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Transatlantic Interdependence in US Climate Change Policy

**Cross-Border State-Business Relations Challenging State
Autonomy**

JONAS MECKLING

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Contact: Jonas Meckling, email: jonas.meckling-alumni@lse.ac.uk.

Managing Series Editor

Hans D. Sohn, Research Fellow, Global Governance Project. E-mail: sohn@glogov.org.

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Foreword

This working paper was written as part of the Global Governance Project, a joint research programme of the Vrije Universiteit Amsterdam, the Potsdam Institute for Climate Impact Research, the Free University of Berlin (Environmental Policy Research Centre), and Oldenburg University. Within the larger context of earth system analysis, the Project investigates international institutions, political processes, organisations and other actors that influence the emerging system of global environmental governance. The current focus is on questions of institutional and organisational effectiveness, learning processes in environmental policy, institutional inter-linkages, the role of private actors in governance systems, and models of global democracy. Major analytical tools are qualitative social science methods, including structured case studies, as well as legal analysis and integrated modelling. Project members represent political science, economics, international law and integrated modelling.

Within the Global Governance Project, this working paper contributes to the efforts of the research group MOSAIC—‘Multiple Options, Solutions and Approaches: (Institutional) Interplay and Conflict’. This group studies the increasing segmentation of different layers and clusters of rule-making and rule-implementing in global governance, both vertically between supranational, international, national and subnational layers of authority (‘multilevel governance’) and horizontally between different parallel rule-making systems maintained by different groups of actors.

Other research groups of the Global Governance Project include MANUS—‘Managers of Global Change: Influence and Learning of International Organisations’, and MECGLO—‘New Mechanisms of Global Governance’. More information on these groups is available at the Project’s web site at www.glogov.org.

Comments on this working paper, as well as on the other activities of the Global Governance Project, are highly welcome. We believe that understanding global governance is only feasible as joint effort of colleagues from various backgrounds and from all regions of the world. We look forward to your response.

Frank Biermann

Director, Global Governance Project
Head, Environmental Policy Department, Institute for Environmental Studies,
Vrije Universiteit Amsterdam

Abstract

While the US federal government rejects to participate in the Kyoto Protocol, business in the US is increasingly adapting to Kyoto-style policies. This raises questions about the autonomy of the federal government and state-business relations in climate change policy. Realist, neo-Marxist and liberal scholars each provide different answers to the question of state autonomy. In the case of US climate change policy and the automobile sector, the liberal perspective of a multi-centric world best captures the dynamics at work, this essay argues. While attempting to hedge the domestic market from carbon caps, the US automobile industry also responds to Kyoto-like policies by investing in low-carbon technologies. A pro-Kyoto coalition centered around the EU partially impacts the US economy by driving the diffusion of carbon caps to both the global and the domestic North American markets. Hence, EU climate policy challenges the autonomy of the US government via state-business relations across borders. In this interdependence game, transnational actors play a crucial role by transmitting policies and, thus, state power. Finally, as US business responds to Kyoto-style regulation, it is likely that domestic business opposition to US ratification of the Protocol will soften in the long run. This would move a return of the US to the international agreement back into the window of opportunity.

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1 Introduction

When in 2001 the US withdrew from the Kyoto Protocol, it seemed to directly echo Robert Kagan's vision of a unilateral superpower (2003). Across the water, the EU was deemed too weak to challenge the US decision, and bring it back on board. Instead, it had to retreat to early implementation within the confines of its own borders. 'Power' on one side, and 'paradise' on the other.

Surprisingly, the Kyoto process has been more stable than expected, finally leading to the entering into force of the Protocol on 16 February 2005. Though, to date, the US is not party to the agreement, the debate on the future participation of the US has recently taken on new optimism. While the federal government repudiates the treaty, activities 'on the ground' in the US attract attention. As Congress, states, cities, and, most importantly, business seem to engage with Kyoto-style climate policies, observers suggest that, in the long run, the US might rejoin the multilateral agreement (Hopgood 2003). Such a proposal appears overly optimistic at first sight, and demands closer inspection of the dynamics at work.

Throughout the history of climate politics, firms have strongly influenced domestic and foreign policies of the US. Therefore, shifts in corporate strategy on climate change best indicate the domestic political momentum for curbing greenhouse gas (GHG) emissions. Indeed, scholars have widely suggested that corporations have alleviated their opposition to Kyoto despite the fact that the administration rejects the treaty (Dunn 2002; Levy and Rothenberg 1999). If this is true, the question arises why business has changed course, and who is actually in the driving seat of such a shift. This essay addresses the issue with regard to the US automobile industry, a key player in climate politics. Accordingly, it asks: *Who rules the US automobile industry?* This question directly touches upon the grand debate on how globalisation affects the power of the nation-state, and the state-market relationship. Scholars in International Relations (IR) and International Political Economy (IPE) have mainly given three answers: state power remains unchallenged—the realist view (Hirst and Thompson 1999); state and business create a dominant transnational alliance—the neo-Marxist argument (Cox 1994); and state power is partly eroded by the dispersion of authority—the liberal perspective (Rosenau 1990).

With regard to climate change, realist and neo-Marxist notions feature most prominently: the US is seen as being either a strong, autonomous state and "hegemonic polluter" (Hopgood 2003: 145), or as allying with transnational business in an emerging hegemonic bloc (Levy and Egan 2003). However, I argue that both perspectives fall short of explaining the present divergence of state policies and business strategies in the US. The perspective of a multi-centric world, instead, provides critical insight into how different state and non-state actors compete for political authority, thus creating the political environment of the automobile sector. Such readings of US climate change

policy, however, are vastly absent from the debate. Here, this essay joins in, taking three steps.

First, US climate change policy and the role of US business in climate politics are reviewed, followed by a critical discussion of the three theoretical perspectives on state power in a globalising world. Second, the case study analyses the degree to which the automobile sector changed strategy after Kyoto, and which political authorities drive this shift most. I argue the automobile sector has not fully changed course, but rather adopted a double-edged strategy: on the one hand, firms produce vehicles with low fuel economy for the US market, while they equally invest in low-emission technologies, anticipating a further diffusion of carbon caps. Thus, the industry responds to competing authorities: it coalesces with the federal government to hedge the domestic market, and responds to a broad alliance of pro-Kyoto forces centred around the EU. Third, based on the case study results, the explanatory value of the three theories is explored. I argue that the case supports notions of interdependence, rather than hegemonic concepts of power. By implementing Kyoto-like policies domestically, and by expanding carbon-constrained markets to Kyoto parties, the EU, indeed, manipulates global markets, also affecting the US economy. In this game, sub/trans-national state and non-state actors play a crucial role in amplifying and transferring policies. Consequently, while state power does not wither away, interdependence allows one state to challenge the autonomy of another.

2 US State and Business in Climate Politics

“The nation-state is dead” claims Naisbitt (1994: 43), taking a radical stance in the debate on the power of the nation-state in relation to global markets and non-state actors. As the US continues to refrain from international climate negotiations, but business activities ‘on the ground’ suggest a pro-Kyoto shift, indeed, questions on the power of the state arise: To what extent is the US autonomous in policy choice? And, who could challenge US power?

With regard to concepts, the transformation of the state is discussed in terms of changes in sovereignty and autonomy, “the two central features of the traditional Westphalian system” (Zacher 1992: 61). While sovereignty means political authority, state autonomy is understood as state capacity, i.e. “an index of coercive power” (Hopgood 1998: 7). Here, changes in the authority game are discussed to draw conclusions on state autonomy.

This chapter introduces the role of the US state and US business in climate politics, and then critically examines realist, neo-Marxist, and liberal perspectives on state autonomy. I argue that realist and neo-Marxist notions of hegemony raise critical questions about the actual degree of state autonomy and the power of multinational corporations (MNCs) respectively. Further, moderate liberal accounts of overlapping rule

systems ought to be considered, as domestic business responds to political authorities other than the US state.

2.1 Historical Overview

Since the inception of international climate politics, the US has played a vital role in negotiations. Except for a short intermezzo in 1995-96 under the Clinton administration, it firmly opposed mandatory targets and timetables for GHG emission reductions with the wind of opposition blowing either from the administration or Congress (Harris 2000; Harrison 2000). While after the inclusion of flexible mechanisms in the Protocol, the Clinton administration committed the US to the treaty and thus to targets, this was not backed up by the Senate.

From 1998 to 2000, Congress ensured that the treaty was neither ratified nor its provisions implemented through the back-door by the executive branch. The failure of COP-6 in The Hague in 2000 finally revealed that negotiations were not leading to a protocol the Senate would ratify (Lisowski 2002). Shortly after George W. Bush had taken office in 2001, he decided to repudiate the Kyoto Protocol, arguing that the treaty was 'fatally flawed' because of non-participation of developing countries and that it would seriously harm the US economy.

Contrary to government policy, corporate strategies on climate change reflect a major shift after Kyoto from aggressive opposition to a more moderate stance, scholars contend (Dunn 2002; Kolk 2001). In the pre-Kyoto phase, opponents of domestic and international GHG controls were dominant. In 1989, the US-based Global Climate Coalition (GCC) was founded, representing over fifty trade associations and firms, particularly from the fossil fuel and energy-intensive manufacturing sectors. The few proponents gathering in the US Council for Sustainable Energy and particularly the insurance industry did not develop significant political clout (Paterson 2001).

Following Kyoto, business opposition began to erode, as firms started to accept climate change science and to channel investment flows to low-emission technologies (Levy and Egan 2003). Shifts in strategy were perceived in the fossil fuel and automotive industries, the sectors most affected by international GHG regulation. In late 1997, BP initiated a series of drop outs from the GCC. In the same year, the Pew Center on Global Climate Change, an initiative supporting the Protocol and collaborating with more than twenty firms, was launched. While there is anecdotal evidence for a divergence of government and business strategies after Kyoto, the extent of strategic change is unclear, as well as the degree to which state power is challenged by the changing course of business. With respect to the latter, three general perspectives exist.

2.2 *Globalisation, Climate Change, and the Power of the US*

2.2.1 STRONG STATE PROTECTING NATIONAL INTEREST?

Realists contend that the power-seeking state remains the most important agent in international politics, firmly controlling economic globalisation (Sorensen 2004: 5). Beyond such common ground, two strands of realist thought provide distinct perspectives on state power: one arguing that the US core state is an autonomous actor in relation to domestic societal interests, and the other focussing on the hegemonic role of the US in the international system.

Arguing at the actor level, state-centric realists, such as Hopgood (1998; 2003), conceptualise the state as an autonomous agent, within which a plurality of state officials compete for the definition of the national interest. Corporate influence does not extend to decision-making within the administration, but only provides rhetorical ‘ammunition’ for state officials defining the national interest. Hence, the core state is thought to be an effective gatekeeper between domestic non-state interests and the international, possessing agency itself (Skocpol 1985).

While it can be conceded that state-centric realists acknowledge the role of state officials in policy-formation, two arguments cast doubt on the assumption of strong internal state autonomy. First, since business activity is central to the provision of tax revenue and employment, it makes sense to assume that business holds weak structural power over government (cf. Falkner 2001). The power is weak and relational because business interests diverge and compete with other societal interests in a pluralist struggle. Second, as Foot et al. (2003) argue, the US is widely seen as a ‘weak’ state in the institutional sense. Decision-making power is shared between the Executive and Congress, including the participation of interest groups in policy-making (ibid.), thus providing multiple channels of influence. Although there are theoretical reasons for effective lobbying, the degree of corporate and societal influence on state agendas is ultimately an empirical question that has to be addressed in the light of the case study.

Contrary to state-centric realists, neorealists argue at the systemic level of the international system (Ikenberry 2002; Waltz 1979), assuming that international cooperation is possible if a single actor with a preponderance of power, the hegemon, exists. Though explaining cooperation with the systemic principle of hegemony, neorealist stability theory implies—for the hegemon—a strong concept of external state autonomy, i.e. state agency (cf. Paterson 1996: 100). In climate politics, the US is often seen to act as a hegemon (Hopgood 2003), however the basis of power is defined. According to Barkin and Shambaugh (1999), the hegemon can choose between: compensating for the non-cooperation of ‘weak’ states—benevolent hegemony; forcing international cooperation—coercive hegemony; and free-riding—which the US does in climate politics.

However, Rowlands (2001) shows that in climate negotiations in the 1990s, US preferences did not always translate into the final agreement, leaving evidence of US hegemony inconclusive. The current veto position could, instead, be taken as an indica-

tor of eroding hegemony. Keohane and Nye (2001) suggest that "the systemic orientation natural to a hegemonial power [...] is challenged by a more nationalistic perspective at home and abroad" (2001: 39), as hegemony declines. It remains to be discussed in the context of the case study whether current developments suggest that the US itself might rejoin the treaty in the future or whether the US is likely to prevent Kyoto from entering a post-2012 commitment phase. US repudiation of Kyoto might well not reflect a historical constant of a unilateral and dominant US, as Kagan suggests, but rather a historically discrete event.

2.2.2 A NEW HISTORICAL BLOC?

While realists see states in control of markets, neo-Marxists argue for a mutual interdependence of the states-system and the global economy, manifesting itself in a 'historical bloc' (Sorensen 2004). Hence, state autonomy is granted, but conditioned by business interests, as the state plays a central role in capital accumulation. Considering the impact of economic globalisation on the role of the state, neo-Marxist state theorists, such as Cox (1994) and Jessop (1990), observe the 'internationalisation' of the capitalist state, in that multilateral institutions are created to promote and reproduce the global economy. Thus, the state persists, but equally undergoes a process of 'deteritorialisation' (Scholte 1997).

Neo-Gramscians identify the order emerging from state-business interaction as hegemony, or a historical bloc, referring "to a historically specific alignment of economic, political and ideological forces that coordinates major social groups into a dominant alliance" (Levy et al. 2003: 101). Beyond economic determinism, hegemony is thought to be contested by social forces in a 'war of position', in which the structural power of business does not instrumentally translate to policy, but has to be continuously reinstated (Levy and Egan 2003). This often results in compromise.

For the pre-Kyoto period, the fossil fuel and energy-intensive manufacturing industries were at the core of a historical bloc, neo-Gramscians contend (ibid.). The lobbies of these sectors, foremost the GCC, successfully prevented mandatory GHG controls (Levy and Egan 1998). With regard to the post-Kyoto shift in industry position, Levy and Egan (2003) suggest a reconfiguration of the transnational historical bloc. In response to miscalculations in political strategy and early regulation in Europe, which created prospects for markets for low-carbon technologies and made European firms move ahead, US companies began to change strategy. "The climate regime associated with this bloc provides very limited targets for emission reductions, market-based implementation mechanisms, and minimal regulatory intrusion upon corporate autonomy" (ibid.: 818). Further, the new regime is ideologically embedded in the win-win discourse of ecological modernisation, and goes along with new NGO-business alliances, including those of the Pew Center and Environmental Defense.

The neo-Gramscian concept of contested hegemony and reconfiguration appears to provide a powerful explanation for strategic change in the business commu-

nity, as it encompasses political, economic, and ideological phenomena. Yet, it runs the risk of overstating strategic alignment and stability of the political order in two ways: first, the alignment of state policies and business strategies, and, second, the convergence of business strategies and interests. It is true that the first Bush administration closely allied with fossil fuel interests in rejecting an international mandate for GHG controls (Harrison 2000). Also, business could push the Clinton administration to include flexible mechanisms in the Protocol. Both examples suggest that business could effectively influence foreign policy by lobbying at the national level. But to presume that after Kyoto an internationalised state emerged that would stabilise a transnational historical bloc centred around market-based climate policies is questionable, as the US rejected Kyoto. This is to be discussed later.

Furthermore, the concept of hegemony underlies the notion of a ‘capital-in-general’, which means that, whilst business interests are plural and may conflict, major economic sectors dominate the definition of the business interest (Newell and Paterson 1998). Considering post-Kyoto business strategies, it is not evident that major economic sectors have fully embraced market-based forms of climate policy and GHG emission caps. Neopluralists suggest the possibility of business conflict in international politics (Cox 1996). Falkner (2001) shows that business conflict, indeed, existed in pre-Kyoto climate politics, but did not significantly affect international climate policies because of the weak political organisation of pro-regulatory forces. It is to be analysed whether business conflict arose in the post-Kyoto phase, and whether it influenced politics.

2.2.3 THE STATE IN RETREAT?

A third perspective, taken by liberals (Sorensen 2004), views state power as being transformed and compromised in the course of globalisation: while the state and the states-system remains central, new political authorities emerge in the global realm. Scholars in this tradition focus particularly on two parallel processes: internationalisation and sub/trans-nationalisation (Cerny 1999; Held et al. 1999; McGrew 2000). The former refers to the increase in inter- and transgovernmental politics; the latter, instead, considers sub-state actors and social and economic non-state actors as playing an increasingly important role in global politics. Transnational relations in particular circumvent nation-states, as they allow for so-called linkage politics, defined as “a recurrent sequence of behaviour that originates in one state and is reacted to in another” (Rosenau 1969: 45).

Thus, liberals share with neo-Gramscians a notion of globalisation, meaning qualitative change in the global polity, as opposed to the realist notion of internationalisation. But, instead of conceptualising the new order as hegemony, they suggest the broad concept of a multi-centric world (Rosenau 1990), in which governance occurs at multiple levels and is carried out by various actors. Under such conditions, the state, Cerny (1999) argues, has to play at least a three-level game, in which its autonomy may

be constrained by international, transnational, and subnational authorities. Beyond the pluralist concept of overlapping authorities, however, there is much debate about who gains power and to what extent. Three claims have been particularly influential.

First, authors such as Ohmae (1990) and Strange (1996), propose a power shift from public authorities to markets, rendering MNCs the new sovereigns. Global markets stretch beyond national jurisdiction and provide MNCs with an ‘exit’ option, the argument goes. In a similar vein, Cutler et al. (1999) analyse the rule-setting function of firms in private regimes. For the case of climate politics, Jagers and Stripple (2003), for instance, emphasise the role of such private governance. Second, studies on transnationalism and global civil society emphasise a gain in power by NGOs, and other social groups (Wapner 1997). In contrast to the market authority of firms, these actors hold ‘moral’ or ‘illicit’ power (Hall and Biersteker 2002), which allows them to contest the states-system and the global economy. Newell (2000) has given a detailed account of the role of environmental non-governmental organisations (ENGOS) in climate politics. Third, authors such as Keohane and Nye (2001), propose the paradigm of ‘complex interdependence’, which refers to “reciprocal effects among countries or among actors in different countries” (ibid.: 7). From this perspective, state autonomy is partially undermined by economic interdependence between states, thus altering the inter-state power game. Though it considers non-state actors and multiple channels of influence, the interdependence school is not describing an overall power shift to private authority; at its core, it maintains a state-centric perspective (Cerny 1996).

All three claims provide interesting points of departure for a debate on state autonomy, but remain too narrow in perspective. The first two schools only argue in terms of a zero-sum game of power redistribution along the public-private distinction. Interdependence scholars, instead, rightly emphasise the inter-state dynamics caused by globalisation, but run the danger of underestimating the role of non-state actors. While this study adopts the analytical perspective of multi-centric governance, it is to be seen which actors are particularly influential and how they interact with each other. Neither the decline nor the resilience of the nation-state are taken as *a priori* assumptions, only the plurality of authorities.

3 Climate Change and the US Automobile Industry

The question of who rules will in the following be explored in the case of the automobile industry and its strategic shift to deal with climate change. As corporate strategy reveals the regulatory landscape, the case study serves to answer two subquestions: To what extent has the automobile industry changed strategy? And, in response to which political actors, processes, and institutions did this shift occur? This will, then, allow for a discussion of state autonomy and the diffusion of power.

3.1 *Methodology*

In line with the pluralistic politics model (Brewer 2004), it is assumed that corporate political strategies are primarily driven by external policy factors. Therefore, corporate strategies can serve as indicators of which political authorities define the rules in a given issue-area. Company-specific factors emphasised by the corporate actor model (Skjærseth and Skodvin 2003: 18 ff.) are only referred to if they explain strategic differences within the sector.

The automobile industry has been selected as a case because it has high stakes in climate politics: it accounts for 3.3 percent of GDP (McAlinden 2003), and, more importantly, transportation contributes almost one-third of GHG emissions (Levy and Rothenberg 1999: 4). While facility emissions are only 2 percent of total life-cycle emissions (Austin et al. 2003: 4), vehicle emissions are the big issue of concern. The sample includes the five largest-emitting companies in the industry: General Motors, Ford, DaimlerChrysler, Toyota, and Honda (Cogan 2003: 20). The relatively small sample size is mitigated by the fact of high industry concentration: the ‘Big Five’ account for about 86 percent of light-duty vehicle sales, and for about 89 percent of total industry emissions based on light-duty vehicle sales.¹

The data has been collected by means of content analysis and semi-structured interviews. Documents reviewed include corporate reports, research reports, policy papers, newspaper articles, open letters, and press releases. A total of nine semi-structured telephone interviews have been conducted in July/August 2004, including interviews with corporate representatives and policy experts. The first group consists of managers of the companies under review and a representative of the Alliance of Automobile Manufacturers (Autoalliance), the industry’s major association. The second group are four policy experts from the Clinton administration, the Environmental Protection Agency (EPA), the Investor Responsibility Research Center, and the Pew Center. Due to reasons of confidentiality, some of the interviewees are not referred to by name. The interviews discussed elements of corporate climate strategies and the relevance of different policies for corporate decisions to engage with climate change.

3.2 *Corporate Climate Strategies*

As has been widely suggested (Levy and Rothenberg 1999), the US automobile sector changed course after Kyoto: strong opposition turned into slow adaptation to carbon-constrained markets. However, the strategic shift is not tantamount to a full U-turn but reveals a double-edged strategy. While on the one hand firms invest in low-emission technologies and implement modest emission reduction policies, they pursue hedging strategies—particularly for the US light-truck market—on the other.

¹ Author’s calculations based on data from Cogan 2003.

In the pre-Kyoto period, US-based auto companies joined the strong opposition to international GHG regulation, including participation in the GCC. After Kyoto, Ford was the first firm to leave the coalition in December 1999, soon followed after by DaimlerChrysler in January 2000, and GM in March 2000 (Cogan 2003). In 1998, Toyota had already joined the Pew Center. On the investment side, US-based firms launched projects on low-carbon technologies. While DaimlerChrysler had invested \$400 million in a fuel-cell joint venture with the Canadian company Ballard since 1993, it was joined by Ford in 1998. One year later, GM set up a partnership with Toyota, investing in electric, hybrid, and fuel-cell technologies (Levy and Egan 2003: 821). Japanese-based Toyota and Honda already launched gas-electric hybrids in 1997, and 1999 respectively (Woerd et al. 2000), thus creating a "Pacific threat" (Dunn 2002: 37) for US-based firms. At the policy front, the European Automobile Industry Association (ACEA), including US-based companies, agreed to a voluntary agreement with the Commission, which set a 25 percent reduction target for CO₂ emissions from vehicles by 2008 compared to 1995.

After US withdrawal from the Kyoto process, investments and engagement with climate policy continued in the auto industry. Initially, US-based firms had channelled investment flows to fuel-cell technology which is not expected to emerge as a viable technological option before 2015 (Austin et al. 2003). Recently, they accelerated the development of hybrid and diesel engines, both technologies that are available in the short term, thus, catching up with Japanese- and European-based firms. Particularly European CO₂ cutbacks are expected to be achieved by a 'dieselisation' of the fleet, whereas the Japanese market is biased towards hybrid technology. Ford introduced its first hybrid sports utility vehicle to the market in 2004, and GM plans to offer hybrid versions of several models by 2007. Estimates suggest that, by 2010, hybrids will account for 10 percent of global vehicle sales (ibid.: 20).

On the policy side, companies adopted modest targets for facility emissions under the auspices of various programmes. In 2002, the Autoalliance, which represents all companies reviewed except for Honda, responded to Bush's call for voluntary action by setting a 10 percent reduction goal for US facilities for the period 2002-2012. All emission reductions are registered with the Department of Energy (DOE) to receive credits for early action in case of carbon caps. In addition, in 2003, Ford became a founding member of the Chicago Climate Exchange (CCX), a voluntary trading programme. With its UK operations Ford also joined the UK Emissions Trading Scheme (ETS) in 2002 and plans to enter the EU ETS in 2005, as does DaimlerChrysler.

While the US auto sector is undergoing strategic re-positioning via R&D, partnerships, and modest emissions commitments, it maintains opposition to US ratification of Kyoto and mandatory fuel economy regulation. US rejection of the Protocol partly results from business opposition from the fossil-fuel and automotive sectors and their close ties to the Bush administration (Lisowski 2002). Moreover, the Autoalliance has been the key lobbyist against a tightening of corporate average fuel economy

(CAFE) standards which are the primary policy instrument for regulating vehicle emissions.

Thus, the automobile industry is trying to hedge the domestic market of light trucks, as these have low fuel economy but account for about 50 percent of domestic sales. According to Deutsche Bank, approximately 70 percent of GM's and Ford's profits derive from this market segment (Austin et al. 2003: 11). Apart from the high significance of light trucks in the portfolio of US-based companies, opposition to emission controls is driven by concerns about customer acceptance of fuel-efficient vehicles. Low fuel prices and high average income traditionally allowed consumers to purchase more fuel-consuming models, in particular light trucks, in the 1990s (Levy and Rothenberg 1999).

However, the double-edged strategy between anticipating carbon constraints and hedging is not equally pursued by all firms. As several commentators, such as David Gardiner, Executive Director of the White House Climate Change Task Force under Clinton, observe a clear divide between US-based and Japanese-based companies.² While this is true for the technological side, with respect to policy position only Honda seems to depart from the hedging strategy (Hakim 2002). It adopted a "watch-wait-and-see mode" instead of joining strong opposition.³

While the economic rationale for the hedging strategy is obvious, it remains unclear what drives continuous investments in low-carbon technologies, facility-related reduction commitments, and pilot projects on emissions trading. The question is, who is creating a regulatory threat for future carbon constraints in the US automobile market?

3.3 *Political Authorities and Corporate Response*

3.3.1 FEDERAL POLICIES

Though climate change has gained momentum at the federal level, the Bush administration's policies so far offer a safe haven to the automotive industry. In February 2002, Bush announced the US Global Climate Change Policy (GCCP), setting an 18 percent reduction target for GHG intensity to be met by 2012, which *de facto* implies an increase of absolute emissions (Krugman 2002; Moor et al. 2003). The goal is to be achieved by voluntary programmes, such as Climate Vision, Climate Leaders, and the Voluntary Registry for Reporting GHG Reductions under the DOE.

While the Autoalliance committed the sector to the Climate Vision programme (Cooper 2003), GM also joined the Climate Leaders programme. All commitments are

² Interview with Gardiner, 16/07/2004.

³ Interview with Honda representative, 12/07/2004.

strictly facility-related, excluding the hot topic of vehicle emissions. As several interviewees have suggested, the targets do not go beyond energy efficiency measures that business rationale recommends anyway. The notion that the GCCP is not a regulatory driver is supported by the fact that GM and Ford among others lobbied the administration to launch the voluntary climate policy in first place, as Hopgood (2003) shows. Thus, the GCCP is supportive of the hedging strategy of the automobile sector, as it exempts vehicle emissions. However, it defuses public demand for climate action by announcing ‘no regrets’ commitments on facility-related emission reductions. Nonetheless, debates on the voluntary registry reflect firms’ sense of a general threat of domestic carbon constraints: there has been vital advocacy for credits for early action if a company signs on to the registry. “Buying insurance”⁴ makes only sense if a future cap is anticipated (Lewis et al. 2004). Indeed, most interviewees expect domestic emission constraints in the future. This threat, however, seems not to come from the administration.

Congress, and particularly the Senate, have, instead, attempted to adopt mandatory regulation, but have widely been defeated. Since 1997, bipartisan legislative proposals on climate change have risen to unprecedented numbers: in 2003 alone, 70 proposals were introduced (Pew Center 2004: 4). Very likely this is due to the international diffusion of emission controls since Kyoto, as well as ongoing US public support for carbon constraints (Brewer 2003). Most importantly, Senators McCain and Lieberman’s Climate Stewardship Act proposed an economy-wide cap-and-trade system but was rejected twice, in October 2003 and July 2004. Furthermore, several bipartisan bills in Congress asked for a significant tightening of CAFE standards but were not adopted after intense lobbying and advertising campaigns, spearheaded by the Autoalliance and supported by the United Auto Workers union (Plungis 2003). Except for a moderate increase for light trucks as part of the National Energy Policy in 2003 (Innovest 2002), CAFE standards have not been increased since 1986. With Republicans in control of both Houses of Congress from 2002, prospects for enacting stronger CAFE standards are also reduced for the near future.

Thus, federal policies do not seem to explain the strategic shift in investment decisions, but suggest a central role for the administration in stabilising the framework for the domestic automobile market. Interviewees considered the 2004 election as the only big variable in federal politics.

3.3.2 STATE POLICIES

With the federal government creating a policy vacuum, states increasingly step in, pushing US federalism to its limits. State action is wide-spread and varies signifi-

⁴ Interview with Cogan, 19/07/2004.

cantly in policy instruments, causing critics to claim a regulatory ‘balkanisation’ of the US (Lewis 2004).

Since 2002, 28 states have launched partial or comprehensive climate change action plans (Jaeger 2004), of which the efforts undertaken by the New England states, 11 Northeast states, and three Westcoast states are most significant. While the first two initiatives contribute to the political momentum for domestic climate politics, they have little direct impact on the automobile sectors, as auto firms do not operate plants in the Northeast, and the policies do not affect fuel economy standards.⁵ A significant alert, instead, has been sent out from California, Oregon, and Washington, whose governors have agreed, in September 2003, to combine the states’ purchasing power to push for fuel-efficient vehicles. Among these, California has already taken the lead, creating the single biggest domestic threat to the US automotive industry.

Accounting for 11.5 percent of the US vehicle market (Plungis 2004), California is a state to watch for auto companies. Despite concerted lobbying efforts of the Autoalliance, the state association of car dealers, the state’s Chamber of Commerce, and United Auto Workers, California enacted the Pavley Bill in July 2002, which requires a decrease of car emissions by 30 percent below 2002 levels by 2014, including light trucks. The unexpected adoption of the bill was largely driven by ENGO advocacy, and reflected increasing regulatory efforts outside the US. In justifying his support for the bill, Governor Davis said: “The federal government and Congress [...] have missed the opportunity to do the right thing. [...] We can now join the long-standing and successful effort of European nations against global warming” (in: Washington Post 2002).

Usually, states are prohibited from regulating fuel economy standards because these are subject to federal preemption under the Energy Policy Conservation Act of 1975. California, however, was allotted discretionary authority under the Clean Air Act of 1977 to pass regulations on pollution control, and all other states are allowed to adopt California’s standards. Both industry officials and the Bush administration soon indicated they would sue California (Murray 2004) because, as Greg Dana from the Autoalliance comments, they “firmly believe that that problem is preempted by federal law.”⁶ In December 2004, the Autoalliance and a group of auto dealers from California filed suit in federal court (O’Dell 2004). The Federation of International Automakers, which represents Honda among others, joined the lawsuit shortly after. Manufacturers not only fear fuel economy regulation in the Californian market, but a diffusion of the standard to other states, an EPA official emphasised.⁷ Such a “California effect” is well-proven in environmental politics (Jänicke and Jacob 2004), and already eight North-

⁵ Interview with Arroyo, 15/07/2004.

⁶ Interview with Dana, 13/07/2004.

⁷ Interview with EPA official, 15/07/2004.

east states have either adopted, or plan to pass Californian standards, which could affect about 30 percent of the US automobile market, Gardiner suggests.⁸

While state authority in climate politics is challenged by the federal government, states attempt to put the federal administration in charge of nation-wide regulation of mobile source emissions. In 2003, twelve states and several ENGOs filed suits against the EPA to overturn the ruling that it had not the authority to regulate GHG emissions from vehicles under the Clean Air Act (Silva 2004). Clearly, domestic regulation on vehicle emissions has come to a courtroom stalemate between federal and state authority. While the outcome is open, state policies are a real threat to carmakers; certainly more than congressional activity because firms possess less influence at the judicial stage than over legislation in Congress. Since state legislation on fuel economy is a phenomenon of the last two years, it can partly explain the latest investments in hybrid and diesel technologies that would be available in the short to medium term, but not the initial strategic change in the late 1990s.

3.3.3 NGO AND INVESTOR PRESSURE

ENGOs play a central role in pushing state legislators to adopt climate change policies. Big national NGOs, such as the Natural Resources Defense Council, Environmental Defense, the Sierra Club, and the Union of Concerned Scientists have emerged as key players in climate politics at the federal level. They only adopted a two-tiered approach, also targeting the state level, when the local environmental movement proved that it had an impact on state legislation.⁹ In the case of California, the San Francisco-based Bluewater Network first put vehicle emissions on the political agenda, which national ENGOs did not credit with high chances of success (Duffy 2003). When the group, however, found a sponsor in Democratic Assemblywoman Fran Pavley, and managed to form a broad coalition of interest groups, the Natural Resources Council and Environmental Defense stepped in. Also, public support was broad: according to a poll by the Public Policy Institute of California 81 percent of state residents supported the law (Baldassare 2002). Thus, the environmental movement was able to outweigh the industrial lobby. John Burton, then president of the California Senate, commented: "The enviros weighed in like professionals" (Duffy 2003: 185).

In the last few years, climate change has been incorporated into the agenda of mainstream domestic and transnational investors. "Fiduciary capitalism", i.e. the growth of institutional investors, has provided shareholders with considerable leverage over corporate agendas, Hawley and Williams (2000) argue. Religious institutional investors, such as the Interfaith Center for Corporate Responsibility, were the first to address the issue in the automotive industry. They filed several shareholder resolutions at GM and Ford between 1998 and 2004 (ICCR 2002; INCR 2004), *inter alia* resolving

⁸ Interview with Gardiner, 16/07/2004.

⁹ Interview with Toyota manager, 09/08/2004.

that the company would have to present plans to significantly reduce fleet emissions (INCR 2004).

In 2003, CERES, a coalition of investment funds and public interest groups, initiated the Investor Network on Climate Risk, thus shifting the topic into the mainstream of institutional investors. The initiative of eight state and city treasurers and comptrollers, and two labour pension fund managers appealed to the US Securities and Exchange Commission to demand corporate disclosure of climate change-related risks in their financial statements. Support from Wall Street soon followed: in June 2004, both Goldman Sachs and Morgan Stanley endorsed disclosure requirements (Smith 2004). This is especially critical in the context of the recent Sarbanes-Oxley-Act¹⁰.

With the Carbon Disclosure Project (CDP) and the Institutional Investors Group on Climate Change (IIGC)—both London-based, investor pressure for climate strategies is also coming from the other side of the Atlantic. By 2004, the CDP represented \$10 trillion in assets with signatories coming from all regions but particularly from Europe (CDP 2004). Such growing domestic and transnational investor concern on climate change is primarily driven by the competitiveness implications of increasingly carbon-constrained global markets. In 2002, over 60 percent of global vehicle sales occurred within Kyoto parties (Austin et al. 2003), which might translate into a comparative advantage for European and Japanese manufacturers in these markets, some argue (Innovest 2002).

Despite the high level of activity, carmakers seem to perceive investor activism only as a diffuse threat with a high degree of uncertainty but which "does not appear to be over the threshold"¹¹. Only Ford and GM have been targeted directly and could partially mitigate pressure by entering into investor dialogues. Moreover, the resolutions have only been filed by a minority of the two companies' shareholders. It is reasonable to assume that shareholder activism contributes to the general political momentum for carbon constraints in the US but essentially remains a modest driver in the US auto industry. Other sectors, such as the electric, oil and gas industries, have been more directly exposed to shareholder activism.

3.3.4 KYOTO AND EU POLICIES

Undisputably, the Kyoto Protocol was a major trigger for initial strategic change in the automobile industry, as an international consensus on emission controls seemed to emerge. In the wake of Kyoto, the 'Big Three' left the GCC and invested in fuel-cell technology. However, subsequent events at The Hague and then US rejection of the Protocol revealed that the norm of international carbon constraints was far from being

¹⁰ The Sarbanes-Oxley Act of 2002 is a major piece of US federal securities legislation, responding to a series of financial scandals. It increased public attention on corporate governance and financial disclosures, including the disclosure of environmental liabilities.

¹¹ Interview with auto manager, 20/07/2004.

embedded in the international system. Nonetheless, Kyoto persisted. Examining four hypotheses, Hovi et al. (2003) suggest, that the reason for that is EU leadership. Indeed, EU policy moved centre-stage in the promotion of international carbon constraints when the EU adopted a "two-pronged strategy" (ibid.: 18) by going ahead with domestic implementation and pressuring for ratification among key states.

At the domestic level, the EU/ACEA voluntary agreement on vehicle emissions and the launch of the ETS in 2005 affect European sales and production of US companies. 20-30 percent of GM, Ford, and DaimlerChrysler's sales occur in the European market; for Honda and Toyota, the European market accounts for less than 20 percent of sales (Austin et al. 2003). For this market, carmakers have to produce significantly more fuel-efficient vehicles, which affected strategic R&D decisions in the US market. Levy and Rothenberg show (1999) that the degree to which EU fuel economy standards impact on US firms depends on the global integration of carmakers. A series of mergers and acquisitions, as well as organisational restructuring, and the subsequent centralisation of R&D in the late 1990s seemed to have given a slightly more global perspective to US managers' perceptions of the competitive environment. Hence, it can be assumed that the agreement had some impact, although the degree is difficult to determine. So far, US companies invest in fuel-efficient vehicles, but equally accommodate differential product standards in the US and EU markets.

For the general political momentum in US climate politics, the preparation and subsequent launch of the ETS seems to be significant. Potential US credit sellers, such as DuPont and some energy companies, are closely monitoring the preparations and advocate a domestic cap-and-trade system (Brewer 2004). Also, the CCX is planning to link its voluntary scheme to the EU ETS, and the EU is negotiating with the Northeast states and Canadian provinces on integrating the regional trading scheme into the EU ETS. As a potential buyer the automobile industry, however, does not have an interest in a global carbon market, unless international carbon caps existed. Only Ford and DaimlerChrysler have a significant geographical exposure to the EU ETS with its European facilities, and, therefore, pursue trading activities. But emissions trading does not seem to have any repercussions on US facilities or strategic positioning. However, the EU-driven diffusion of carbon caps critically affected US carmakers.

Seeking leadership in climate politics, the EU started a massive diplomatic offensive after US rejection of Kyoto (BBC 2002). The goal was to get the "reluctant 'gang of four'" (Hovi et al. 2003: 18), that is Australia, Canada, Japan, and Russia, to ratify the treaty. The campaign was successful: shortly after EU ratification in spring 2002, Japan and Canada ratified, and China approved the treaty. It is believed that without EU pressure Japan and Canada would not have ratified. With Kyoto having entered into force, the largest share of the global automobile market is under a carbon cap and parties are taking early action. Japan has already increased fuel economy standards and Japanese carmakers are selling hybrids on the US market.

Moreover, together with California, Canada is the critical market for US car-makers because it is part of the profitable North American market. Canada's voluntary fuel economy standards have traditionally complied with CAFE standards (Stensil et al. 2003), thus ensuring a harmonised regulatory regime for North America. In its 2002 Kyoto Implementation Plan, however, the Canadian government proposed a 25 percent increase in fuel-efficiency by 2010 in an attempt to replicate the EU voluntary agreement. So far, the Canadian Vehicle Manufacturers Association, representing primarily GM, Ford, and DaimlerChrysler, has been very reluctant (Chase and Keenan 2004), while ENGOs, such as the Sierra Club, want Canada to follow the Californian example. The outcome remains to be seen. Also, China has taken on fuel economy standards above US level, and aims to meet European standards for conventional air pollutants from vehicles by 2010. This is highly important considering the fact that China is the fastest-growing emerging market (Austin et al. 2003).

In short, by increasing fuel economy standards in its domestic market, and equally promoting the expansion of carbon-constrained markets, the EU spurred competition for fuel-efficient vehicles and promoted policy diffusion across major automobile markets. In response, US firms seem to have jumped on the bandwagon as far as R&D is concerned. The success of EU negotiations with Russia on Kyoto ratification and the subsequent entry into force of the treaty only support the notion that Kyoto might prove to be a viable regime. However, it should be noted that the stringency of both future carbon caps and their enforcement are not clear yet.

To summarise, in the wake of Kyoto, the US automobile industry adopted a double-edged strategy, thus responding to competing authorities in a fragmentary climate regime. On the one hand, the federal administration implemented protectionist policies allowing carmakers to hedge the domestic light-truck market. On the other hand, other states—lead by the EU Commission—and sub/trans-national actors create a significant momentum for emission controls. So far, the political struggle remains undecided and evolves along many lines: administration versus Congress, administration versus states, trade associations versus ENGOs, firms versus firms, and, last but not least, US administration versus EU Commission.

4 Competing Authorities in Climate Change Politics

The analysis of the double response of the US auto sector to competing authorities now allows for a debate of the three perspectives introduced above. I will show why there is little evidence to assume a hegemonic concentration of power in climate politics. I argue that while the US is a strong state—not domestically, but internationally—realists and neo-Gramscians tend to overstate state autonomy and the power of multinational corporations respectively. The case rather supports the idea of a transatlantic interdependence game via transnational economic links and an important role for sub/trans-national actors.

4.1 *Autonomy and Hegemony Challenged*

States remain central actors, notably in providing the institutional framework for domestic and global markets. To a large extent the US succeeds in hedging its domestic automobile market from carbon controls, whilst the EU and its Kyoto allies are the primary architects of carbon-constrained markets. Beyond the notion of a persistence of the state, however, strong realist presumptions of unconstrained internal and external state autonomy find little empirical evidence.

While Congress is known to be ‘porous’ and to provide various channels of influence, carmakers also hold leverage over the administration. As the case study shows, both US rejection of the Protocol and the GCCP can be partly traced back to corporate influence in the administration. Likewise, the relative freeze of CAFE standards in Congress is a result of effective corporate lobbying. The *Washington Post* rightly concluded that “Detroit’s Complacency” (2004) reflects the industry’s long-term impact on federal policies. Interestingly, at the state level ENGOs seem to exploit a comparative advantage in influencing vehicle emission standards, which stresses a notion of relational corporate power. Apart from the permeability of the core state, internal state autonomy is challenged by autonomous action of sub- and transnational actors (see chapter 4.3).

Although internally ‘weak’, the hypothesis that the US is a hegemon in the international system until recently finds support in the fact that Kyoto, for a long time, has not entered into force since the US withdrawal. However, EU diplomacy managed to keep the process alive, widening the group of cooperative states, and finally leading to the entry into force of Kyoto. International cooperation seems to be possible without initial participation of the US, which supports the notion that cooperation does not require hegemony. In the long run, however, any climate regime depends on US participation to be effective because of its share in GHG emissions. Such a return of the US becomes more likely, if the repercussions of Kyoto on the national economy, and subsequently on US politics are taken into consideration. Further acceleration of competition for fuel-efficient vehicles could significantly change carmakers’ political stance on fuel economy.

Beyond the auto sector, such dynamics are about to pick up with regard to potential credit sellers in a global permit market advocating a domestic cap-and-trade system. Thus, carbon markets seem to develop independent dynamics of expansion which contradict the neorealist presumption that hegemons can install economic interdependence but equally reduce and manage it (cf. Keohane and Nye 2001). It was indeed the US administration who insisted on the inclusion of flexible mechanisms in the Protocol, fostering global market interdependence. Ironically market-based environmental policies—Bernstein’s “liberal environmentalism” (2002)—seem to have hit back by creating a pro-emissions trading lobby in the US, as the UK and the EU move ahead with implementation. Possibly, cooperation might be enhanced by the erosion of hegemony (Snidal 1985).

While there are signs that hegemony is declining and that, in the future, the US might join Kyoto, it nevertheless remains a strong state capable of protecting its domestic market. The ultimate litmus test for state autonomy is still to come: it is open whether the US will remain a non-party to Kyoto, whether it can prevent Kyoto to move beyond 2012, or is able to establish an alternative international climate regime.

4.2 *Conflict versus Alignment*

Firms have exercised significant leverage over climate policy—mostly at the domestic level. To assume the existence of a business- and state-driven transnational historical bloc, however, fails to accommodate deep rifts in state policies, and within the global economy on Kyoto-like policies.

When, after Kyoto, according to the neo-Gramscian reading, the realignment of the historical bloc was on the way (Levy and Egan 2003), the US withdrew from the treaty. If business was embracing a market-based climate regime, it thus lost its major ally, which questions the idea of a dominant state-business alliance. Nonetheless, it could be argued that Kyoto parties established an ‘internationalised state’ that ensures the framework for global implementation of emission controls, substituting for US power. It is true that the Kyoto process has led to a proliferation of mandatory climate policies now codified in international law. But it is doubtful whether an international regime—under conditions of anarchy—could produce the degree of stability neo-Gramscian notions of an ‘internationalised state’ suggest (cf. Victor 2001). The general comment of Germain and Kenny on the pitfalls of neo-Gramscian IR theory is particularly valid in climate politics: a “corresponding structure of concrete political authority” (1998: 27) is absent at the global level.

Apart from the absence of a powerful state ally, there is significant business conflict over Kyoto-style policies, with a cleavage running between potential credit sellers and buyers in a future carbon market. Only few sellers of surplus credits have incentives to advocate a cap-and-trade system. According to Lewis et al. (2004), such conflict between potential sellers and buyers has already affected federal politics, as potential credit sellers support the McCain-Lieberman Bill to introduce a domestic cap-and-trade system. Pro-mandate advocacy, however, is strongly opposed by potential credit buyers.

Irrespective of the fact that they have relaxed their position on climate change, major economic sectors, including the auto industry, remain opposed to Kyoto. As has been shown, lobbying of the fossil-fuel and automobile sectors accounts for the domestic momentum behind US withdrawal from the Protocol. Moreover, it would be misleading to interpret voluntary emission reduction commitments as signs of a pro-Kyoto stance, as Levy and Egan (2003) propose. On the contrary, in many cases these are meant to deviate public pressure for adopting mandatory Kyoto policies. According to the logic of the double-edged strategy, the strategic shift only relates to the medium- to

long-term investment preparing for potential future mandates; the hedging strategy, instead, tries to prevent this scenario from being implemented too quickly.

Hence, major sectors have not embraced a market-based Kyoto regime but only respond to Kyoto-like policies where regulatory threats require. Ford, for instance, rejects a mandatory cap-and-trade system in the US, but its subsidiary Volvo respects Kyoto, as it operates within the EU (Brewer 2004). Also, emissions trading is not per se regarded as a new consensus on the 'easy way' of climate policies. Only Ford and DaimlerChrysler engage with permit trading because they have to comply to the European caps under the EU ETS. Climate action of industry appears to occur in response to state power instead of reflecting a reconfigured transnational bloc in favour of a market-based climate regime.

4.3 Double-edged Strategy and Transatlantic Interdependence

Neither a powerful state, nor an overarching state-business coalition sufficiently explain the double-edged strategy of the US automobile sector because political authority is, indeed, more widely dispersed. Not MNCs, but the EU, other Kyoto parties, and sub/trans-national actors seem to hold most leverage in challenging the federal government's autonomy.

While MNCs have proved to possess significant lobbying power at the national level, there is little evidence for the retreat-of-the-state hypothesis. As 178 countries agreed to implementation measures under Kyoto, global automobile markets do not provide an exit-option for MNCs to eclipse the nation-state (Hirst and Thompson 1999). On the contrary, the market functions as a mechanism for policy diffusion, thus enhancing the power of those states driving and coordinating policy implementation. Also, voluntary programmes, such as the EU/ACEA agreement, are not purely private in nature, but reflect a regulatory threat of public actors.

Sub- and transnational actors have emerged as influential political authorities in the current struggle over US climate change policy. With California and other states contradicting the administration, federalism in environmental policy-making proves to be a source of considerable political clout for subnational actors (cf. Kelemen 2004). The threat of judicial reinstatement of the federal government's regulatory authority reflects the administration's critical awareness of the potential loss of authority. While the struggle is still about authority, if California implements the CO₂ regulation, constraints on the policy choices of the federal government could materialise.

State action is partly based on the autonomy of states within US federalism, but it also mirrors the international proliferation of emission controls, as ENGOs and state policy-makers argumentatively resort to the international process and EU leadership. This suggests a form of emulative linkage politics (Rosenau 1969), which promotes norm diffusion from the international to the subnational level and stimulates domestic politicisation. Subnational actors, such as the Northeast states cooperating with Cana-

dian provinces and potentially with the EU, can even ‘re-link’ to the international process, thus adopting their own ‘foreign policies’. Also, transnational actors directly intervene in the US via penetrative linkage politics: institutional investors attempt to influence the agenda of US firms, and Japanese firms import competition for low-emission vehicles to the US market (cf. Hill 2003). Thus, transnational relations circumvent the federal government as the ‘gatekeeper’ between domestic and international levels, challenging the authority of the US. The existence of both emulative and penetrative linkages reveals that the ‘moral’ and ‘market’ authority of ENGOs and investors is partly derived from those countries that drive the norm diffusion, and set the market framework. As Keohane and Nye put it, transnational actors can be “transmission belts” (2001: 22) of state power.

As has been shown, EU and Kyoto party policies affect the US economy via competitive dynamics, which makes a case for complex interdependence: manipulation of global markets by one state affects the autonomy of another. Thus, the nation-state persists but can be challenged by other states, rendering manipulation of interdependence an asset in the inter-state power game (Keohane and Nye 2001). The way transatlantic interdependence is increased in climate politics is enlightened by the concept of lead markets, referring to those countries where environmental innovations are introduced first (cf. Jänicke and Jacob 2004). The EU pioneered in lead market implementation and expansion, both having repercussions on the US auto industry.

First, the EU lead market for fuel-efficient vehicles affects the innovation path of MNCs operating in or exporting to the EU. Indeed, US carmakers responded by investing in low-emission technologies, while equally producing fuel-intensive vehicles for the US market. A possible explanation for the trend’s failure to spill over from the lead market to the US is that carmakers apply regionally differentiated product standards, as Studer Noguez (2000) shows for Ford. High dependence on light-truck sales in the domestic market, and low fuel prices support the case for maintaining low fuel economy standards in the US. Such a strategy supports the notion that MNCs are strongly influenced by the political conditions of their home-markets (cf. Doremus et al. 1998). In short, the EU lead market has an effect on US investment, but does not yet lead to convergence of standards which suggests modest interdependence.

Second, the expansion of early implementation of emission controls to other regions in the wake of the EU’s diplomatic campaign seems to create a critical mass of carbon-constrained markets outside the US, and takes the innovation dynamics of the lead market to the US. Most importantly, a potential fuel economy improvement in Canada and California could significantly alter the competitive dynamics in North America. The mechanism of “diffusion by imitation” (Jänicke and Jacobs 2004: 35) as part of the Kyoto process holds the potential to promote convergence of fuel economy standards at a higher level than that favoured by the US administration. Such an effect critically reinstates and strengthens the power of the state pioneering a lead market.

Indeed, policy-makers seem to be increasingly aware of interdependence in transatlantic climate politics. Having received applications from US companies to join the EU ETS in 2004, then EU Environment Commissioner Wallstrom commented: "I think there is a move [...] maybe not from the administration at this point, but finally I think ultimately they will come on board. I think with big US companies or multinational companies, they look to Europe" (in: Mason 2004). However, to be sure, the long arm of the EU—transatlantic interdependence—is not necessarily a strong one.

First, the double-edged strategy reveals that EU and Kyoto-like policies so far have only a modest impact on US economy, putting US and EU authorities in a dynamic balance of power in climate politics. Asymmetrical interdependence is just about to emerge as a power resource, as the competition for low-carbon technologies picks up. US authority is critically challenged, but policy choice seems not yet to be constrained. Moreover, further competition for fuel-efficient vehicles and policy diffusion might only be realised if the EU succeeds in setting strong enough domestic incentives for innovation, and if Kyoto parties comply with their early implementation commitments. Hence, interdependence is at work but heavily conditional on the EU's and Kyoto parties' capability to move ahead.

5 Conclusion

This article set out to discuss the autonomy of the US in climate politics at a point where the administration remains opposed to the Protocol, while domestic actors, including the automobile industry, partly move towards action. Indeed, as has been shown, the EU has stretched out its long arm across Kagan's power gap, to lay its hand on US domestic business and politics. With US autonomy being challenged, a return of the US to the Protocol moves back into the window of possibility. The reason is that the domestic economy is not ruled by the US government only.

Realist, neo-Marxist, and liberal concepts of state power and globalisation each offer different answers to the question of who rules: the autonomous nation-state, a capitalist state-business alliance, or a plurality of actors govern world affairs. It is argued that only the third analytical perspective of overlapping and competing authorities allows to grasp the political struggle evolving around US climate change policy. While realists rightly emphasise the centrality of the nation-state, they tend to overstate internal as well as external autonomy in policy choice. Neo-Gramscians, instead, capture the role of MNCs in policy-making, but overemphasise business influence, as business conflicts exists and corporate interests are contested by other political actors.

It is argued that no single political authority rules the auto industry, which is revealed by its double-edged strategy responding to competing authorities: the industry hedges the domestic market and current profits, as well as it anticipates a rise in fuel economy standards. Thus, on the one hand, carmakers have a strong hold on the federal government which supports the hedging strategy of the domestic light-truck mar-

ket. On the other hand, US states, transnational actors, and, most importantly, the EU and other Kyoto parties are turning on the heat for higher fuel economy standards—also affecting US firms.

Among the actors in the pro-climate coalition, the EU is proving to be the most influential, as it implements and expands a lead market. Thus, the main political cleavage runs between states, rendering economic interdependence an issue of transatlantic relations. Consequently, this case supports notions of complex interdependence, which stress limited state autonomy but still consider states the main actors in global politics. The interesting point is how pioneering states manipulate interdependence by fostering a lead market and, thus, challenge the autonomy of other states in international environmental politics.

Moreover, the analysis makes a case for sub- and transnationalisation. In particular, subnational actors, such as California and local ENGOs, seem to be critical ‘gateopeners’ and multipliers of early implementation of Kyoto-like measures. This does not suggest a clear power shift from states to sub/trans-national actors, but a complex interdependence of state agendas at different levels, as well as between state and non-state actor agendas.

These conclusions raise a number of issues for future research on state autonomy in global environmental politics. First, if lead markets for environmental technologies alter interdependence, then the link between early implementation and the spillover effects on inter-state relations ought to be further explored. Depending on the ‘globality’ of markets, the form of regulation etc., varying degrees of interdependence are to be expected. Second, given the role of sub/trans-national actors in challenging state autonomy by expanding and transmitting lead markets, the interdependence between state and sub/trans-national actors in reinstating and extending each others power resources should move centre-stage in the study of the nation-state in global environmental politics.

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