



THE LONDON SCHOOL  
OF ECONOMICS AND  
POLITICAL SCIENCE ■



LSE 'Europe in Question' Discussion Paper Series

# Endogenous Coordination

# Multinational Companies and the Production of Collective Goods in Central and Eastern Europe

Bob Hancké

LEQS Paper No. 41/2011

August 2011





## Editorial Board

Dr. Joan Costa-i-Font

Dr. Mareike Kleine

Dr. Jonathan White

Ms. Katjana Gattermann

All views expressed in this paper are those of the author and do not necessarily represent the views of the editors or the LSE.

© Bob Hancké



# Endogenous Coordination Multinational Companies and the Production of Collective Goods in Central and Eastern Europe

Bob Hancké\*

## Abstract

Most accounts of business coordination assume historically given conditions for this to emerge. Business coordination is therefore difficult, perhaps impossible, to construct endogenously. This paper examines a process of 'endogenous coordination' through an analysis of reindustrialization and industrial upgrading in Central Europe during the 2000s. Because of its recent post-communist history, during which existing institutions of economic governance were dismantled wholesale, Central Europe is a particularly unlikely place for complex forms of business coordination to emerge. Demonstrating the empirical possibility of endogenous coordination, and identifying conditions under which it has emerged thus shifts the debate from pessimistic fatalism to a more optimistic world of possibility. The paper identifies three conditions for business coordination to emerge. One, a pattern of industrialization that combines sophisticated skills and capital goods, leading to higher asset specificity and fixed costs; two, bottlenecks in the production of collective goods associated with these assets against the background of potentially high returns in investment; and, three, the existence of a third party, which provides a forum for deliberation and strategic coordination while holding effective sanctioning capacity.

---

\* **London School of Economics and Political Science**

European Institute

Houghton St

London WC2A 2AE, UK

Email: [r.hancke@lse.ac.uk](mailto:r.hancke@lse.ac.uk)

# Table of Contents

<b>1. The role and origins of business coordination</b>	<b>5</b>
<b>2. High fixed costs: Leading sectors and comparative institutional advantage</b>	<b>10</b>
<b>3. Asset specificity and bottlenecks: From low-wage location to high value-added manufacturing</b>	<b>15</b>
<b>4. Emerging forms of inter-firm coordination</b>	<b>19</b>
<b>5. Conclusion</b>	<b>24</b>

---

## Acknowledgements

This paper is based on material in Bob Hancké & Lucia Kurekova, 'Varieties of Capitalism and Economic Governance in Central Europe'. Final report for Project CIT1-CT-2004-506392 (NewGov STACEE), September 2008

[[http://www.eu-newgov.org/database/DELIV/D20D09\\_Final\\_Report\\_STACEE.pdf](http://www.eu-newgov.org/database/DELIV/D20D09_Final_Report_STACEE.pdf)].

Comments from participants in a workshop in Oldenburg in February 2010, in the EGOS colloquium in Amsterdam July 2008, and in a PERG seminar at the Central European University in October 2007, as well as from Michel Goyer, Bela Greskovits, Martin Heidenreich, Jan Kleinheisterkamp, Lucia Kurekova, Vera Scepanovic, Marco Simoni and Gunnar Trumbull are gratefully acknowledged.

# Endogenous Coordination

## Multinational Companies and the Production of Collective Goods in Central and Eastern Europe

The comparative study of capitalism has, since the publication of the *Varieties of Capitalism* volume (Hall and Soskice 2001), directed attention to market and strategic coordination as the critical variables that differentiate (as ideal-types) liberal and coordinated market economies (LMEs and CMEs) – and beyond. Business coordination can help understand how France adjusted (Hancké 2002) after failing to reinvent itself along CME lines (Culpepper 2001). It is a useful perspective to make sense of the development of Latin American political economies (Ross-Schneider and Soskice 2009), and of the economic organization of Mediterranean countries (Molina & Rhodes 2007). And in its ‘negative’ version, lamenting the absence of domestic business coordination, including some of its proto-institutional forms such as high trust or social capital (Stiglitz 1999; Levy 1999), as a condition for economic upgrading, business coordination is an equally crucial variable in understanding divergent outcomes. All these views share the underlying idea that business coordination is exogenously given, usually handed down through history, or – conversely – destroyed under particular historical conditions. Hall and Soskice (2001) are relatively silent on the origins of coordination, and whilst Hancké et al. (2007) explore these to some extent, they ultimately conclude in favour of the historical hypothesis. The argument

## Endogenous Coordination

in Feldmann (2007) is more dynamic: transition policies in Estonia had a network-destroying and in Slovenia a network-preserving effect, two pathways that he causally relates to the absence or presence of business coordination in these countries. Yet his analysis also underscores the importance of historical junctures and irreversibilities in the process.

There is little doubt that business coordinating capacity is a relatively scarce semi-institutional good: without this assumption the failure of reform in France, the inability of Spain to upgrade its manufacturing industry, and the thin institutional pathways that Central Europe has adopted since that period, would all be difficult to understand. But this historically deterministic perspective on the roots of business coordination has unfortunate implications: in the limiting instance, business coordination becomes, for those who think of it as a worthwhile asset, a bit like a rich uncle – nice to have, but there is not much you can do about it if you do not (cf. Levy 1999). If a political economy missed the rendez-vous with business coordination at a critical juncture, or destroyed existing or incipient forms of business coordination for whatever reason, it seems to have lost this chance forever. As a result of these obstacles to building business coordinating capacity endogenously, nations are thus likely to drift from low and medium levels of strategic coordination into a position approximating pure market coordination. Since deregulating an institutional framework that supports business coordination is considerably easier than building it, political-economic adjustment will follow a neo-liberal path by default when faced with inconsistent and often underperforming institutions (Hall & Gingerich 2009) – true in continental Western Europe, but possibly even more so in Central Europe, where nominally neo-liberal policies forced these new capitalist nations onto a path of rapid market-making without the

concomitant (welfare-)state making that historically accompanied such transitions in the post-war period (Innes 2010).

This paper addresses this problem of what I call ‘endogenous coordination’ through an analysis of reindustrialization and industrial upgrading in Central Europe, and the conditions under which inter-firm strategic coordination emerged in certain geographic areas and industrial sectors that supported these processes. While the ambition of this paper may appear modest, its implications are potentially wide-ranging. If building business coordination capacity endogenously is as difficult as it appears, then demonstrating the empirical possibility of endogenous coordination, and identifying conditions under which it has emerged, shifts the debate from pessimistic fatalism to a more optimistic world of possibility. This is particularly the case in Central Europe in the 2000s, an area not known as a fertile breeding ground for such complex institutional arrangements. My main empirical focus is on the complex engineering sector in Central Europe – the regional economy that encompasses most of the Czech Republic, south-west Poland, western Slovakia and north-western Hungary, and which is dominated by large foreign multinational companies (MNCs). The rapid and massive reindustrialization of these highly FDI-dependent, neo-capitalist political economies offers a laboratory to study the emergence of potentially different forms of capitalism and market organization (see also Nölke & Vliegenthart 2009). It thus also allows us to compare different forms of emergent market and strategic coordination. The paper identifies instances of inter-firm coordination of the type that Hall and Soskice (2001) address as ‘strategic’ (i.e. not primarily based on market relations), and analytically examines the conditions under which they emerged. Since these forms of strategic coordination came into existence in institutional environments which had historically been ‘thin’, and in regions and countries where states and private

## Endogenous Coordination

associations were weak but foreign MNCs very strong, I call the emergent form of coordination 'endogenous' since it is neither primarily given by history, nor imposed from the outside, but resulted from the interactions between the actors themselves – although not without a partial transfer of sovereignty to a third party. The main purpose of this paper is to retrace and analyze the conditions under which such endogenous forms of business coordination have occurred.

Methodologically, the project of this paper can therefore be considered as the equivalent of finding one sign of life in outer space: I make no claims about generalizability, deep trends toward coordination in Central Europe, or even that such endogenous forms of coordination are necessarily sustainable arrangements in the long run (though I do think that they are both more common and more stable than many believe, at least until the onset of the crisis of 2007-09). However, just as one signal emanating from intelligent beings beyond the Earth would offer proof that we are not alone in the universe, so even only a handful of instances suggests that there is room for business coordination to emerge beyond historically present conditions.

The first part of this paper explores the literature that analyzed the emergence of business coordination, and assesses its usefulness for understanding developments in Central Europe (CEE). In the second section, I analyze the profiles of re-industrialization in different CEE economies since the mid-1990s, distilling two broad economic development patterns, each with very different strategic implications for firms in those economies. Since these patterns of 'complex' versus 'basic' industrialization result in different levels of asset specificity and therefore of fixed costs, thus section 3, they present both labour and especially capital, with very different time horizons. When faced with bottlenecks in the production of collective goods such as skills and regional technological capacity, firms therefore run into classic collective

action problems. These problems – the final step in the argument – are resolved through non-firm actors who provide forums for deliberation and strategic coordination against the background of sanctioning capacity. Throughout this analytical narrative, relevant comparisons with situations where these conditions are not met, will highlight the salience of each of the conditions I identify.

## 1. The role and origins of business coordination

Business coordination appears to be a necessary (though not necessarily a sufficient) condition for collective competition goods such as industry-specific skills and sophisticated technological capabilities (see Crouch et al. 2001) to emerge. The problem is perhaps best understood as a simple collective action problem. Companies A and B would both be better off if the collective competition good existed (technology transfer, for example, or a specific skill formation system that would produce skilled workers for both A and B). However, since A benefits from not contributing to but consuming the collective good that B has produced and vice versa, neither of the two (and, by extension, more) companies will initiate the production of the collective good in the first place, and all are worse off. Business coordination overcomes this collective action problem by (a) providing a deliberative arrangement in which firms no longer meet as atomized agents, but as organized members and (b) rewarding contribution or punishing free-riding (Finegold & Soskice 1988; Hall & Soskice 2001). Business coordination is therefore a valuable semi-institutional asset for countries embarking on a development path aimed at producing high value-added, medium-high technology goods and services. Most of the companies in those countries will be of the A and B type above; yet since they compete, they will be reluctant to share in the production of

## Endogenous Coordination

what might become specific strategic assets. The likely result is therefore that, if left without some form of non-market coordination, such arrangements fail to produce the necessary collective goods.

Our understanding of the emergence and sustainability of business coordination falls broadly into two categories. The first, and numerically the dominant perspective, in essence answers the question historically. At some point in the recent or distant past, a set of preconditions existed leading to the production of institutional arrangements that furthered the emergence of inter-firm coordination. This could be the mode of work organization in the pre-capitalist era (Iversen & Soskice 2009), the nature of the political system (Martin and Swank 2011), the emergence of large banks or the state as the social matrix of capital, or closer in time, the policies adopted by governments during the post-1989 transition in Central Europe and the Former Soviet Union which could have preserved the key elements of proto-coordination or destroyed them (Feldmann 2007; King 2007; Stiglitz 1999). And where business coordination was existent but underdeveloped, it either disappeared, as under Thatcher's UK (Wood 2001), or was complemented by strategic actions by the state, as in France and other Latin European economies (Molina & Rhodes 2007).

The second view of coordination does not necessarily reject this historical hypothesis, but suggests that it is not a necessary condition for some form of governing institutional arrangements to emerge. In a market economy, thus the argument by, among others, Hayek (1967, esp. chapters 4 and 6), free actors will develop exactly the number and type of institutions that they deem necessary to govern the contracts they engage in. Since any dyad can in principle produce a different institutional arrangement to govern its contracting, society (societies) will produce multiple institutional orders; according to Hayek competition between these different institutional models

will weed out the inefficient ones. Institutions are, therefore, intrinsically endogenous as a result of the combined effects of experimentation and competition.

A related though different, constructivist version of this argument can be found in Sabel's writings on economic governance of industrial adjustment (Sabel 1991 and 1995; Cohen 2010). This perspective posits 'studied trust' and monitoring of benchmarks as the key mechanisms: any interaction between two parties requires some form of trust (the expectation that B will not renege on its commitment once A has dedicated resources to a joint project), upon which the parties can build toward ever more complex arrangements. After all, trust is, as Arrow (1974) already pointed out, a good that increases in value with use. Monitoring, in turn, refers to the process of agreeing on principles and outcomes without specifying how each actor reaches those. Combined, thus the argument, they offer a mechanism that actors will accept, but which also has the effect of raising cooperation from a basic to a more complex level.

These views help us considerably in understanding the emergence of coordination, since they address complementary processes. History obviously matters for the production of coordination. Without the necessary insurance mechanisms in the political economy, it would be hard to imagine actors suspending their critical sense and engaging in wildcat cooperation. Coordination and cooperation is considerably easier to sustain in a sociological world in which reputations and redistributive mechanisms are supported by pre-existing institutions. Or, put differently, any attempt at voluntary mutually beneficial coordination, such as a price-fixing cartel, is very hard to sustain if the prospective benefits of any individual party adhering to the rules of the cartel are lower than the benefits gained by temporarily exiting the cartel. If OPEC constrains its oil production to drive

## Endogenous Coordination

up the price, for example, then any individual OPEC member faces a steep incentive to over-produce to reap the short-term gains in revenue. Two mechanisms stop this from happening: exclusion from the club as a sanction, and/or reputational damage – yet both require some form of pre-existing sanctioning capacity or social matrix that would enforce these mechanisms (Aoki 2001; 2005). History, thus the argument, provides precisely that.

But that leaves us with a puzzle that cannot be understood within the framework of the historical hypothesis on the emergence of business coordination. Empirically, the transition to democratic capitalism in Central Europe took place against a background of the systematic destruction of the pre-1989 autocratic planned economy, and in its wake of most economic as well as non-economic institutions that existed before 1989. Countries in CEE thus entered the post-socialist era with very ‘thin’ institutions and without a relevant recent history to build on. At the same time, however, companies in CEE appear to have built embryonic forms of coordination, even in regions and countries where a priori that possibility was only marginal at best (i.e. not in places like Slovenia, where the preconditions for business coordination were carried over from the past – cf. Feldmann 2007). Hayek’s (1967) argument on how institutions evolve endogenously is in part helpful here: if two parties consider cooperation to be mutually beneficial, they will adopt the common rules necessary to govern that cooperation. That point, however, encounters its limits in the simple problem that what may be mutually beneficial is not always produced (Olson 1966), even in small groups, as the standard Prisoner’s Dilemma makes clear. All else equal, market failures are the standard outcomes of cooperative ventures of this kind: neither A nor B is willing to commit resources to a cooperative venture in the absence of binding promises of the other to do the same. The problem could be overcome through the adoption of ‘thick’ deliberative and sanctioning institutions:

deliberation would allow actors to understand, even in one-shot games, how their collective goal can be furthered, and sanctioning capacity is necessary to incentivize all the potential beneficiaries of the collective good to contribute to its production. But that takes us far from the parsimonious ‘endogenous institutions’ of the Hayekian universe, and back into the historical perspective. The constructivist endogenous view, in turn, simply assumes too much of the relevant actors, and is probably not falsifiable in any instance. The emergence of coordination in CEE followed, as discussed below, a dramatic breakdown in trust as a result of highly opportunistic actions that undermined the endogenous capacity for future cooperation. It is unclear where, under those circumstances, trust would reside; and ‘discovering’ such trust post hoc simply is not sufficient as an argument, since it cannot distinguish between situations where it should have emerged and did on the one hand, and type I and type II errors on the other – situations where trust should have emerged but did not and where trust should not have emerged but did.

In their original statements neither the historical nor the endogenous views of institutions therefore help us understand the unexpected outcome in CEE, where companies appear to have built inter-firm coordination. The (inductive) argument I put forward here is that under certain restrictive conditions, which all appear simultaneously necessary in an expansive reading, coordination between firms can emerge, even in the absence of historical and/or institutional preconditions. These conditions can be summarized as follows. The first is high fixed costs: if actors – firms in this case – have a sufficiently long time horizon in the amortization of their investment, they are locked into the situation from which they started out without viable exit options. The second is a high level of asset specificity, both on the side of firms and workers, as a result of which the asset cannot easily

be contracted in (and thus has to be produced). The third is the existence of bottlenecks in the production and provision of the good against the background of large future rewards resulting from high growth. And the fourth and final introduces an important political moment: the presence of a third party offering a deliberative setting for the discussion of cooperation and capable of adequately sanctioning deviations from the cooperation pattern. This third party in effect plays the role of a coordinating agent, but is backed up, as we shall see, by the fact that it provides a separate public good to firms and thus in principle is capable of sanctioning them. The balance of this paper is organized in three sections, each one developing in conceptual and empirical detail the steps above. The sections are organized along simple narratives, but will bring in relevant comparisons with other situations, both within CEE and in the rest of Europe, to highlight the 'necessary' character of the conditions outlined earlier. The final section concludes.

## 2. High fixed costs: Leading sectors and comparative institutional advantage

The post-1989 reindustrialization of Central Europe is in essence a story of the crucial role of foreign direct investment (FDI) in economic development (Greskovits 2005; Nölke & Vliegenthart 2009). Foreign capital, as the history of recent industrializations in other parts of the world such as Latin America and Southern Europe suggests, can produce very different outcomes, ranging from relatively benign local developmental effects to uncontrollable private forces in newly industrializing areas in order to exploit significant (wage) cost advantages. Central Europe initially was no exception. Even though before the late 1980s some market-seeking logic may have been at the basis of activity of MNCs in Central Europe, there is little doubt that the post-1989

investments were primarily guided by the low wage, tax and other cost advantages of the region relative to Western Europe. Large MNCs that located in CEE bring with them a significant amount of autonomy: their weight relative to the local and national economies where they settled allowed them to negotiate from a position of strength with local and national authorities, their financial autonomy allowed them to internalize costs as well as benefits, and their long-term links with subcontractors in the West allowed them to build a state-of-the-art supplier network. Multinational companies, furthermore, can cross-subsidize a few years of losses in new operations if they assume that strategic gains lie further down the road.

---

**Table 1.** A typology of leading sectors

***'Complex' sectors***

- **Light-complex:** only human capital intensive: e.g. pharmaceuticals, office and data processing machines, electrical machinery, scientific equipment, optical goods, clocks
- **Heavy-complex:** intensive in both physical and human capital intensive: e.g. chemicals, machinery and equipment, road vehicles and transport equipment

***'Basic' sectors***

- **Light-basic:** intensive neither in physical nor human capital, but unskilled labour: e.g. cork and wood, textile, rubber, furniture manufacturing, clothing and accessories and footwear
- **Heavy-basic:** intensive only in physical capital: e.g. food, live animals, beverages and tobacco, fuels, vegetable oils, iron and steel, pulp and paper, non-ferrous metals

Source: Greskovits 2005

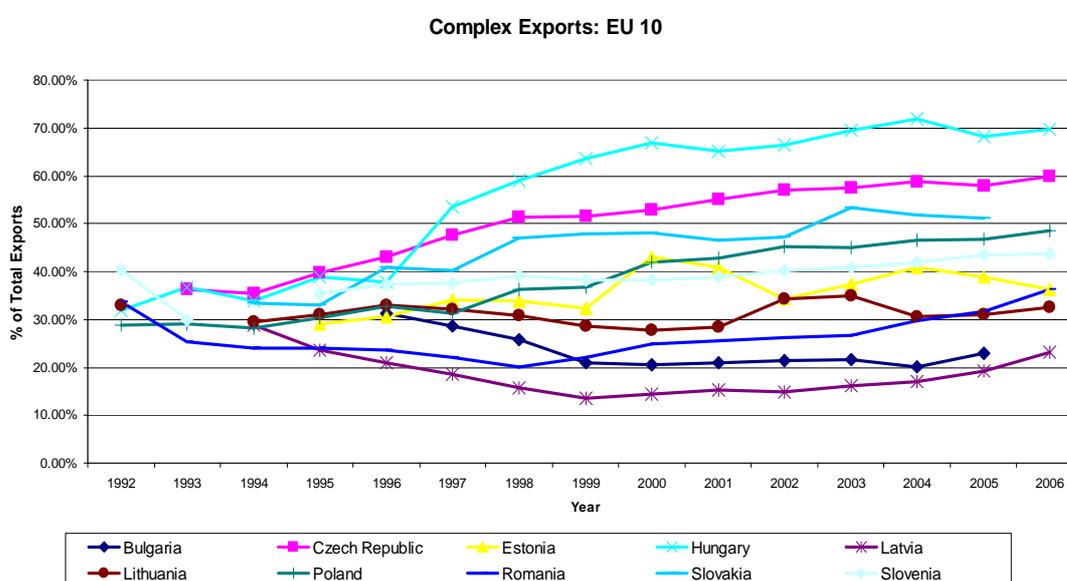
---

A careful comparison of foreign investment in and export profiles of different CEE member-states, based on the asset-specificity typology that Greskovits (2005) has constructed, suggests quite convincingly that broadly speaking two very different production profiles, related to different leading sectors, have emerged in the region over the last 10-15 years. Leading sectors are categories of firms that 'share factor-intensity, product character and contribute

## Endogenous Coordination

[significantly] to exports' (Greskovits 2005: 2). The typology is essentially based on the degree to which industries are labour or capital-intensive, and, dichotomizing the positions for both factors of production, leads to four sub-types which are summarized in table 1: a) intensive only in physical capital, b) intensive in both physical and human capital, c) only in human capital, and d) in neither physical nor human capital, but unskilled labor. In the following, these factor-combinations are referred to as a) heavy-basic, b) heavy-complex, c) light-complex, and d) light-basic profiles (Greskovits, 2005; Bohle & Greskovits 2007). For the purposes of this analysis, these four can be collapsed into two very different production profiles: the 'complex' sectors relying on relatively complex technologies and sophisticated skills, and 'basic' sectors which do considerably less so.

**Figure 1.** The evolution of leading sectors in Central Europe



Source: UN COMTRADE, 2007. Own calculations.

Using this typology as a perspective to look at reindustrialization and investment in Central Europe in particular shows a remarkable differentiation across the region. As figure 1 demonstrates, Slovenia and the Viségrad 4

countries (Czech Republic, Poland, Hungary and Slovakia – V4 henceforth) have increasingly specialized in complex export industries, while in the others (the Baltic states and south-eastern Europe) heavy-basic and light-basic profiles dominate. In the V4 and Slovenia at least 40% of their exports – and usually considerably more – over the last decade consisted of complex goods; 40% appears to have become the ceiling for complex product exports in the remaining countries. In addition, the trajectories of the V4 and Slovenia contrast sharply with the Baltics and South-eastern Europe (SEE). In the first group, the share of complex products in exports rises almost immediately after the transition recession of the early 1990s, while that share first fell in the other group and began to rise only toward the end of the decade, and then only slowly. While it may be too early to treat these different outcomes as stable, there are reasons to believe that it is very difficult for the Baltics and SEE to catch up with the V4 in terms of the importance of complex manufacturing. The initial wave of investment in CEE seems to have produced significant positive network externalities: complex manufacturing is likely to locate where other companies with a similar profile are already located because they can draw on existing collective competition goods. The western parts of Central Europe are now the new industrial heartland for medium-tech complex goods, such as cars and light engineering. The region produces more cars per capita than anywhere else in Europe and possibly the world, and a sophisticated supplier network has emerged, particularly in the centrally located Czech Republic.

The upshot of this comparison of reindustrialization in Central and Eastern Europe is therefore that the countries that specialized in complex exports developed a very different profile from the others, with significant implications in terms of their ‘rootedness’ in the areas where they are located. Complex engineering typically takes place in large plants: the automobile

## Endogenous Coordination

industry and its suppliers may be the typical examples of this, but chemical and pharmaceutical companies, as well as light sophisticated engineering require huge up-front investments in capital and, to a lesser extent, skills – or, in this case, the presence of specific skills associated with that type of manufacturing at least precludes a rapid exit when the environment turns more hostile. This combination of a reliance on specific skills and capital is absent in the Baltic states and South-eastern Europe, where at least one of the factors is of a ‘generic’ nature, and exit options are therefore, *ceteris paribus*, higher in the latter than in the V4 countries which rely on complex manufacturing. Steel plants, one could argue, are just as ‘rooted’ in their environment as, for example, car plants. Yet steel plants can in fact relatively easily relocate, both within and beyond CEE, since they rely less on skilled workers and, perhaps most importantly, owners can quite easily shift production capacity to more modern plants elsewhere if that appears to be more beneficial. Textile plants and other small units of light manufacturing are, as a result of their different capital and skill requirements, very easy to move in comparison with car and chemical plants. In sum, the different ‘leading sector’ profiles that emerged in the reindustrialization of the region thus presented companies on the whole with long-term versus short-term time horizons. In complex industries, they are forced to stay; in industries with a basic profile they are considerably more footloose.

### 3. Asset specificity and bottlenecks: From low-wage location to high value-added manufacturing

The second condition for coordination beside the low exit options concerns the provision – or perhaps more accurately the lack – of skills during the transition to capitalism. Most (possibly all) multinationals settled in the region in search of low labour costs – in the early 90s, wages in Central Europe were considerably below wage levels in the West, even controlling for lower labour productivity in CEE. Moreover, many companies were aware of the relatively high-skill levels: even though the pre-1989 production and productivity statistics turned out to be deeply misleading, and Central Europe was not quite the industrial powerhouse that many westerners had thought for several decades, training systems in many Central European countries often were adopted during the Habsburg period and therefore resembled the powerful, robust (west-) German training system. In addition, many governments made an effort, in an attempt to rapidly reindustrialize, to attract foreign capital through privatizations and especially tax holidays and subsidies (often supported by the EU's PHARE programme). Add to this the high unemployment rates, which made recruitment of skilled labour a relatively easy task, and produced a relatively docile workforce happy to have a job at all in the rapidly unraveling Central-European labour market, and there is little doubt that the multinationals' motivations may have been severely skewed toward low costs. This location strategy of MNCs was reflected in the initial low Relative Unit Values (RUV) of the products they produced.<sup>1</sup> Taking the case of the automotive sector, Central Europe started

---

<sup>1</sup> The formula to calculate the RUV is: (Total value of exports in sector A for region X/total volume in units of exports in sector A for region X) / (Total value of EU exports in sector A/total volume in units of EU exports in sector A). RUV is a proxy to measure the degree of sophistication and value of the exported products, correcting for the endogenous developments within and cyclicity of the industry as a whole.

## Endogenous Coordination

at a RUV level that was less than one-fifth of the EU average in the early 1990s, and in the car industry specifically only about a quarter of the unit value relative to production in Spain and Portugal (Scepanovic 2009).

By the year 2000, however, many of the multinationals, especially in the motor vehicle and related industries, started shifting their production profile away from the relatively low-end, low value-added cars that they had been making up until then toward the high mid-end first, and high-end cars and car parts afterwards. The VW Group was the front-runner: by 2000, production in Škoda moved up from the low-tech Favorit to the sophisticated Octavia and Fabia, with more R&D autonomy for the years to come. Similarly, the VW factory in Bratislava shifted production from the entry-level VW Polo to the high-end sport utility vehicles (SUV) variably known as Audi Q7, VW Touareg or Porsche Cayenne; and the Audi engine production site in the Hungarian Győr has become one of the world's leading engine producers (Janovskaia, 2007). At about the same time, sophisticated multinational complex systems suppliers such as Bosch, Valeo, VDO, and Delphi entered the region: by 2007, the Czech Republic was home to around 200 of them. Several of these – such as Siemens, VDO and TRW – set up R&D centers in the country (Janovskaia 2007). Overall, as Scepanovic (2009) suggests, the RUV of the car industry in CEE converged on and by 2002 slightly surpassed that of the Iberian peninsula.<sup>2</sup>

---

<sup>2</sup> It is too early to tell exactly why the V4 appear able to avoid the low-value added path in which southern Europe seems to be caught. One of the difficulties for such an analytical exercise is that the key elements were very similar in both regions: low wages, a rapid transition, attraction of FDI through targeted government policies, and relatively weak labour unions. In fact, from a slightly broader political-economic perspective, conditions for an upward product market shift were possibly better in the Iberian peninsula: some recent acquaintance with capitalism (as opposed to a planned economy), a rapid expansion of government into the economy after 1975 and a more active stance with regard to supply-side policies afterwards (Boix, 1998; W.R. Smith, 1998), and trade unions who had been associated with opposition to the dictatorships instead of (with the exception of Poland) the transmission belts that unions often were in CEE.

The effects of this slow but unmistakable upgrading process in the car industry specifically and in complex industries in general in the V4 have been important. Upgrading has several components that have to move in tandem in order for them to have the desired effect: skills need to be redefined and their acquisition organized, technology upgraded, supplier networks need to move, and infrastructure needs to be upgraded. While some of these processes are well within the control of the upgrading companies (especially capital investment), supplier links and infrastructure are less so. But the most interesting area is possibly in skills. After 1989, the previously existing firm-based training systems essentially collapsed, since existing firms that trained went bankrupt and privatized firms stopped training against the background of high unemployment rates, even in the well-performing regions, which assured them with a supply of skilled labour. Public investment in education was extremely low for at least a decade after 1989, and primarily directed toward the acquisition of general skills rather than the complex specific ones that prevailed in the industry. Finally, the temporary emigration of a large section of the relevant younger cohorts, and the massive entry of large fast-growing foreign companies that soak up labour have turned a region which started the transition in the early 1990s with an abundance of skilled workers into a region with significant skills shortages by the early 2000s. The rapid and large-scale process of upgrading thus produced strategic bottlenecks in specific assets such as skills, which could not easily be resolved through a combination of public policies and deep (private and public) pockets.

The relevance of these particular bottlenecks is brought out clearly in a comparison with the upgrading process of French industry in the 1980s and early 1990s. The productivity crisis that France faced after the manifestation of the crisis of its economic model in the first half of the 1980s led to very similar bottlenecks: both skill formation systems and supplier links were weak, and

## Endogenous Coordination

endangered the ability of large firms to modernize their production processes and, on the back of that, their product market strategies (Hancké 2002: 57-82). Yet the background conditions were very different for French firms. First of all, they could rely on a vast array of state policies that supported them; in fact, large firms in France simply hijacked government policies in areas such as labour relations and regional development to build robust skill formation and technology transfer systems. In addition, and the most important characteristic in comparison with Central Europe, the skills and capabilities that French firms required of their workers and suppliers were considerably more generic: upgrading in France in the period between 1985 and 1995, the peak period of industrial adjustment, involved a modernization of the existing mass-production model into a more flexible one that relied on tight control of development at the center and standardized off-the-shelf skills and parts. The public educational system produced large numbers of post-secondary 'technical' workers (Courtois 1995; Dubar 1996: 63-73), and suppliers were organized in tight networks around the large firms, producing according to specifications designed in the center without much direct reliance on the abilities that suppliers may have acquired (Hancké 1998). France thus never faced the type of asset shortages that companies in the V4 faced, which had its roots in the need for more specific skills and technological links. These strategic bottlenecks around asset specificity and the interesting and surprising solutions to the problems associated with them are the topic of the next section.

#### 4. Emerging forms of inter-firm coordination

Multinational companies in the Viségrad 4 countries are, as we saw, very different from their counterparts in the other Central European states. Foreign direct investment in the region had a high degree of asset-specificity, and much of the investment in complex production incurred high fixed costs. A plant in the automotive, chemical, or steel industries is highly capital-intensive, and often requires a relatively long (>10-15 year) period for the investment to be written off. Precisely because such investments can only be realized over the medium to long run, these companies are unlikely to rapidly relocate in new lower-cost jurisdictions, since that would mean foregoing the gains from the initial investment. In sum, the V4 and to some extent Slovenia thus seem to have attracted long-term, 'rooted' FDI which brings better jobs and pushes economies upwards, while the others appear to have attracted companies with a much more foot-loose capital structure and relatively short-term amortization periods, which allow them to relocate rapidly without incurring tremendous costs as a result of non-realized investment.

Companies may initially have decided to invest in Central Europe because of low labour costs, but around the turn of the century they started to discover the problems associated with that strategy. The most important one was that, as the Central European economies became more integrated in the EU economy, wages slowly started to rise alongside productivity. While trade unions appear careful (or too weak) to negotiate inflationary wage settlements in most V4 countries, real wages in the export sector in the V4 have nonetheless increased substantially over the last decade. Another, related, issue was that companies began to face skill bottlenecks as the result of two mutually reinforcing processes. As more foreign companies took advantage of

## Endogenous Coordination

the beneficial labour market conditions in CEE, and often a large part of the relevant age groups sought employment outside their country of origin, the number of available workers fell rapidly. Second, companies lacked adequately qualified labour due to the complete (Poland) or partial (Slovakia, Czech Republic) dismantling of vocational and technical training systems that had been established before 1989. Finally, the remnants of vocational and technical training have been simply inadequate for the industrialization trajectory that the V4 have adopted, since they were organized along the traditional Soviet-era industrial lines emphasizing the skills for heavy-basic instead of complex industries.

The effect of these different pressures has been that the level of specific skills in younger age cohorts, and particularly those of the type that such fast-growing high-value added export sectors require, has fallen rapidly. A similar development took place in the relations with suppliers: a large multinational firm in an assembly-based industry such as automobiles and consumer goods is ultimately only as good as its suppliers – of which there were few indigenous ones left after 1989. For a while firms avoided these types of bottlenecks by importing the necessary parts from the West, but relatively high transportation costs made such a strategy at best a temporary stop gap. Thus large firms were forced to negotiate with their suppliers how they would settle in CEE or arrange for domestic firms to upgrade their operations and become suppliers.

The potential solutions to these bottlenecks – resolving the skills shortage and technical upgrading of suppliers – led to well-known collective action problems. The problem takes its paradigmatic form in the area of skills: if company A sets up an in-house training programme to alleviate the skill shortages it experiences, then company B has a strong incentive not to do the same and instead poach the workers trained by A – which leaves A, in an

open labour market (i.e. assuming that skills are to a large degree transferable within industry and workers free to change jobs), with only two options: either abandon training (lest the company subsidizes training among its competitors) or cooperate with B. The first option, which leads to a low-skill equilibrium, is far from optimal (though not unheard of, as Finegold & Soskice 1988 analyze for the UK); the result is that A abandons the training system and thus gradually ceases production as skills dry up. But the medium to long-term investment horizon of the newly established companies in CEE makes that a very unfavourable move: unless A is willing to divest after only a few years and thus incur significantly negative returns on its investment, A is forced to stay in the market. The alternative option – cooperation – is therefore a considerably more attractive one, but this one runs into the standard problem that in the absence of binding sanctions neither A nor B will contribute to the public good that skills have de facto become. The stalemate that ensues as a result of this failure to provide public goods is, other things being equal, impossible to overcome without a third party enforcing cooperation, a role usually played by the state or private associations in most OECD countries. Yet governments have been reluctant to play such a dirigiste role in the labour market of most CEE economies, and the few attempts to build non-state associational governance mechanisms to handle these types of collective action problems (by making membership of Industry Chambers compulsory, for example) were abandoned quickly in most of the places where they were tried.

As a result of the fast growth in production volume in the region, labour force growth was significantly below the needs of the many multinational companies locating in the central region of the V4, even when correcting for productivity growth. Being large operations, car plants often rapidly depleted the available skilled workforce (a fortiori when they all located in the same

## Endogenous Coordination

area with a relatively tight labour market to begin with), and they faced the skills bottleneck earlier than companies in other industries would. The solution to this hard constraint has been that car assembly plants, especially Volkswagen (VW), one of the earliest western investors in the region, have started recruiting workers from a slightly wider area and train them themselves. But other companies have also increasingly located in the region, usually as a result of the positive network externalities associated with being a second-mover: they benefit from the policies and institutions that the first mover and local governments have put in place without having to invest in them. In Slovakia, for example, VW has been recruiting and training workers from 50-60 km away and bussing them into the Bratislava area. When Peugeot (PSA) opened a car plant in the area of Trnava a few years later, most of the workers quite reasonably preferred to work close to home over the daily trip to Bratislava. VW thus not only implicitly trained workers for PSA but also failed to resolve the key problem at the basis of the reinstatement of firm-level training, since it lost its trained workers to PSA.

This dilemma was resolved through the construction of a complex network of non-market private actors that offered VW a chance to negotiate cooperation directly with PSA. VW used its close relations with the local German Chamber of Commerce to start conversations with the French Chamber first – thus opening indirect communication with PSA – and other Chambers, especially the Slovak and the American Chambers, afterwards. Once agreement on cooperation had been reached between the main companies, these Chambers then set out to organize a de facto industry-wide training system with them – and acted as enforcers, less by stick than by carrot – using their local political clout to induce the local and national governments to fill in the institutional and policy holes (such as the provision of basic general industry skills and skill certification).

As the circumstances have forced major multinational firms to react to the issue, the process has seen an evolution from worker poaching in the case of PSA Trnava and VW Bratislava to different forms of coordination. Companies did not turn to existing institutions and organizations (which were largely absent anyway) but started building voluntarist forms of private network arrangements. These networks take different forms, but they usually seem to involve local Chambers of Commerce of the FDI-sending and of the FDI-receiving countries, local and regional authorities, and central support from public actors such as the Ministries of Labour, Education or Economic Affairs. The role of the Chambers of Commerce is perhaps the most surprising: since many of the companies were large firms (often of German origin), who were privileged partners of the local (German) Chamber, they used this institutional vehicle to build links with other companies, not directly but through the different Chambers, asking them to provide a cooperative framework that increased and secured contributions by individual companies to the collective good. These proto-institutional frameworks built around the Chambers and the large foreign investors became the building blocks for local forms of coordinated problem-solving in which collective goods – club goods, in fact, but often with spill-overs into the rest of the local economies – were produced and access to them was regulated through these governance networks.

Coordination can therefore be constructed *de novo*, but this process mirrors the collective action dynamics associated with industrial upgrading in other CMEs such as Germany and Japan. Inter-firm coordination, at least of the type that extends beyond immediate ad hoc solutions, emerges when a third party has the ability to enforce (at least in the limiting case) compliance with the arrangement that produces the public good. To a large extent international Chambers of Commerce (ICCs, meaning national chambers of

## Endogenous Coordination

commerce in a foreign country) can rely on carrots for this soft form of enforcement: since the MNCs depend on them for many important but often intangible services and local representation, they will also look favourably upon requests by ICCs to help resolve a wider problem. But there appears to be more to this than simple goodwill. ICCs actually play a crucial role in informal dispute settlement through mediation between MNCs and local suppliers: contract enforcement through courts may take several years, is unpredictable, and therefore costly – something, in short, that MNCs would prefer to avoid (Pistor 1996 offers an early analysis of this for Russia). ICCs offer mediation services that allow the problem to be resolved quickly, and the vast majority of disputes in fact seems to pass through the ICCs' mediation and arbitration services rather than through local courts (some informal estimates suggest up to 98%, but this is likely to be less in developed capitalist economies with a long-standing tradition of commercial law courts and more in relatively young capitalist economies of the sort that we find in Central Europe). This club good is the sanctioning capacity that supports the carrot when ICCs try to negotiate a collective solution to training bottlenecks.

## 5. Conclusion

By the mid-2000s, embryonic forms of strategic coordination between multinational companies were emerging in Central-Eastern Europe, one of the places where such informal collective arrangements would ex ante seem highly unlikely. MNCs located there for very opportunistic, possibly even relatively short-sighted cost-related reasons, governments and non-market actors appeared too weak to push for such forms of business coordination and inter-firm cooperation, and constructing this type of coordination is, even in the best of cases, considerably more difficult – possibly impossible – than

destroying it. This outcome was, somewhat ironically, linked to the nature of FDI in the region itself. Greskovits (2005) has drawn our attention to what he calls 'thorough versus shallow' paths of industrialization. The crucial operational difference between these two models of industrialization can, in more analytical language, be captured in the time horizons that foreign investors face. In the case of 'shallow' industrialization, the part of investment made up by fixed costs is small, and capital is, as a result, highly mobile; in the case of 'thorough' restructuring, the part of fixed costs is high, capital is therefore considerably less mobile, and the structural asymmetry vis-à-vis labour and suppliers is substantially mitigated: problems that occur simply have to be resolved, and that often includes negotiations with workers and their representatives in industries such as the automotive industry, and with suppliers and regional authorities. In short, high set-up costs limit exit options of multinational companies; as a result they cannot simply leave when faced with bottlenecks, but have to weigh the costs of divesting against the costs associated with resolving the problems that the bottlenecks produce. When production profiles become more asset-specific, as they seem to have done in the last decade in the region and especially in the industry examined above, both the costs incurred as a result of problems associated with bottlenecks and the relative costs of divesting rise steeply.

This particular arrangement, which ties capital locally after an initial investment, is at the basis of the emerging modes of inter-firm coordination in Central Europe that are documented in this paper. If the relative advantages of problem-solving outweigh other considerations, companies are, all other things being equal (which they can be taken to be in this particular case) prone to engage in problem-solving. However, in the absence of existing local or national policies and institutions that provide a blueprint or at least a policy matrix that companies can draw on, they are forced to solve problems

## Endogenous Coordination

on their own. The issue then is that the solution to a problem that one company is trying to resolve is likely to produce positive externalities for other companies – in effect, the solution has the key characteristics of a collective good: it is non-rival and excludability is low. Under those conditions, as we know since Olson, the good is not produced or consumption of the good is subject to selective incentive mechanisms. Because of the small number of actors, the second is highly possible – but hard to build in the absence of external sanctioning institutions. This is where coordination across firms comes in. If a small number of firms can be persuaded that cooperation to produce a good is both in the individual and the collective interest, they are likely to contribute. However, for that to happen, some deliberative and sanctioning mechanism has to be in place that allows them to agree on a joint initiative in the absence of a strong state that would offer this and enforce cooperation. The international Chambers of Commerce, whose reputation allows them to nudge MNCs into cooperation and whose exclusive provision of a club good that is crucial for the MNCs gives that nudge some bite, provides this mechanism.

Strategic coordination between large firms is therefore, and somewhat surprisingly, possible without a battery of historical conditions present, even in the low-trust circumstances of mid-2000s Central Europe, a setting in which it is by all accounts highly unlikely to emerge. However, the historical hypothesis correctly suggests that strategic coordination can be a highly asymmetric process. While building coordination requires a complex set of conditions, destroying it can be relatively simple, with small changes in the environment jeopardizing this fragile process, and thus undermining its sustainability. Identifying some of the necessary conditions for strategic coordination to emerge without a supporting history therefore begs the

question how such benign processes can be sustained in the absence of historical frameworks conducive to sustainability.

## References

- Aoki, Masahiko (2005), 'Endogenizing Institutions and Institutional Changes', Manuscript, Stanford University
- Arrow, Kenneth (1974), *The Limits of Organization*, New York: Norton.
- Bohle, Dorothee and Bela Greskovits (2007), 'Neoliberalism, embedded neoliberalism and neocorporatism: towards transnational capitalism in Central and Eastern Europe.' *West European Politics*, 30 (3), 433-466.
- Boix, Carles (1998), *Political parties, growth and equality: conservative and social democratic economic strategies in the world economy*. Cambridge: Cambridge University Press.
- Cohen, Amy (2010), 'Governance legalism: Hayek and Sabel on Reason and Rules, Organization and Law', *Wisconsin Law Review*, forthcoming.
- Courtois, Gérard (1995), 'Education et Formation: Grandes tendances' (in) Cordellier, Serge & Elisabeth Poisson (eds.), *L'Etat de la France*. Paris: La Découverte, pp. 85-90
- Crouch, Colin, Patrick Le Galès, Carlo Trigilia and Helmut Voelzkow (2001), *Local Production Systems in Europe: Rise or Demise?* Oxford: Oxford University Press
- Culpepper, Pepper (2001), 'Employers, Public Policy and the Politics of Decentralised Cooperation in Germany and France' (in) Hall, Peter and David, Soskice (eds.), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford University Press, pp. 275-306.
- Dubar, Claude (1996), *La Formation Professionnelle Continue*. Paris: La Découverte.
- Feldmann, Magnus (2007), 'The Origins of Varieties of Capitalism: Lessons from post-socialist transition in Estonia and Slovenia' (in) Bob Hancké, Martin Rhodes & Mark Thatcher (eds.), *Beyond Varieties of Capitalism: Conflict, Contradictions and Complementarities in the European Economy*. Oxford University Press, pp. 328-350.
- Finegold, David, and David W. Soskice (1988), 'The Failure of Training in Britain: Analysis and Prescription.' *Oxford Review of Economic Policy*. 4 (3), 21-53.
- Greskovits, Bela (2005), 'Leading Sectors and the Varieties of Capitalism in Eastern Europe', *Actes de Gerpisa*, 39: 13-128.
- Hall, Peter and Daniel Gingerich (2009), 'Varieties of Capitalism and Institutional Complementarities in the Political Economy: An Empirical Analysis.' *British Journal of Political Science* 39 (3), 449-482.
- Hall, Peter and David, Soskice. 2001. (Eds.) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford University Press, 2001.
- Hancké, Bob (1998), 'Trust or Hierarchy? Changing relationships between large and small firms in France.' *Small Business Economics* 11:3, pp. 237-52.
- Hancké, Bob (2002) *Large Firms and Institutional Change: Industrial Renewal and Economic Restructuring in France*. Oxford: Oxford University Press.

- Hancké, Bob, Martin Rhodes and Mark Thatcher (eds.) (2007), *Beyond Varieties of Capitalism: conflict contradictions and complementarities in the European economy*. Oxford: Oxford University Press.
- Hayek, Friedrich A. (1967), *Studies in Philosophy, Politics and Economics*. London: Routledge & Kegan Paul.
- Innes, Abby (2010), 'Are democratic welfare states compatible with emerging markets? Evidence from Central Europe'. Manuscript, LSE.
- Janovskaia, Alexandra (2007), *Industrial upgrading in the automotive MNC subsidiaries in Central Europe: The case of the VW Group*. Manuscript, LSE.
- Levy, Jonah (1999), *Toqueville's Revenge. Dilemmas of institutional reform in post-dirigiste France*. Cambridge MA: Harvard University Press.
- Martin, Cathie Jo and Duane Swank (2011) 'Gonna party like it's 1899: Party systems and the origins of varieties of coordination' *World Politics* 63 (1), pp. 78-114.
- Molina, Oscar and Martin Rhodes (2007) 'The Political Economy of Adjustment in Mixed Market Economies: A Study of Spain and Italy.' In Hancké, Bob, Martin Rhodes and Mark Thatcher (eds.). 2007. *Beyond Varieties of Capitalism: conflict contradictions and complementarities in the European economy*. Oxford: Oxford University Press, pp. 223-252.
- Nölke, Andreas and Arjan Vliegthart (2009) 'Enlarging the Varieties of Capitalism: The Emergence of Dependent Market Economies in East Central Europe.' *World Politics*, 61 (4), pp. 670-702.
- Ross-Schneider, Ben and David Soskice (2009), 'Inequality in developed countries and Latin America: coordinated, liberal and hierarchical systems.' *Economy and Society* 38 (1), pp. 17-52.
- Sabel, Charles (1993) 'Studied Trust: Building New Forms of Cooperation in a Volatile Economy', *Human Relations* 46 (9): 1133-70.
- Sabel, Charles (1995), 'Design, Deliberation and Democracy: On the new pragmatism of firms and public institutions', accessible via <http://www2.law.columbia.edu/sabel/papers/Design.html> (accessed 16 Nov 2010).
- Scepanovic, Vera. 2008. 'Varieties of foreign-led industrialisation: Comparison of automobile industry development in East Central and Southern Europe.' Department of Political Science, Central European University. PhD Dissertation Prospectus.
- Smith, W.Rand. 1998. *The Left's dirty job: The politics of industrial restructuring in France and Spain*. Pittsburgh: University of Pittsburgh Press.
- Stiglitz, Joseph. 2000. 'Whither Reform? Ten years of the Transition.' Keynote Address, Annual World Bank Conference on Development.

# Endogenous Coordination

## Recent LEQS papers

- Crescenzi, Riccardo, De Filippis, Fabrizio & Pierangeli, Fabio.** 'In tandem for cohesion? Synergies and conflicts between regional and agricultural policies of the European Union' LEQS Paper No. 40, July 2011
- Somek, Alexander.** 'The Social Question in a Transnational Context' LEQS Paper No. 39, June 2011
- Mabbett, Deborah.** 'A Rights Revolution in Europe? Regulatory and judicial approaches to nondiscrimination in insurance' LEQS Paper No. 38, May 2011
- Karaman, K. Kivanç & Pamuk, Şevket.** 'Different Paths to the Modern State in Europe: The interaction between domestic political economy and interstate competition.' LEQS Paper No. 37, May 2011
- Scharpf, Fritz W..** 'Monetary Union, Fiscal Crisis and the Preemption of Democracy.' Paper presented at the LEQS Annual Lecture 'Saving the Euro – at the expense of democracy in Europe?' on 12 May 2011 at the London School of Economics, LEQS Paper No. 36, May 2011
- Zigante, Valentina.** 'Assessing Welfare Effects of the European Choice Agenda: The case of health care in the United Kingdom.' LEQS Paper No. 35, May 2011
- Hobolth, Mogens.** 'European visa cooperation: interest politics and regional imagined communities.' LEQS Paper No. 34, May 2011
- Monastiriotis, Vassilis.** 'Regional Growth Dynamics in Central and Eastern Europe.' LEQS Paper No. 33, April 2011
- Johnston, Alison.** 'The Revenge of Baumol's Cost Disease?: Monetary Union and the Rise of Public Sector Wage Inflation.' LEQS Paper No. 32, March 2011
- Glendinning, Simon.** 'Europe, for example.' LEQS Paper No. 31, March 2011
- Winkler, Heinrich August.** 'Greatness and Limits of the West. The History of an Unfinished Project.' LEQS Paper No. 30, February 2011
- Dani, Marco.** 'Assembling the fractured European consumer.' LEQS Paper No. 29, January 2011
- Joerges, Christian.** 'Unity in Diversity as Europe's Vocation and Conflict's Law as Europe's Constitutional Form.' LEQS Paper No. 28, December 2010
- Kylstad, Ingrid.** 'Turkey and the EU: A 'new' European identity in the making?' LEQS Paper No. 27, November 2010
- Costa-i-Font, Joan.** 'Regional Single Currency Effects on Bilateral Trade with the European Union.' LEQS Paper No. 26, October 2010
- Erkan, Ozgur.** 'Spain's Referendum on the European Constitutional Treaty: A Quantitative Analysis Within the Conceptual Framework of First and Second Order Elections.' LEQS Paper No. 25, June 2010
- White, Jonathan.** 'Left, Right and Beyond: The Pragmatics of Political Mapping.' LEQS Paper No. 24, June 2010
- Monastiriotis, Vassilis & Zartaloudis, Sotirios.** 'Beyond the crisis: EMU and labour market reform pressures in good and bad times.' LEQS Paper No. 23, June 2010

**LEQS**

European Institute  
London School of Economics  
Houghton Street  
WC2A 2AE London  
Email: [euroinst.LEQS@lse.ac.uk](mailto:euroinst.LEQS@lse.ac.uk)

<http://www2.lse.ac.uk/europeanInstitute/LEQS/Home.aspx>

