Do Membership Benefits Buy Regulatory Compliance?

An Empirical Analysis of EU Directives 1978-1999*

REVISED VERSION – July 2006

Richard Perkins, r.m.perkins@lse.ac.uk
Eric Neumayer, e.neumayer@lse.ac.uk

Address: Department of Geography and Environment, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, UK
Fax: +44 (0)20 7955 7412

* Corresponding author: Richard Perkins.
Do Membership Benefits Buy Regulatory Compliance?


ABSTRACT

Underlying several theories of European integration is the idea that countries’
willingness to sign-up to supranational rules is dependent on the expectation and/or
realisation of various benefits. In this paper, we explore whether such benefits also
affect member states’ implementation of these rules. Using econometric techniques,
we estimate the influence of several measures of membership benefits on the annual
number of legal infringements received by 15 member states over the period 1978-
1999. Our results provide qualified support for the idea that benefits positively
influence compliance. We find that greater intra-EU trade dependence and voting
power in European institutions relative to population size are negatively associated
with legal infringements. Yet, contrary to a priori expectations, net fiscal transfers are
positively correlated with infringements.

KEY WORDS: Benefits, Compliance, European integration, Implementation
Introduction

Although policy-making in the European Union (EU) remains highly centralised, responsibility for implementation ultimately resides with national administrative actors. Evidence suggests that the extent to which these actors have discharged this responsibility has varied considerably. Statistics on the number of infringement proceedings raised by the European Commission point to significant differences – both between, and within, individual member states over time – in the degree of compliance with Treaty obligations to implement EU policy (Börzel, 2001).

Such variations have not escaped the attention of academics (Mbaye, 2001). In recent years, scholars of European governance have advanced a wide range of explanations for spatio-temporal variations in member state (non-)compliance. Broadly speaking, these explanations have centred around two basic determinants (Börzel, 2000; Falkner et al., 2004; Lampinen and Uusikylä, 1998). The first is the ability of administrators to comply with EU policy, and the second, their willingness to do so. The focus of our paper is on this latter set of determinants.

Typically, differences in the willingness of administrators to comply have largely been explained according to the degree of compatibility (“goodness-of-fit”) between EU policy requirements and domestic institutional characteristics (Bursens, 2002). In this paper, however, we examine a different, and altogether less well researched, thesis. Specifically, we explore the possibility that variations in the willingness to comply are shaped by the extent to which national actors benefit from membership of the EU. Membership benefits would appear to offer considerable explanatory potential in the present context. The EU is a supranational body that effectively distributes costs and benefits between individual member states.
Yet the distribution of these costs and benefits is uneven. It is our contention that member states that derive greater benefits from the EU will demonstrate higher levels of compliance.

With a view to empirically scrutinising this thesis, we use econometric techniques to estimate the influence of several hypothesised measures of membership benefits on the number of annual infringements for 15 member states over the period 1978-1999. Our study is unique in two important respects. First, we go far further than past studies in investigating the influence of different membership benefits. Although past quantitative research has examined membership benefits, it has often done so by proxy, using Eurobarometer data on public support for the EU (Lampinen and Uusikylä, 1998; Mbaye, 2001). Yet there is growing recognition that public attitudes are, at best, a blunt measure of membership benefits. Recent work suggests that the public forms opinions about the EU on factors other than the real and/or perceived gains derived from EU membership. As well as objective benefits, therefore, citizens’ attitudes towards European integration are known to be profoundly shaped by their perceptions of the performance of domestic political institutions (Brinegar and Jolly, 2005; Kritzinger, 2003; Sánchez-Cuenca, 2000). By contrast, our study centrally analyses a total of three conceptually distinct membership benefits, derived respectively from Europe-wide trade rules, fiscal redistribution and the apportionment of votes in European law-making institutions. In doing so, we attempt to provide a more proximate, wide-ranging and disaggregated analysis of the influence of national gains on compliance with EU policy.

Second, although adopting reasoned opinions as our principal measure of non-compliance, we additionally analyse non-compliance at a further stage of infringement proceedings, namely, referrals to the European Court of Justice (ECJ).
Significantly, we demonstrate that our main results are consistent across both stages, suggesting that the influence of membership benefits is not simply confined to the reasoned opinions stage of Commission proceedings.

The rest of our paper is structured as follows. Section 2 outlines the nature and enforcement of directives. Section 3 introduces three key membership benefit variables hypothesised to explain variations in legal infringements. Section 4 describes our research design, while section 5 presents our results. Briefly stated, we find general support for the explanatory value of membership benefits. As anticipated, both levels of intra-EU trade dependence and per capita voting power in European institutions are negatively correlated with the number of infringements received by the Commission. However, contrary to expectations, higher levels of net fiscal transfers are associated with more legal infringements. Finally, section 6 concludes and discusses the wider implications of our findings.

**Complying with the EU Directives**

The most important form of EU law – and the empirical focus of the present study – is the directive. Under the Treaty of Rome, responsibility for implementing directives falls to competent authorities within member states, who must complete two steps in order to comply with their legal commitments. First, they must formally incorporate (“transpose”) directives into national law, a process known as legal implementation. Second, states are required to ensure that directives are effectively applied and enforced on the ground, notably, by instituting appropriate administrative measures (Lampinen and Uusikylä, 1998: 233; Weale et al., 2000: 297).
Breaches of Treaty obligations can occur at either of these stages. Non-compliance may arise where administrators fail to transpose directives within the period allowed by the European Commission, typically 12-18 months. Non-compliance can also occur where member states incorporate directives into national statute on time, but do so incorrectly or incompletely. Finally, breaches of EU law may arise during final implementation, where member state authorities fail to institute adequate monitoring and enforcement mechanisms.

Whether non-compliant behaviour is sanctioned depends on the activities of the European Commission. Article 211 of the Treaty of Rome entrusts the Commission with monitoring and enforcing compliance with EU law, while Article 226 empowers the Commission to launch infringement proceedings against member states suspected of not fulfilling their obligations to implement EU law (Davies, 2001: 87). Proceedings invariably begin informally with a series of bi-lateral discussions between the Commission and competent national authorities.

Where dialogue and mediation fail, infringement proceedings may become formal in nature. These formal proceedings take place over three sequential stages. In the first, the Commission issues a “formal letter of notice”, in which the relevant state is asked to submit its observations regarding the suspected breach. If the formal letter fails to resolve the dispute, a “reasoned opinion” may be served against the concerned state, setting-out the Commission’s view of how the member state has breached its legal obligations and establishing a time-table for action (Börzel, 2001: 806-08; Cairns, 2002: 122-24; Davies, 2001: 87-9). Continued non-compliance with the terms of the reasoned opinion may prompt the Commission to proceed to a further stage, namely, “referral to the European Court of Justice”.

5
The European Union Institute has compiled data on the annual number of infringement cases taken against individual member states for the period 1978-1999. Table 1 shows reasoned opinions – aggregated over three year blocs for ease of exposition – for this time period. The table reveals significant differences in the number of legal infringements, both within, and between, individual member states over time.

<<INSERT TABLE 1 ABOUT HERE>>

The central purpose of the present paper is to explore the role of membership benefits in explaining these spatio-temporal variations. Membership of the EU provides states with a number of potential (additional) benefits which might plausibly affect the willingness of national political and administrative actors to implement directives. We hypothesise that spatial and temporal variations in these benefits explain some of the observed differences in legal infringements.

**Theorising the influence of membership benefits**

While the benefits from EU membership are multiple, complex and potentially ambiguous, there are a number of reasons why they can be expected to influence compliance with directives. Most fundamentally, perhaps, the gains from membership are likely to influence, directly and indirectly, the willingness of political actors to implement EU policy (Mattli, 1999; Mbaye, 2001). Two possible mechanisms are likely to be important in this respect. The first is rational, calculative and self-interested behaviour (Underdal, 1998). Implementing EU policy is rarely without its
costs, raising the possibility of opposition from a wide range of market, civil society and political actors. Assuming that actors behave rationally, therefore, it follows that compliance with EU law will be better where derived benefits are greater. Directly, membership benefits – say, from the Single Market or Common Agricultural Policy (CAP) – potentially offset some of the costs of adjusting to EU policy, and therefore are likely to increase actors’ acceptance of EU policy (Börzel, 2000; Molle, 2001). While indirectly, to the extent that continued functioning of the EU is in the self-interests of domestic actors benefiting substantially from membership, it makes sense that they should avoid jeopardising its workings by supporting and/or tolerating non-compliance.

The logic of rational choice has been invoked in previous studies of EU compliance, although these have invariably focused on domestic institutional characteristics influencing the costs and benefits of adjusting to individual EU directives (Beach, 2005; Börzel, 2000; Knill, 2001). Yet we expect the broader, generic benefits derived by member states to additionally enter the cost-benefit calculus of legal compliance. In practice, they are likely to affect the legal transposition and application of many EU directives in two ways.

First, where political actors benefit directly from EU membership, they are likely to show a greater willingness to support and expedite the passage of EU directives into domestic law. Additionally, political actors may devote greater resources and attention towards setting-up an administrative infrastructure required for the practical application of these directives. A second pathway of influence derives from non-state actors. Where politically active groups such as consumers and producers benefit, or indeed, anticipate benefitting, from EU directives, they are likely to “mobilise” against instances of non-compliance, generating pressures for political
and bureaucratic actors to legally transpose and apply directives in a timely and correct manner (Börzel, 2003). More generally, membership benefits accruing to non-state actors are likely to facilitate the process of legal transposition and implementation by reducing the likelihood of opposition to EU policy requirements. Specifically, where citizens, firms, etc, gain from their participation in the EU, there is less of a chance that they will reject new directives.

However, it seems unlikely that implementation will be driven entirely by rational, self-interested motives (Chayes and Handler Chayes, 1993). Whilst generally recognising the operation of rational calculus, a growing body of work additionally emphasises the normative basis of compliance (Cardenas, 2004; Checkel, 2001; Simmons, 1998). According to such normative approaches, compliance behaviour is shaped by social norms, which collectively provide a template for appropriate action. Within the European context, for example, Beach (2005) has argued that member state implementation is conditioned by norms regarding the legitimacy of EU law. Thus, it is suggested that as domestic actors come to accept the normative force of EU law, so legal compliance should improve.

Another potential mechanism through which generic membership benefits might influence implementation, therefore, is by strengthening the normative power of EU law. In particular, we expect domestic actors who receive greater benefits from EU membership to be persuaded to identify with the EU, and moreover, accept the legitimacy of its laws. Hence the compliance “pull” of European law will be stronger in countries benefiting more from their involvement in the EU. Conversely, the normative force of European rules is likely to be far lower in states that derive only limited membership benefits. Indeed, domestic actors’ acceptance of the legitimacy of EU law might plausibly be damaged by the perception that their country is
disadvantaged in terms of, for example, an “unfair” distribution of votes or unfavourable fiscal settlement.

Note, neither of the above mechanisms – instrumental or normative – relies directly on sanctions to motivate compliance. While compliance may be partly driven by concerns that non-implementation may evoke a reciprocal response from other member states, ultimately undermining the effective functioning of the EU, we do not anticipate that states comply out of fear that they will lose any of their wider membership benefits granted by European institutions and/or fellow member states. A “poor” record of compliance with EU law is unlikely to have any bearing on, for example, the distribution of votes or redistribution of fiscal resources. Nor do we anticipate a “good” record of compliance with EU law enabling a country to secure a higher level of membership benefit. There is, in fact, very little evidence to suggest that individual member states are materially rewarded by European institutions or other member states – through, for instance, more favourable budgetary settlements – in return for faithful legal compliance (Begg and Grimwade, 1998; McCormick, 1999). Instead, the emphasis of our argument is on non-conditional membership benefits, and their role in strengthening the rational incentives and/or normative basis to comply with EU directives, either directly by political and bureaucratic actors, or indirectly, via non-state actors.

These predictions are broadly supported by mainstream theories of European integration. While diverse with respect to the emphasis that they place on different actors, processes and motives, integration theories are nevertheless united in the role lent to rewards and benefits. For neofunctionalists, therefore, unification takes place as nationally-constituted elites (industry associations, labour unions, political leaders, etc.), who believe that their interests are served by integration, are persuaded to shift
loyalties to the supranational level (Haas, 1958; Lindberg and Scheingold, 1970; Nye, 1971). Importantly, such processes may support the development of new European identities, and therefore increased acceptance of the normative force and legitimacy of EU law. Theories of intergovernmentalism, too, attach particular significance to national rewards. According to intergovernmentalists, integration is primarily driven by the distinctive self-interests and priorities of nation-states, with critical decisions over whether to cede authority to supranational government made according to the utilitarian calculations of national governments (Hoffman, 1966). More recent (“liberal”) modifications to intergovernmentalism have emphasised the role of domestic societal pressures in shaping state goals (Moravcsik, 1993). Specifically, they allow for the possibility that unification is influenced by sub-national interest groups – citizens, business groups, etc. – who weigh-up the costs and benefits from additional supranational integration.

Of course, the onus of integration theories has been on the social, economic and political drivers underlying the joint formulation of a harmonised body of supranational law (Neyer, 2004: 24). They have had comparatively little to say about the implementation of these laws. Yet, recognising that ‘implementation is the continuation of politics by other means’ (Bardach, 1997; cited in Dimitrakopoulos, 2001: 444), it follows that similar principles should apply. Therefore, the very same actors – national interest groups, political elites, citizens, etc. – who demand new forms of supranational policy, whether as a result of rational calculations or the internalisation of European legal norms, are also likely to actively support and/or accept its implementation. Inevitably, during the post-decisional politics of implementation, there will be exceptions. Yet we expect the predominant pattern to mirror the wider politics of political integration. That is, implementation of EU policy
will be better where unification delivers, or indeed, is expected to deliver, greater relative benefits to influential stakeholders.

In the rest of this section, we develop three key hypotheses regarding these benefits. Our first two hypotheses relate to the economic benefits from EU membership, while our third hypothesis seeks to capture the potential political advantages obtained by certain member states. We begin with intra-EU trade.

(a) Economic benefits: intra-EU trade

Foremost in any discussion about the economic rewards from EU membership is trade (Eichenberg and Dalton, 1994; Hitiris, 2003). Members of the EU have not only benefited from the abolition of intra-country tariff barriers, but also the harmonisation of national standards and regulations that might otherwise have acted as barriers to trade. Together, these developments have reduced transaction costs, facilitated the free movement of goods and services, and created the conditions for the realisation of further economic gains (Mattli, 1999; Molle, 2001; Sandholtz and Stone Sweet, 1998).

According to several theoretical models, it is precisely these economic gains from a harmonised set of rules, regulations and laws that provided the original catalyst for European integration. For traditional (Haas, 1958; Lindberg and Scheingold, 1970) and modified (Sandholtz and Stone Sweet, 1998) accounts of neofunctionalism, therefore, growing cross-border economic transactions generated demand for European-level co-ordination, rules and regulations to reduce obstacles to intra-EU trade. Similar transaction-based motives may have also helped to sustain and reinvigorate subsequent demand for further European integration. Thus, Mattli (1999)
describes how the need to enhance competitiveness through increased economies of scale encouraged major corporate actors to lobby national governments for further internal market integration, resulting in the Single European Act.

The gains obtained from market liberalisation and legal harmonisation are likely to vary (Jovanovic, 2005; Molle, 2001). Specifically, we expect member states which depend more in their trade on other EU partners to benefit more from Europe-wide rules. Thus, the overall gains derived by consumers – in terms of lower prices from the abolition of tariffs within the EU – will be greater in countries which obtain a large share of their imports from other member states. Similarly, countries which send a larger share of their exports to other EU countries stand to gain more from European rules guaranteeing the security, stability and efficiency of trade (Mattli, 1999). Owing to such benefits, we expect countries with a high share of intra-EU trade to total trade to support harmonised, single market policies at the European level.

A similar logic can be applied to the politics of implementation. Where a country trades extensively with other EU members, and therefore benefits from the creation and maintenance of free-market rules, we expect to find stronger support for the implementation of directives (Hitiris, 2003). Aware of their reliance on the functioning of the Single Market, market actors in countries exporting a large share of their exports to other member states are less likely to purposefully undermine EU rules, for example, by lobbying against timely and/or correct transposition. Legislators, politicians and civil servants in such countries might similarly be expected to treat compliance with EU directives as a matter of wider strategic importance. In fact, both sets of actors are likely to favour setting a good example, fearing that non-compliance may trigger a reciprocal response by other member states.
in areas related to free trade, ultimately threatening the functioning of the Single Market. EU export-oriented countries are likely to end-up losing out most from such an outcome.

Likewise, domestic actors benefiting from free imports and competition – represented most forcibly by consumer groups – are likely to actively monitor the implementation of EU directives favouring their interests. Moreover, where non-compliance is detected, they will mobilise behind directives, for example, alerting the media and lobbying politicians (Börzel, 2000). Where a large share of a member state’s imports are from other EU member states, and therefore subject to EU trade and competition laws, such pressures for implementation are likely to be stronger reflecting the greater losses from non-observance of EU laws.

More generally, as the gains from European trade grow, so member states’ normative acceptance of EU rules is likely to increase. Thus, we expect (economically beneficial) trade between member states to foster growing commitment to EU integration, in doing so, naturalising the legitimacy of European-level law. Directly, this is likely to induce implementation as civil servants, legislators and politicians respond to a re-scaled “logic of appropriateness” (March and Olsen, 1979) by legally transposing directives. Indirectly, growing acceptance of the EU and its laws by citizens is likely to increase normative and instrumental (i.e. electoral) pressures on governments to transpose and apply European policies, which should plausibly improve implementation (Duina, 1997). Reinforcing these internal dynamics may be external, reputational ones (Downs and Jones, 2002; Simmons, 1998). Thus, domestic political actors may strive to implement EU directives in order to avoid appearing “backwards” and/or “uncooperative” amongst their peers in other member states with which they are closely linked through international trade. The importance of
reputation has been widely-invoked in the International Relations literature to explain why states – and especially states exposed to international scrutiny through trade openness – enter into, and moreover, comply with their international legal obligations (Chayes and Handler Chayes, 1993). We believe that reputational dynamics may similarly assume a regulatory role in the European context (e.g. see Lægreid et al., 2004).

Conversely, actors in countries which trade relatively little with their European counterparts are less likely to re-scale their preferences, interests and identities towards Europe, and therefore accept the legitimacy of EU law. They are instead more likely to continue to regard domestic law as prime locus of regulatory authority (Baker et al., 2002; Falkner et al., 2004). In fact, precisely for this reason, it should be easier for political and bureaucratic actors in countries which are less economically integrated into the EU to ignore European directives.

Inevitably, neither of instrumental nor normative dynamics is likely to guarantee member state compliance with EU law. Thus, while material incentives to preserve the EU legal order governing competition and trade may be strong in countries with high intra-EU trade dependence, directives in other fields (e.g. environmental protection) are more likely to be accepted and/or rejected according to their respective merits¹. Similarly, where European policy requirements are especially costly and/or disruptive, the normative power of EU law may fall foul of short-term material imperatives (Olsen, 2002). Yet we expect overall support for implementation to be higher in member states which rely more heavily on intra-EU commerce as part of their total trade.
Another potentially significant economic benefit derived from EU membership comes in the form of fiscal transfers (Eichenberg and Dalton, 1994; Jovanovic, 2005). Through its budgetary powers, the EU collects and redistributes significant financial resources. For example, the budget for the EU-15 in 2004 totalled €94.6 billion in commitment appropriations. The majority of these resources are spent in just two areas, the Common Agricultural Policy (CAP) and Structural Funds. In the 2004 budget, they accounted for approximately 48% and 22% of total budgetary commitments, respectively.

This redistributive feature of the EU budget creates fiscal “winners” and “losers”. Thus, certain states benefit from the budget in that they are net recipients, i.e. receiving more from the EU than they contribute. Conversely, other member states are net donors, losing-out in the overall distribution of EU funds.

By creating winners and losers, the budgetary mechanism may have important implications for compliance. Specifically, we anticipate that net recipients of the EU resources will have a better record of implementing EU law. From a rational choice perspective, net transfers represent potentially important financial benefits derived from EU membership, offsetting some of the costs of legal harmonisation. In principle, therefore, they should increase the probability of compliance. Of course, cost-benefit calculations of this sort are unlikely to be widespread. Yet, amongst domestic actors benefiting significantly from EU subsidies, such considerations might plausibly assume considerable importance. Aware of wider, compensatory benefits derived from membership, groups such as farmers may be more willing to accept the costs of complying with relevant directives. More importantly in the present context,
they are less likely to mobilise against legal transposition, making it easier for domestic political actors to take the steps required to comply.

At a more general level, the redistributive economics of the EU may influence wider acceptance of the legitimacy of the EU, and normative commitment to its laws (c.f. Gabel, 1998; Van Kersbergen, 2000). The net budgetary position of states often features prominently in national media coverage of the EU, often provoking considerable public debate about the merits of integration (McCormick, 1999). Indeed, evidence suggests that the level of fiscal transfers has a positive influence over attitudes towards the EU by national publics and political elites (Anderson and Reichert, 1996; Bourantonis et al., 1998; Mattilla, 2004). Thus, it follows that domestic actors in states that are fiscal winners are more likely to conflate their interests with Europe, and therefore come to accept the normative force of EU law. As in the case of intra-EU trade, the growing legitimacy of Europe and its laws might be expected to positively influence, directly and indirectly, the willingness of political actors to transpose and apply directives (Duina, 1997).

Conversely, where the EU budget settlement is deemed “unfair”, we expect resentment towards Europe and its laws. Rather than being seen as a legitimate entity, the EU is more likely to be viewed as inimical to the national interest, imposing significant financial burdens on domestic actors. Lacking normative attachment, the underlying pressure on civil servants, legislators and politicians to transpose and apply directives will inevitably be lower.

Curiously, results from the only study to investigate the influence of fiscal transfers contradict these expectations. For a sample of 15 member states, Börzel et al. (2004) find that net transfers are positively correlated with infringements. However, this result is derived without control variables. Our research design is able to show
whether this counter-intuitive result upholds once the impacts of other variables are controlled for in a multi-variate regression.

(c) Political benefits

While the EU remains a predominantly economic union, we nevertheless expect political gains accruing to domestic political elites to influence the logic of compliance. Such expectations are consistent with state-centric formulations of integration theory – and specifically, intergovernmental approaches – that emphasise national executives as the primary actors in the unification process. According to these accounts, countries’ willingness to cede sovereignty to the EU is ultimately determined by the extent to which (further) integration fulfils the functional self-interests of national political executives (Rosamond, 2000).

Within the context of the EU, one of the most potentially important payoffs derived by political actors is the enhancement of executive capacity and power. At the broadest level, EU integration benefits all member states, to the extent that it provides national executives with the capacity to solve collective action problems (Moravcsik, 1998; Wessels, 1997). Yet the EU also provides some states with enhanced political authority relative to their size, in that they are overrepresented in European legislative institutions.

Decisive in this respect is countries’ voting power in the Council of Ministers and European Parliament, the two central institutions for the representation of member states’ interests in EU policy-making. The formula for apportioning votes within these institutions has changed over time, both in response to Treaty revisions
and successive enlargements. However, it has consistently favoured smaller member states, with the least populous countries apportioned vastly more votes per head of population than the most populous ones. This favouring of the smaller member states has been widely noted in the literature, as has the dissatisfaction with these arrangements amongst the larger member states (e.g. Bindseil and Hantke, 1997; Heisenberg, 2005; Kandogan, 2005). To prevent a further erosion of their relative power, the more populous member states have successfully, but only to a limited extent, managed to reduce the over-representation of smaller states in various rounds of enlargement, in which states with a population size below the EU averaged have joined (Kandogan, 2005).

According to Rodden (2002), the overrepresentation of small states is most apparent in the case of unanimous voting within the Council, but also applies to qualified majority voting (QMV), as well as voting in the Parliament. An important corollary is that political actors in overrepresented countries enjoy political clout in European-level institutions far beyond their population size. They are therefore potentially able to “punch above their weight” within intergovernmental negotiations, enhancing their historically limited political powers. In our empirical analysis below, we use an index of a priori voting power per capita to capture differences in individual states’ (potential) ability to influence voting outcomes within the European Council and Parliament relative to their size.

As with economic gains, we hypothesise that the benefits derived by states with voting power disproportionate to their population size will positively shape their compliance with EU law. All else equal, we expect member states with more voting power per capita – that is, with greater potential power to influence the outcome of votes relative to their population size – to infringe EU law less frequently.
An obvious objection to this hypothesis, of course, is the idea that it is not relative power that matters, but absolute power. Besides, populous states with large numbers of votes ultimately command greater absolute power to influence EU legislative developments, and therefore are better placed to achieve policies that suit their self-interests. Adopting a rationalist, “goodness-of-fit” logic, this would suggest that such states will have a better record of compliance, in that they will generally find it cheaper and/or less disruptive to adapt to European requirements. Yet this argument – which equates absolute voting power with political benefits from EU membership – overlooks two important factors.

First, the idea that populous states with large numbers of votes, and greater potential voting power, recurrently prevail over others and always obtain the policies they want is not consistent with the empirical record. True, evidence suggests that larger states exercise their “veto” power more frequently, for example, abstaining or voting “no” against the majority within the Council (Heisenberg, 2005; Mattilla, 2004). However, there is only limited evidence to suggest that larger, more populous states are able to use their voting power to consistently achieve policies that are close to their interests, preferences and styles, and even then, only under certain conditions (Bailer, 2004; Mokken et al., 2000). In reality, no single member state alone commands decisive influence over legislative proposals (Raunio and Wiberg, 1998), suggesting that absolute voting power cannot be taken as a robust predictor of favourable outcomes.

Indeed, where states with a large number of votes are overrun by smaller states, we anticipate considerable resentment towards the resulting EU policy by domestic political elites and their electorates. Historically, countries such as Germany, France and the UK have wielded considerable power, and generally only faced limits
on their authority from other large states. However, the overweighting of smaller
countries within decision-making fora, together with the EU’s voting rules, means
that larger countries’ size no longer guarantees them control over decisions that affect
them. In the event, policies arising from EU decision-making institutions that do not
reflect the interests of larger countries are unlikely to be easily accepted by state or
non-state actors, accustomed to “getting their way”. Legislators and civil servants in
such countries might well be expected to face considerable domestic opposition –
especially from regulated parties – to delay transposition, or else, water down the
requirements enshrined in the respective directive within domestic legislation.
Conversely, smaller, overrepresented states have gained more than they have lost.
While they may not be as (potentially) powerful as states with a large number of
absolute votes, the EU provides smaller, overrepresented states with supranational
political influence beyond their population size.

A second reason to question the political benefits as absolute power argument
is that it is not only consequentialist factors that matter. Equally, if not more
important, are issues of procedural equity. Thus, scholars have long suggested that
rules are more likely to be obeyed where they conform to commonly-held notions of
equity and fairness (Fisher, 1981). Applied in the present context, this might suggest
that states with more votes, or more precisely, greater (potential) voting power
relative to their population size, will have a better record of compliance. Political
representatives from countries with disproportionate influence over EU decision-
making are more likely to feel they have been granted a “fair” and “just” opportunity
to represent their national interests. They are therefore also more likely to feel that
the substance of EU laws is fair. In fact, precisely because of the perceived legitimacy
and fairness of EU decision-making rules, European law will acquire greater
normative force amongst political actors in smaller, overrepresented states (c.f. Simmons, 1998). The appearance of fairness in EU decision-making processes is also important since it might be expected to reduce resentment, opposition and negative mobilisation by regulated parties.

Conversely, despite commanding greater absolute voting power, we expect larger, populous states to feel more aggrieved by the (under-)apportionment of votes and EU voting rules. Thus, unable to automatically convert their size into influence over EU decision-making, political representatives from larger, underrepresented states are likely to look on EU law-making arrangements, and indeed, EU laws themselves, as “unfair”. Particularly where large, powerful member states lose out to a winning coalition of smaller states over an issue of national importance, such grievances may assume wider political salience. Indeed, they are likely to fuel anti-European sentiment amongst the wider public, with negative consequences for state compliance. Where citizens feel that EU policies are being dictated or unduly influenced by smaller, less powerful states, therefore, domestic political actors may gain electoral capital from openly defying EU directives. Either way, the result will be a worse record of implementation.

**Research method**

(a) **Dependent variable**

Ideally, one would like to use a measure of actual non-compliance. However, no such data exist. For this reason, and in common with other previous quantitative studies,
we therefore resort to a measure of (detected) legal non-compliance. Our dependent variable – that is, our measure of the degree of legal non-compliance with EU directives – is the annual number of infringement cases raised against individual member states. These data are taken from the European University Institute’s Database on EU member state Compliance with Community Law and cover 15 member states for the period 1978-1999 (European Union Institute, n.d.).

The use of infringement data requires some explanation. Infringement cases only cover a fraction of the total number of legal infractions committed by member states in any year (Börzel, 2001; Bursens, 2002; Mastenbroek, 2003). There are two reasons for this. First, not all cases of potential non-compliance are detected. Although the Commission supplements its own investigations into legal breaches with information provided to it by member states and third-party complaints, these sources do not provide a comprehensive record of breaches of EU law (McCormick, 1999; Weale et al., 2000). Second, only a small proportion of potential infringements brought to the Commission’s attention are prosecuted. Instead, the majority of cases are resolved informally, without the need for protracted official proceedings (Börzel, 2001; Davies, 2001; Nugent, 2003; Weale et al., 2000).

The existence of unrevealed non-compliance inevitably reduces the explanatory power of our statistical estimations. However, provided that unrevealed cases are randomly distributed across the sample, they should not invalidate the use of infringement data in the present context. There are two possible scenarios where this assumption might not hold. First, rates of detection and reporting of non-compliance may vary between member states (Mastenbroek, 2003); and, second, the Commission might be more willing to prosecute certain states than others (Hattan, 2003).
Yet, investigating these scenarios, Börzel (2001) finds scant evidence of systematic bias. According to Börzel, neither societal activism nor state monitoring capacity – two factors that might conceivably bias disclosure – are related to the number of national infringements. Similarly, she finds no consistent relationship between country rankings by total infringements to any of the factors – state power, level of Euro-scepticism, etc. – previously hypothesised to influence the Commission’s willingness to initiate official proceedings. These observations, of course, do not entirely rule out the existence of systematic bias. Yet they do suggest that some of the potential biases typically considered in the literature may be relatively unimportant.

Of the possible infringement stages, we opt for reasoned opinions as our main dependent variable. These represent the first fully “official” indication that a member state is failing to comply with its legal obligations and are especially well-suited to the present research task. First, unlike formal letters, reasoned opinions exclude a substantial share of infringement cases arising from ambiguities and misunderstandings of EU law, neither of which are of central interest in the present study. At the same time, unlike referrals to the ECJ, reasoned opinions do not exclude potentially instructive cases of non-compliance. Only the most persistent and intransigent cases of non-compliance end-up being referred to the ECJ, with the result that a large number of genuine cases of non-compliance are missing from referrals statistics (Börzel, 2001). Despite our preference for reasoned opinions, we additionally report results for ECJ referrals. These are correlated with reasoned opinions at $r = .68$ and are similar to the dependent variable used in Mbaye (2001).
(b) Main explanatory variables

Similar to scholars who have studied the effect of economic membership benefits on citizen support for European integration (Anderson and Reichert, 1996; Eichenberg and Dalton, 1994; Gabel and Whitten, 1997), we measure the influence of a country’s trade dependence on other EU states using the share of intra-EU trade as a percentage of a member state’s overall world trade. Calculated using data from OECD (2005), a high overall score implies that a large share of a country’s international trade is with other member states. As our measure of redistributive fiscal benefits, we use data from Rodden (2002) on real net transfers from the EU per capita. From the same source, we take our measure of political benefits, namely, an index of a priori voting power per capita, which is the average of voting power within the: (i) Council under unanimity rules; (ii) Council under QMV rules; and (iii) Parliament\(^2\). Rodden (2002) uses the Shapey-Shubik (SS) formula to compute his indices of voting power. The SS index considers all possible coalition permutations and represents the fraction of all coalition permutations for which the vote of a particular actor – in this case, political representatives from a member state – is critical. By weighting the SS index on a per capita basis, Rodden’s measure provides us with a more relevant indicator of a priori voting power, capturing differences in states’ potential power to shape outcomes relative to their population size. Per capita SS measures have previously been used in other studies (Bindseil and Hantke, 1997; Kandogan, 2005). In order to ensure that our measure truly captures political benefits in the form of disproportionate potential influence over decision-making, and is not simply a proxy for country size, we include the natural log of population size as a control variable.
(c) Control variables

As well as our explanatory variables capturing different aspects of membership benefits, we include several control variables. Our list of control variables is not exhaustive. Thus, we do not attempt to control for several “institutional” variables – various policy styles, bureaucratic traditions, etc. – identified in past qualitative studies as determinants of compliance (Knill, 2001). While useful in explaining variations in member state implementation of particular directives, it remains unclear as to whether the influence of specific, idiosyncratic institutional characteristics extends to all directives. Instead, we restrict our focus to well-established generic determinants.

Our first variable is (the log of) population size which, as noted above, is included to ensure that our measure of political benefits is not simply picking-up a country size effect (data from World Bank, 2003). The next two variables seek to capture a country’s ability to comply with the requirements of EU directives. The first is bureaucratic quality, widely identified in previous work as a positive correlate of legal compliance (Börzel et al., 2004; Falkner et al., 2004; Lampinen and Uusikylä, 1998; Mbaye, 2001; Weale et al., 2000). We measure bureaucratic quality using a score provided by the International Country Risk Guide (PRS Group, 2004), which runs from 1 (worst) to 4 (best). The second capacity variable is GDP per capita. All else equal, richer countries are likely to have a better legal, fiscal and administrative infrastructure to comply with directives. Data are taken from Heston et al. (2002).

A fourth control variable is political constraints which have been shown to limit the ability of executives to transpose directives into domestic law. Thus,
according to several recent studies, compliance is lower where there are more veto players in the domestic political system (Giuliani, 2003; Haverland, 2000). In the present study, we use an index of political constraints developed by Henisz (2000) to capture these restrictions on political authority. Building on a simple spatial model of political interaction, the index captures the structure of government in a given country, together with the political views represented by different levels of government. It measures the extent to which political actors are constrained in their future policy choices by the existence of other political actors with veto power.

A fifth control variable is membership length. Countries which have been members of the EU for longer breach its laws more often than more recently acceded counterparts (Giuliani, 2003; Mbaye, 2001). A number of possible explanations for this observed relationship exist, although perhaps the most plausible is that recent entrants are more eager to demonstrate their status as “legitimate” members of the EU by fully complying with its rules (Bengtsson et al., 2004). As our measure of membership length, we take the natural log of the number of years of EU membership, since the negative influence of EU membership length is unlikely to increase linearly with time.

As a caveat, it is important to acknowledge that the Commission has historically granted newcomers a “grace period” in recognition of the difficulties involved in adjusting to numerous EU laws (Börzel, 2001; Sverdrup, 2004). In effect, it has exempted accession member states from their obligations to implement directives, typically for a period of approximately two years. To account for this newcomer effect, we include a dummy variable for the first two years after accession, which we expect to have a negative effect on the number of infringements received.
Our final set of control variables consist of dummy variables for the legal system, distinguishing between countries with Scandinavian civil law (Denmark, Finland and Sweden), French civil law (Belgium, France, Greece, Italy, Luxembourg, Netherlands, Portugal and Spain), German civil law (Austria and Germany) and Common law (Ireland and United Kingdom). The omitted (reference) category in the estimations is the Scandinavian civil law category (data taken from La Porta et al., 1999). The importance of legal systems stems from their influence over the process of legal incorporation (Alter, 2000). Relevant here are styles of conflict management, the complexity of legal procedures and norms of compliance, all of which can potentially facilitate and/or impede transposition. Indeed, legal characteristics – specifically, a low degree of litigiousness, procedural simplicity and norms of ‘faithful compliance’ – are said to explain the comparatively low number of infringement proceedings taken against the EU’s Nordic states, particularly beyond the formal letters stage (Bengtsson et al., 2004; Bursens, 2002; Goldsmith and Larsen, 2004; Sverdrup, 2004). Table 2 provides summary descriptive variable statistics.

<<INSERT TABLE 2 ABOUT HERE>>

(d) Estimation technique

We estimate the following model

\[ y_{it} = \alpha + \beta_1 x_{it} + \gamma_1 T_t + u_{it} \]

The subscript \( i \) represents each member state of the EU in year \( t \), \( y \) is the number of legal infringements and \( x \) is the vector of explanatory variables. The year-specific dummy variables \( T \) are of particular importance in the context of the present study,
capturing general developments common to all member states, but changing over time. They include annual increases in the number of directives, which might plausibly impact member state compliance (Neyer, 2004). They also include: modifications to the procedures used by the Commission to record official infringements (Börzel, 2001); changes in the Commission’s willingness to pursue infringement proceedings against member states (Hattan, 2003); developments in the European legal regime for enforcing and sanctioning non-compliance (Alter, 2000), and institutional developments such as Treaty revisions and enlargement (Börzel et al., 2004). Year-specific time dummies can control for all these developments, so long as they affect all member states approximately equally, without the need for explicitly controlling for each factor.

Because the dependent variable is a discrete, strictly positive count variable, ordinary least squares (OLS) is not well suited as a regression technique, as its underlying distributional assumption is that of a normally-distributed continuous variable. A common technique for count data is an estimator based on the assumption that the underlying data is Poisson distributed. However, it implicitly assumes that the conditional mean and the variance functions of the dependent variable are equal. If this assumption is violated, then Poisson regression is overly anti-conservative and under-estimates the standard errors of variables (Cameron and Trivedi, 1998). We therefore use a popular alternative, which does not make this assumption, namely, the negative binomial regression, together with standard errors that are robust toward arbitrary heteroskedasticity. The presence of autocorrelation can create problems for statistical inference. We therefore tested for autocorrelation in our panel data, using Wooldridge’s (2002) F-test for panel data. Autocorrelation would call for clustering observations at the panel level, which then produces consistent, but inefficient
estimations. Fortunately, our test results clearly fail to reject the hypothesis of no first-order autocorrelation.

Results

Table 3 shows our estimation results. We concentrate first on reasoned opinions as the dependent variable. As expected, the coefficient for share of intra-EU trade dependence is negative and statistically significant. That is, countries with greater trade dependence on other EU member states receive fewer reasoned opinions, indicative of a comparatively higher level of legal compliance with EU law. Similarly, we estimate a negative and statistically significant relationship between voting power per capita in EU institutions and number of reasoned opinions issued by the Commission. In effect, our results suggest that member states that are apportioned greater (potential) political influence over EU legislative processes relative to their population size are more likely to comply with their obligations to implement directives. Similar estimations are obtained for ECJ referrals: coefficients for share of intra-EU trade dependence and voting power per capita are both negative and statistically significant.

Yet, contrary to expectations, we estimate a positive and statistically significant relationship between net fiscal transfers per capita and legal infringements. Countries benefiting most from the EU budget are more – not less – likely to be investigated by the Commission for non-compliance and have more – not fewer –
reasoned opinions, and indeed, ECJ referrals. This result is very robust to permutations in the possible ways of measuring fiscal benefits. For example, replacing the preferred measure with net transfers relative to GDP, transfer to payments ratio or gross transfers rather than net transfers (ignoring payments into the EU budget) all lead to the same surprising result.

Regarding our control variables, for reasoned opinions as the dependent variable, only bureaucratic quality, the period of grace and the legal system dummies are statistically significant with the anticipated coefficient signs. Countries with higher bureaucratic quality and newly acceded states have fewer infringements. Member states with a common law, French civil law or German civil law tradition all have a higher number of infringements than countries with a Scandinavian legal system, the omitted reference category. For ECJ referrals, in addition to the control variables already mentioned, EU membership length and the index of political constraints have the anticipated positive effect. Surprisingly, countries with a higher GDP per capita face more ECJ referrals. Population size is not statistically significant in either estimation.

**Discussion and Conclusion**

Countries’ participation in the EU integrationist project has historically been sold on the basis of various benefits that accrue to members. Indeed, precisely because of these rewards, it is suggested that it is in the self-interests of member states to ensure functioning of the EU through the proper application of its laws. In this paper, we
explore whether member states respond to this logic. That is, do states that benefit more from membership have a better record of complying with EU laws?

With a view to answering this question, we use quantitative regression techniques to estimate the influence of several hypothesized benefits on the number of infringements for 15 member states over the period 1978-1999. While infringement cases cannot be read as a true measure of the absolute scale of non-compliance, there is nothing to suggest that they are systematically biased between member states (Börzel, 2001). Our findings provide overall support for the idea that compliance with directives is influenced by the level of benefits derived from the EU. As anticipated, states with higher levels of intra-EU trade dependence are subject to fewer infringements, presumably because such countries are amongst the chief beneficiaries of a common set of rules that promote the stable, predictable and impediment-free movement of goods and services (Mattli, 1999). Similarly, to the extent that per capita voting power in EU institutions is negatively correlated with legal infringements, our results suggest that countries deriving greater political benefits from European integration relative to their country size have a better record of compliance.

Our only surprising result concerns fiscal transfers. Although we would intuitively expect member states receiving more from the EU budget in per capita terms to have a better record of compliance, our results suggest that such countries are actually subject to more infringements. What might explain this counter-intuitive result? We investigated whether the type of transfer matters. Unfortunately, truly comparable data on the disaggregation of transfers are only available for 1995 onwards. Separating transfers into agricultural, structural (regional development) and other funds – using data taken from Rodden (2002) – we find that both agricultural and other funds have a negative coefficient sign, albeit not statistically significantly
so, whereas the structural funds transfers have a positive and highly statistically significant effect (detailed results are available from the authors on request). As these results are inferred from only a few years of data, they need to be treated with caution. However, with this caveat in mind, a possible explanation might be suggested: since a significant share of structural funds are allocated to regions with incomes significantly below the EU average, it could be that the transfer variable picks up an effect of insufficient capacity to comply with EU directives in recipient countries, which is not fully captured by GDP per capita and bureaucratic quality. At this stage, we cannot offer a more compelling explanation, and we openly admit that the true reason might be different. Clearly, more research is needed to explore the underlying dynamics of the positive correlation between fiscal transfers and infringements.

Our findings have a number of wider implications. First, they suggest that the implementation of directives is shaped by the generic benefits derived from membership of the EU. Past research has similarly hypothesised a role for benefits in motivating compliance. However, the primary emphasis of previous work has been on the benefits associated with individual policies, and the role of nationally-idiosyncratic institutional factors in shaping these (Börzel, 2000; Knill, 2001; Mastenbroek and van Keulen, 2006). By contrast, we find evidence that the wider, diffuse rewards associated with European polity, policy and governance also influence member states’ compliance with EU directives. The importance of reciprocity, benefits and rewards in providing the nation-state with the legitimacy to govern has long been recognized by scholars of domestic government. Our study is unique in providing support for the role of such factors in shaping countries’ willingness to implement EU law.
Second, our findings suggest that theories of European integration are right to emphasise economic and political rewards in political unification. The implementation of a harmonised body of EU law is an important part of integration. Indeed, the success of the EU integrationist project crucially depends on member state compliance with Treaty obligations (Mattli, 1999). To the extent that we find that a larger share of intra-EU to total trade and per capita voting power in European institutions influences the implementation of EU law, our study supports theoretical predictions regarding the role of membership benefits in fostering commitment to European unification (Rosamond, 2000).

At the same time, our results underline the need to distinguish between different membership rewards. That intra-EU trade and per capita voting power emerge as a statistically significant predictor of compliance, but net transfers do not, strongly indicates that not all rewards translate into increased commitment to European integration. Clearly, certain types of benefits are more influential than others when it comes to complying with EU laws.

Yet, while these differences – particularly between our two economic benefit variables – might seem puzzling, it is worth noting that they are not necessarily inconsistent with theories of integration. Traditional and revised neofunctionalist accounts, in particular, have long privileged cross-border transactions, and especially economic exchanges, as a central catalyst for European integration (Haas, 1958; Nye, 1971; Sandholtz and Stone Sweet, 1998). According to these approaches, as cross-border linkages expand, so demand from domestic groups for harmonised Europe-wide rules and their implementation, grows. Similarly, state-centric, intergovernmental approaches have recognised instrumental political authority and power as a central driver of European integration. Although side-payments have been
mentioned as a means for gaining the support of interest groups for EU integration, they have rarely been assigned the same explanatory significance as either cross-border economic transactions or political authority and power (Ingelhart, 1971; Lindberg and Scheingold, 1970). Hence the empirical findings presented in our paper are not entirely without theoretical precedent.

The results from our study also contain potentially instructive lessons for policy-makers. They suggest that fiscal transfers, a traditional side-payment used to gain the favour of domestic interest groups, are not a panacea for compliance problems. While payments may encourage member states to accede to the EU and sign-up to its rules (Mattli, 1999), they do not guarantee the implementation of these rules. Instead, if policy-makers wish to use fiscal transfers as an incentive for compliance, they might need to make redistributive payments far more conditional. Whether such a move is possible, or indeed economically, politically or ethically desirable, is open to discussion. However, our finding should caution policy-makers against the intuitive assumption that transfers foster compliance with EU laws.
Notes

We thank three anonymous referees for many constructive comments. Eric Neumayer gratefully acknowledges financial support from the Leverhulme Trust.

1 Note, we do not believe that the strength of opposition to such directives will be significantly greater in countries with high levels of intra-EU trade dependence.

2 A referee rightly pointed out that our measure of a priori voting power should ideally be adjusted for temporal changes in EU voting rules and in the relative importance of the European Council versus Parliament in EU decision-making. Unfortunately, these dynamics are complex, and moreover, extremely difficult to quantify. We have not yet seen any measure that adjusts for temporal changes in the importance of the Parliament. In the absence of such a measure, we resort to a simple average.

3 Note, however, dropping the bureaucratic quality variable from the model renders the GDP per capita variable statistically insignificant.
References


(consulted Nov. 2005)

Hoffman, Stanley (1966) 'Obstinate or Obsolete: The Fate of the Nation State and the Case of Western Europe', *Daedalus* 95(862-915).


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>54</td>
<td>43</td>
<td>80</td>
<td>85</td>
<td>94</td>
<td>122</td>
<td>141</td>
</tr>
<tr>
<td>Denmark</td>
<td>12</td>
<td>16</td>
<td>13</td>
<td>15</td>
<td>10</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Finland</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>France</td>
<td>56</td>
<td>83</td>
<td>95</td>
<td>70</td>
<td>64</td>
<td>112</td>
<td>204</td>
</tr>
<tr>
<td>Germany</td>
<td>28</td>
<td>36</td>
<td>51</td>
<td>60</td>
<td>66</td>
<td>128</td>
<td>111</td>
</tr>
<tr>
<td>Greece</td>
<td>0</td>
<td>33</td>
<td>82</td>
<td>123</td>
<td>119</td>
<td>163</td>
<td>122</td>
</tr>
<tr>
<td>Ireland</td>
<td>19</td>
<td>35</td>
<td>42</td>
<td>53</td>
<td>65</td>
<td>86</td>
<td>92</td>
</tr>
<tr>
<td>Italy</td>
<td>93</td>
<td>81</td>
<td>119</td>
<td>190</td>
<td>165</td>
<td>167</td>
<td>168</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>34</td>
<td>16</td>
<td>38</td>
<td>47</td>
<td>85</td>
<td>73</td>
<td>91</td>
</tr>
<tr>
<td>Netherlands</td>
<td>31</td>
<td>24</td>
<td>31</td>
<td>43</td>
<td>61</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Portugal</td>
<td>—</td>
<td>—</td>
<td>0</td>
<td>24</td>
<td>146</td>
<td>125</td>
<td>142</td>
</tr>
<tr>
<td>Spain</td>
<td>—</td>
<td>—</td>
<td>8</td>
<td>34</td>
<td>97</td>
<td>98</td>
<td>80</td>
</tr>
<tr>
<td>Sweden</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>31</td>
<td>21</td>
<td>25</td>
<td>34</td>
<td>39</td>
<td>50</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: European University Institute’s Database on EU member state Compliance with Community Law.
Table 2. Descriptive summary variable statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasoned Opinions</td>
<td>259</td>
<td>22.247</td>
<td>18.722</td>
<td>0</td>
<td>94</td>
</tr>
<tr>
<td>ECJ Referrals</td>
<td>256</td>
<td>6.223</td>
<td>6.540</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>Intra-EU trade (% of world trade)</td>
<td>259</td>
<td>65.420</td>
<td>7.876</td>
<td>46.974</td>
<td>80.471</td>
</tr>
<tr>
<td>Net transfers from EU p.c.</td>
<td>259</td>
<td>0.053</td>
<td>0.199</td>
<td>-0.253</td>
<td>0.770</td>
</tr>
<tr>
<td>Political power in EU institutions p.c.</td>
<td>259</td>
<td>0.012</td>
<td>0.022</td>
<td>0.001</td>
<td>0.105</td>
</tr>
<tr>
<td>Population (logged)</td>
<td>259</td>
<td>16.403</td>
<td>1.489</td>
<td>12.800</td>
<td>18.222</td>
</tr>
<tr>
<td>Bureaucratic quality</td>
<td>259</td>
<td>3.672</td>
<td>0.550</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>GDP p.c. (logged)</td>
<td>259</td>
<td>9.774</td>
<td>0.259</td>
<td>9.170</td>
<td>10.675</td>
</tr>
<tr>
<td>Index of political constraints</td>
<td>259</td>
<td>0.759</td>
<td>0.088</td>
<td>0.350</td>
<td>0.890</td>
</tr>
<tr>
<td>EU membership length (logged)</td>
<td>259</td>
<td>2.934</td>
<td>0.907</td>
<td>0</td>
<td>3.871</td>
</tr>
<tr>
<td>Period of grace</td>
<td>259</td>
<td>0.066</td>
<td>0.248</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Common law</td>
<td>259</td>
<td>0.170</td>
<td>0.376</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>French civil law</td>
<td>259</td>
<td>0.602</td>
<td>0.490</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>German civil law</td>
<td>259</td>
<td>0.104</td>
<td>0.306</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 3. Estimation results.

<table>
<thead>
<tr>
<th></th>
<th>Reasoned Opinions</th>
<th>ECJ referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra-EU trade (% of world trade)</td>
<td>-0.023 (3.02)***</td>
<td>-0.026 (2.66)***</td>
</tr>
<tr>
<td>Net transfers from EU p.c.</td>
<td>0.562 (2.56)**</td>
<td>1.278 (3.23)***</td>
</tr>
<tr>
<td>Political power in EU institutions p.c.</td>
<td>-6.954 (1.99)**</td>
<td>-13.601 (2.67)***</td>
</tr>
<tr>
<td>Population (logged)</td>
<td>-0.055 (0.84)</td>
<td>-0.116 (1.23)</td>
</tr>
<tr>
<td>Bureaucratic quality</td>
<td>-0.272 (2.16)**</td>
<td>-0.681 (4.57)***</td>
</tr>
<tr>
<td>GDP p.c. (logged)</td>
<td>0.234 (0.78)</td>
<td>0.973 (2.38)***</td>
</tr>
<tr>
<td>Index of political constraints</td>
<td>0.772 (1.53)</td>
<td>1.684 (2.60)***</td>
</tr>
<tr>
<td>EU membership length (logged)</td>
<td>0.084 (0.90)</td>
<td>0.536 (4.07)***</td>
</tr>
<tr>
<td>Period of grace</td>
<td>-1.228 (3.71)***</td>
<td>-0.781 (1.81)*</td>
</tr>
<tr>
<td>Common law</td>
<td>0.895 (4.50)***</td>
<td>1.160 (4.02)***</td>
</tr>
<tr>
<td>French civil law</td>
<td>1.594 (7.26)**</td>
<td>1.965 (6.51)***</td>
</tr>
<tr>
<td>German civil law</td>
<td>1.385 (5.58)**</td>
<td>-1.630 (4.83)***</td>
</tr>
<tr>
<td>Observations</td>
<td>259</td>
<td>259</td>
</tr>
<tr>
<td>Countries</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.16</td>
<td>0.17</td>
</tr>
<tr>
<td>Wald test</td>
<td>954.7 (0.0000)</td>
<td>538.2 (0.0000)</td>
</tr>
<tr>
<td>Panel test of autocorrelation</td>
<td>0.158 (0.6972)</td>
<td>1.656 (0.2190)</td>
</tr>
</tbody>
</table>

Note: Estimation is by negative binomial regression with robust standard errors.

Constant and year-specific time dummies included, but coefficients not reported.

Wald test is asymptotically chi-squared distributed with p-value in brackets.

Wooldridge’s (2002) panel test of autocorrelation is F-test with p-values in brackets.

* significant at .1 level  ** at .05 level  *** at .01 level.