professor at the Central European University in Budapest and adjunct professor at the Godollo University of Agricultural Sciences.	Budapest, 4.07.2011
28	Peter Heil	Director and Head of Consultancy	Budapest, 09.05.2013

		Services at ConsAlt.	
29	Peter Ocsenas	Policy Officer at COWI Hungary.	Budapest, 23.05.2012
30	Gabor Miklosi	Policy officer for Hungary, DG REGIO, European Commission.	Brussels, 10.04.2013
31	Noemi Dalnoky	Head of Unit of the Managing Authority for Environmental Programmes, National Development Agency.	Budapest, 23.05.2013
32	Carsten Rasmussen	Chief of Unit in DG REGIO, European Commission; former Desk Officer for Hungary.	Brussels, 17.07.2013
33	Matyas Maksi	Policy Officer for Hungary, DG REGIO, European Commission.	Brussels, 17.09.2013
34	György Viszkei	Managing Director of Öko-Pannon; former Managing Director of CSAOSZ; former member of OKT (business).	Budapest, 2.05.2012
35	Éva Baka	Head of the Beverage Carton Environmental Services Association (IKSZ).	Budapest, 13.05.2013
36	Krisztina Wegner	Managing Director of the National Waste Management Agency (OHU); former managing director of ROs for Tyres.	Budapest, 26.04.2012
37	Ursula Denison	Managing Director of PRO-EUROPE	By phone, 25/03/2013
38	Andrzej Gula	President of the Institute for the Economic Environment.	Warsaw, 8.10.2012
39	Paweł Czepieł	Professor at the Jagiellonian University.	Cracow, 24.10.2013
40	Beata Kłopotek	Advisor to the Minister of Environment; former Director of the Waste Management Department.	Warsaw, 28.09.2012 and 8.10.2013
41	Tomasz Winnicki	Deputy Chairperson and Secretary General of PROS; Professor Emeritus of the Polytechnic of Lublin.	Warsaw, 5.05.2014
42	Michał Korkozowicz	Head of REBA, recovery organisation for batteries; former member of the EPR Advisory Group.	Warsaw, 6.11.2013 and 30.04.2014
43	Krisztof Skąpski	Head of the Political Cabinet of the Ministry of Environment (2010-2011), Ministry of Environment.	Warsaw, 25.09.2013
44	Andrzej Kraszewski	Former Minister of the Environment (2010-2011), professor at the Polytechnic University in Warsaw.	Warsaw, 7.11.2012 and 29.10.2013
45	Tomasz Zylicz	Dean of the Department of Economic Sciences at the University of Warsaw; founder of the Warsaw	Warsaw, 12.11.2012

		Ecological Economics Center.	
46	Dariusz Piechowski	Director for Environmental Protection, MPO Warsaw.	Warsaw, 9.11.2012
47	Christophe Manet	Desk Mercosur, DG External Relations, European Commission; former Desk Officer for Estonia, Latvia, Lithuania and Poland.	By phone, 14.03.2013
48	Pierre Schellekens	Head of Representation in Sweden, European Commission; former Desk Officer for Poland.	By phone, 15.04.2013
49	Krisztof Kawczynski	Head of the Environmental Committee in the Chamber of Economy (Krajowa Izba Gospodarcza).	Warsaw, 13.11.2013 and 18.11.2013
50	Wladysław Janikowski	General Director of REKARTON.	Warsaw, 15.11.2013
51	Jerzy Jendrośka	Head of the Polish Association of Environmental Lawyers (PELA).	Wrocław, 13.11.2012
52	Zbigniew Karaczun	Head of the Mazovian branch of the PKE, professor at the Agricultural University in Warsaw.	Warsaw, 16.10.2012
53	Jerzy Ziaja	Managing Director of the Chamber of Recyclers (OIGR).	Warsaw, 3.10.2012
54	Andrzej Zwawa	Head of *Polska Zielona Sieć,* coordinating body for the Polish environmental NGOs.	Cracow, 1.10.2012
55	Joanna Czajewska	Head of Unit for Coordination of Implementation, Department for Coordination of Infrastructural Programmes, Ministry of Regional Development.	Warsaw, 31.10.2012
56	Pascal Boijmans	Head of Unit, competence Centre Administrative Capacity Building, DG REGIO, European Commission.	Brussels, 17.07.2013
57	Brendan Smyth	Principal Administrator Financial Engineering, DG REGIO, European Commission; former responsible for ISPA projects.	Brussels, 22.07.2013
58	Wojciech Deska	Head of Warsaw Office, European Investment Bank.	Warsaw, 10.10.2013
59	Edyta Stankiewicz	Project Economist and JASPERS, European Investment Bank, Warsaw Office.	Warsaw, 10.10.2013
60	Patrick Dorvil	Senior Economist at the European Investment Bank.	By phone, 30.09.2013
61	Marcin Jurasz	Director of the Department for special wastes, REMONDIS.	Warsaw, 18.11.2013
62	Julia Majewska	Head of Unit of the Department of European Funds in the Ministry of Environment.	Warsaw, 30.10.2013

63	Robert Markiewicz	Vice-director of the Department of Land Protection at the NFOSiGW.	Warsaw, 17.10.2013
64	Tadeusz Arkit	Member of *Sejm* (Civil Forum Party), member of the OSZ Committee.	Warsaw, 20.11.2013
65	Hanna Zakowska	Deputy Director for Research at the Packaging Research Institute (COBRO).	Warsaw, 25.10.2013
66	Grzegorz Ganczewski	Specialist in Packaging and Environment Department at the Packaging Research Institute (COBRO).	Warsaw, 25.10.2013
67	Andrzej Grzymala	Country Office Director of REC; former Purchasing and Project Manager of Rekopol.	Warsaw, 26.11.2012
68	Mikolaj Jozefowicz	Director of ERP Batteries Poland.	Warsaw, 6.11.2012
69	Marek Rosłon	Member of the Council of the Polish Chamber of Packaging.	Warsaw, 7.11.2013
70	Katarzyna Michniewska	President of Eko-Cykl and Logistyka Odzysku.	Warsaw, 20.11.2013
71	Grzegorz Karnicki	Operational Director of the Utilizational Center OPON.	Warsaw, 20.11.2012
72	Ian Clark	Head of Unit, Policy and Implementation Frameworks, DG for Humanitarian Aid and Civil Protection, European Commission; former coordinator for the team and desk officer for Hungary and Slovak Republic in the Enlargement team of DG Environment.	Brussels, 22.03.2013
73	Jan Mikołaj Dzięczołowski	Programme Manager for Poland, DG REGIO, European Commission.	Brussels, 15.04.2013
74	Piotr Manczarski	Professor at the Polytechnic University in Warsaw.	Warsaw, 19.11.2013
75	Ludwig Krämer	Senior Lawyer at ClientEarth; former Head of the Legal Unit and Waste Management Unit in the DG Environment of the European Commission; former professor at Kiel and Judge with Landgericht in Kiel.	Brussels, 20.03.2013
76	Witold Willak	Programme Manager for Poland – EU Policies, DG REGIO, European Commission.	Brussels, 19.07.2013
77	Małgorzata Grodzińska-Jurczak	Professor at the Institute of Environmental Sciences, Jagiellonian University of Cracow.	Cracow, 2.10.2012
78	Szabolcs Szogyenyi-Kovacs	Head of Waste Management Unit, Ministry of Rural Development	Budapest, 27.04.2012

79	Tristan Azbej	Environmental expert of the Fidesz Party	Budapest, 3.05.2012
80	Magdalena Dziczek	Assistant Director of KIGO	Warsaw, 27.11.2012
81	Dariusz Matlak	President of PIGO	Warsaw, 8.11.2012
82	Mira Stanisławska-Meysztowicz	Founder of the NGO Foundation Our Earth (Fundacja Nasza Ziemia)	Warsaw, 27.11.2013
83	Ewa Synowiec	Director of the European Commission Representation in Poland	Warsaw, 21.11.2013
84	Krzysztof Bolesta	Principal Advisor to the Minister, Energy and Climate Policy, Ministry of Environment	Warsaw, 29.11.2013
85	Tibor Stelbaczky	Head of Department, EU Sectoral Policies Department, Ministry of Foreign Affairs of Hungary	Budapest, 23.05.2013
86	Katarzyna Iwinska	Rector's Plenipotentiary for Scientific Research, Collegium Civitas	Warsaw, 31.10.2012
87	Joanna Huczko	Chief Specialist on international cooperation and management of project activities on control activities, Chief Inspectorate of Environmental Protection	Warsaw, 12.11.2012
88	Joanna Piekutowska	Deputy Regional Inspector for Environmental Protection in Warsaw, Regional Inspectorate for Environmental Protection	Warsaw, 27.11.2012
89	Andrea Mogyorósi	Chief Environmental Protection Inspectorate	Budapest, 25.05.2012
90	Fraçois Delcueillerie	Head of the Enlargement Sector, Desk officer for Croatia and Former Yugoslavian Republic of Macedonia, DG Environment, European Commission	Brussels, 30.06.2012
91	Barbara Iwanska	Professor at the Jagiellonian University in Cracow	Cracow, 24.10.2013
92	Rosalinde Van der Vlies	Equal Treatment Legislation Unit in DG Justice; former deputy head of unit in the DG Environment, European Commission	Brussels, 16.06.2011
93	Karolina Fras	Team Leader DG Environment, European Commission	Brussels, 28.06.2011
94	Michel Sponar	Resource and Waste Management, DG Environment, European Commission	Brussels, 21.03.2013
95	Françoise Bonnet	Secretary General ACR Plus, Association of Cities and Regions for Recycling and Sustainable Resource	Brussels, 16.07.2013

		Management	
96	Jean Hannequart	General Director of the Brussels Institute for the Management of the Environment, former President of Association of Cities and Regions for Recycling and Sustainable Resource Management	By phone, 19.07.2013
97	Marek Pszoncka	Waste Management Office, Department of Government, Mazovia Region	Warsaw, 19.11.2012
98	Gabor Szylagyi	Hungarian Central Statistical Office	Budapest, 15.05.2012
99	Dariusz Bochenek	Polish Central Statistical Office	Warsaw, 9.10.2012
100	Magda Gosk	Head of Waste Shipment Unit, Chief Inspectorate of Environmental Protection	Warsaw, 11.10.2012
101	Gabor Fazekas	Managing Director of the NGO Magyar Természetvédők Szövetsége	Budapest, 14.05.2012
102	Sibylle Grohs	Compliance Promotion, Governance & Legal Issues, DG Environment, European Commission; former member of the Waste Unit during the accession negotiations	By phone, 14.03.2013
103	Guillaume Perron-Piché	European Suppliers of Waste to Energy Technology	Brussels, 24.11.2012

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