

**VARIETIES OF CAPITALISM IN CENTRAL EASTERN EUROPE –
COORDINATED, LIBERAL, OR DEPENDENT MARKET ECONOMIES?**

THE INSTITUTIONAL IMPACT OF GERMAN FOREIGN DIRECT INVESTMENT
IN HUNGARY

By

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ABSTRACT

The thesis is embedded in the broader debate revolving around *the Varieties of Capitalism* approach that has become a widely used framework in comparative political economy. As the approach has been developed on Western OECD countries, its applicability to Central Eastern Europe is debated. With *Varieties of Capitalism* as a point of reference, German FDI in Hungary will be analyzed. The development of German investments in Hungary and the motivations for German TNCs to locate production sites will be examined. In a further step, the impact of German firms on Hungarian institutions is analyzed. A focus of this analysis is on industrial relations, vocational training and industrial upgrading. The thesis is informed by quantified datasets and several interviews with managing staff of Hungarian subsidiaries of German transnational corporations. The results of the analysis, as will be argued, are not consistent with the assumptions generated by the *Varieties of Capitalism* framework. Transnational corporations evaluate and try to take influence primarily according to the profitability and competitive quality of institutions. Institutional complementarity as suggested by Varieties of Capitalism approach may therefore be overrated a concept for analyzing transnational capitalism in CEE.

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LIST OF ABBREVIATIONS

CEE	Central Eastern Europe
CME	Coordinated Market Economy
DME	Dependent Market Economy
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GHCOG	German-Hungarian Chamber of Industry and Commerce
LME	Liberal Market Economy
R&D	Research and Development
TNC	Transnational Corporation
TNCM1	Transnational Corporation Manufacturing 1 (Interview)
TNCM2	Transnational Corporation Manufacturing 2 (Interview)
TNCM3	Transnational Corporation Manufacturing 3 (Interview)
TNCS	Transnational Corporation Sales (Interview)
V4	Visegrád States
VoC	Varieties of Capitalism
WE	Western Europe

INTRODUCTION

An hour's walk through Budapest is sufficient to become aware of the degree of German presence in Hungary. As 27% of the tourists are Germans¹, one is likely to catch up some German phrases in the streets. Obviously, not only tourists have been flocking to the country in the Carpathian Basin in the last years. Entering one of the many shopping malls, one looks into the stores of *MediaMarkt*, *Saturn* and *Praktiker*, *OBI* and the like. Leaving the inner city, one passes the plants and subsidiaries of various major German-based companies, such Siemens, Knorr-Bremse, or RWE. Since the early 1990s more and more German investors have come to Hungary, foreign direct investment (FDI) from Germany has become an essential factor of the Hungarian economy. It accounts for a fifth of total FDI, and this in a country whose inward FDI stock is remarkably high, at 62% of GDP².

The radical increase of FDI after the demise of communism contributes considerably to globalization, therefore, FDI is a major topic of investigation and discussion in the globalization literature. Also, the qualitative value of FDI for developing countries is subject to academic debate that, put simply, revolves around the question whether FDI is good or bad and which kind of FDI is needed for the sustainable development of countries not belonging to the core of the world economy. This question is naturally of considerable interest for the (post-)transition countries of Central Eastern Europe (CEE)³. Advocates of FDI, such as Damijan et.

¹ Thomas Petermann, Christoph Revermann, and Constanze Scherz, *Zukunftstrends Im Tourismus* (Berlin: edition stigma, 2006), 55.

² Calculated for 2008 based on data of GHCOG and eurostat. The total FDI stock of Hungary in 2008 was €62.7bn at a GDP at €101.7bn.

³ Here used for the Baltic States, The Visegrád States (Czech Republic, Hungary, Poland, and Slovakia; henceforth: V4) and Slovenia.

al.⁴ point to the positive role of FDI regarding technology transfer to transition countries, while others point to the negative effects, such as distortion of markets and rent-seeking as a prime motivation of investors to engage in transition countries⁵. Other authors, such as Gary Gereffi, take a middle position showing the ambiguous role that FDI can play in a country's attempt to climb up on the global production chain⁶.

Bearing in mind the growth rates and stock of FDI in the CEE countries, these countries cannot be properly understood and their economic development properly evaluated, without considering the large share of foreign ownership in their economies. While this statement may sound self-evident, it is not. In fact, the currently most proliferating analytical concept, of comparative political economy, Varieties of Capitalism (VoC) runs into theoretical as well as empirical difficulties in the case of the CEE countries.

The VoC approach has been the most widely applied and debated one in the last decade. In their seminal volume⁷, Peter Hall and David Soskice establish a historical-institutionalist framework that combines the macro-level of national institutions with the micro-level of firms engaging in a given institutional environment. They establish a typology of ideal-type political economies, the *liberal market economy* (LME), for which the USA is a paradigmatic case and the *coordinated market economy* (CME), which is best represented by Germany. The two ideal types, though very different in nature, are considered equally efficient. Therefore, VoC can

⁴ Jože P. Damijan and others, "Technology Transfer through Fdi in Top-10 Transition Countries: How Important Are Direct Effects, Horizontal and Vertical Spillovers?," *William Davidson Working Paper* 549, no. February 2003 (2003). <http://wdi.umich.edu/files/publications/workingpapers/wp549.pdf>.

⁵ Joze Mencinger, "Does Foreign Direct Investment Always Enhance Economic Growth," *KYKLOS: International Review for Social Sciences* 56, no. 4 (2003).

⁶ Gary Gereffi, "Global Production Systems and Third World Development," in *Global Change, Regional Responses*, ed. Barbara Stalling (Cambridge: Cambridge University Press, 1997).

⁷ Peter Hall and David Soskice, *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford: Oxford University Press, 2001).

explain the existence of very different political economies in a globalizing world and provides with convincing insights, why convergence with the neoliberal model has not materialized in the way that many expected in the early 1990s.

When it comes to CEE, however, scholars applying VoC run into several difficulties. First, CEE countries cannot be understood as LMEs or CMEs, although several scholars try to do so⁸. A second issue that brings us to the topic of FDI, and that renders the heuristic value of the VoC framework in CEE troublesome, is its methodological nationalism. Admittedly, Hall and Soskice and the later contributors of the VoC literature pay attention to transnational engagements by introducing the concept of *institutional arbitrage* the VoC framework focuses primarily on institutional setups *within* national borders.

Hence, when applying the VoC framework to CEE several questions arise. First, can relatively young and instable institutional systems such as are met in CEE be understood by means of the VoC framework? Secondly, can a framework that focuses on equilibrium-seeking national institutional systems provide with valid insights for countries whose foreign ownership and FDI saturation is as high as most of the CEE countries? Thirdly, can VoC explain why firms from CME countries such as Germany increasingly invest in CEE? Fourthly, what is the effect of transnationalization? The VoC framework would suggest that relocations and investments of firms abroad lead to an enforcement of the institutional environments, both in the home and the host country. Bearing in mind the static perspective of VoC, this would mean that German FDI in CEE would make Germany even more a CME and the CEE countries more of whatever they are.

⁸ Lawrence P. King, "Central European Capitalism in Comparative Perspective," in *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementaries in the European Economy*, ed. Bob Hancké, Martin Rhodes, and Mark Thatcher (Oxford Oxford University Press, 2007). David Lane, "Emerging Varieties of Capitalism in Former State Socialist Societies," *Competition and Change* 3 (2005).

In this thesis I will try to approach the puzzles outlined above. This seems worthwhile an undertaking, as several of these questions have not been exhaustively addressed so far, although more and more contributions are currently embarking on discussing the value of the VoC framework in CEE⁹.

The aim of this thesis is twofold. Firstly, this dissertation represents a contribution to debate about the nature of CEE countries in the context of the VoC approach by Hall and Soskice. By focusing on the Visegrád states (V4) and within this group, on Hungary, I will address the question to what extent the Varieties of Capitalism approach can help us understand the nature and direction of the countries' institutions and developmental paths. The importance of FDI, especially German FDI, will be of central interest in answering these questions.

Secondly, the interest of this thesis is how German firms that engage in Hungary evaluate and influence the Hungarian institutions. As already noted above, the presence of German firms and German FDI in Hungary is substantial. Therefore, German firms should have the capability to have a considerable impact on Hungary's institutions and its economy as a whole. The question is, whether German firms are indeed influencing the Hungarian institutional setup, and if they do, what direction this influence takes. We can therefore formulate two tightly connected research questions:

Research question 1: How and why do German firms engage in the institutional environment in Hungary and what implications does their presence in Hungary have for the future trajectory of the Hungarian institutions and economy?

⁹ Andreas Nölke and Arjan Vliegenhardt, "Enlarging the Varieties of Capitalism: The Emergence of Dependent Market Economies in East Central Europe," *World Politics* 61, no. 4 (2009). David Lane and Martin Myant, *Varieties of Capitalism in Post-Communist Countries* (Basingstoke: Palgrave Macmillan, 2007).

Research question 2: Based on the results of this inquiry, which implications can be derived about the applicability of VoC to the CEE countries as well as the general validity of the Hall/Soskice approach?

Trying to answer these questions, this thesis aims to produce viable results that are embedded in and contributing to the current debate about comparative capitalism and developmental paths of Central Eastern European countries.

CHAPTER 1: ARGUMENTATION AND METHODOLOGY

The thesis is divided in two parts. Chapter 2 will entail a detailed discussion and critique of the contemporary debate on capitalism in CEE and the VoC framework. After having provided a brief description of the Hall/Soskice framework, I will proceed with a review of the current literature that tries to understand Central Eastern Europe by means of the VoC approach and elaborate on the most debated issues of that literature. I will address the question whether the VoC framework's concepts of institutional arbitrage and comparative institutional advantages can be fruitfully applied when it comes to Western FDI in CEE. The chapter is concluded with a brief outline of VoC's implications regarding the future trajectory of CEE. The theoretical chapter 2 therefore establishes the "toolbox" to answer the two research questions of this thesis by introducing the VoC approach as well as its critics and by pointing out the most controversial issues concerning its validity and viability for CEE.

In chapter 3, the institutional impact of German firms in Hungary will be illuminated by analyzing the motivation of German firms to locate in Hungary, as well as their assessment of the Hungarian institutional environment. Subsequently, three fields which are closely related to and embedded in the VoC framework, industrial upgrading, industrial relations, and vocational training, will be analyzed with respect to the institutional impact that German firms have on them.

Admittedly, focusing on merely two core institutions of the VoC framework (industrial relations and vocational training) is somewhat problematic. As Nölke and

Vliegenhart point out, focusing on only few institutions “may lead to problematic conclusions because a narrow focus does not allow for an identification of the quintessential interdependencies between different institutions within one capitalist model”¹⁰. Being aware of these pitfalls, the aim of this thesis is therefore not to develop a consistent model of the Hungarian or German institutional setup. Rather the analysis of two tightly connected institutions and industrial upgrading, as a result of a certain institutional configuration, is carried out in order to trace and highlight possible complementarities or dysfunctionalities in the institutional setup of Hungary as well as in the strategies of German firms acting inside or outside of this institutional environment.

German firms in Hungary were chosen as a topic of investigation because Germany is regarded the paradigmatic case of a coordinated market economy, while Hungary, twenty years after the end of socialism, has developed a consolidated economy that is highly dependent on (German) FDI. The focus on the interdependence on Hungarian institutions and German firms therefore promises to deliver valuable insights not only about the strategies of business groups but also about the political economies of the two countries in general. The focus will be on the manufacturing sector, for this is the sector that German firms are especially involved in Hungary and that is of special importance for the Hungarian economy. Furthermore Germany, according to VoC, has a discrete comparative advantage in manufacturing the goods whose production is more and more done in Hungary (e.g. transport equipment). Therefore, the focus on manufacturing is likely to produce valuable insights both about the two countries as well as the Varieties of Capitalism approach in general.

¹⁰ Nölke and Vliegenhardt: 672.

Methodologically, I will rely on a mixed-methods approach that makes use of quantified data sets and collected data. Naturally, accessible data-sets are indispensable for illuminating the quantitative and qualitative presence of foreign capital in Hungary and institutional developments.

Furthermore, several interviews that I conducted in spring 2010, whose content serves as the foundation of a qualitative analysis. The strategy to include semi-structured elite interviews with leading managing professionals from subsidiaries of German TNCs in Hungary was chosen primarily for the reason that the interviews give valuable insight into the strategies and perceptions of *firms*, and can thus it be weighed nicely against the outspokenly *firm-centered* VoC perspective. Secondly, the interviews with top-level professionals provide with valuable insider knowledge from the very meeting point of German TNCs' strategies with the Hungarian institutional environment. It is understood, that information gained in interviews is anecdotal, subjective and may be influenced by corporate interests or personal opinions. The statements and results that are derived from the interviews are therefore reflected upon, treated with caution and not considered paradigmatic or universally valid. However, the insights gained directly by managers of German TNCs in Hungary are deemed highly relevant to answer our research questions that enquire into the institutional impact of German firms in Hungary and the heuristic value of VoC.

CHAPTER 2: VARIETIES OF CAPITALISM AND CENTRAL EASTERN EUROPE

This chapter will give an overlook over the contemporary debate about the VoC framework and touch upon some of the most controversial assumptions of VoC. As this thesis engages in an analysis of German firms in Hungary, the focus of this chapter will be on the applicability of VoC to CEE. The chapter provides with an overview over the current VoC debate and will expose the problematic issues of the Hall/Soskice approach when it comes to Western FDI into Central Eastern European countries. The insights gained in this chapter will offer the theoretical background that will be made use of in the subsequent empirical chapter.

2.1 Varieties of Capitalism: A Disputed Paradigm

The field of comparative capitalism does not constitute a genuinely novel research interest of scholars of political economy¹¹. In 1965, Andrew Shonfield investigated in the differences between Western capitalist nations and traced the differences in their historically determined institutional configurations¹². In the context of the demise of really existing socialism and the emergence of the globalization debate, the interest capitalist varieties gained further momentum. Michel Albert's *Capitalism against Capitalism* distinguishes American Capitalism from continental European "Rhineland" capitalism¹³. The dichotomy of Anglo-Saxon and Continental European capitalism has been further elaborated on in Hall's and Soskice seminal volume, published in 2001¹⁴. *Varieties of Capitalism* is one of the most cited books in the field of

¹¹ For a detailed account, see Dorothee Bohle and Béla Greskovits, "Varieties of Capitalism and Capitalism Tout Court " *European Journal of Sociology* 50, no. 3 (2009): 356-359.

¹² Andrew Shonfield, *Modern Capitalism* (New York: Oxford University Press, 1965).

¹³ Michel Albert, *Capitalism against Capitalism* (London: Whurr, 1991).

¹⁴ Hall and Soskice.

comparative political economy, hardly any reference list of articles on the broader issue dispenses with mentioning it. The VoC approach also frequently resonates in management literature¹⁵ as well as in journalistic articles¹⁶.

Hall and Soskice introduce two ideal types of co-existing market economies, the *liberal market economy* (LME) as well as the *coordinated market economy* (CME). The USA (LME) and Germany (CME) are the two political economies that come most closely to the ideal types. VoC is resting on the pillars equilibrium, complementarities, and system coordination. Institutional systems within a national economy shape and reinforce each other thereby shaping and reinforcing the political economy as a whole. The institutional systems under examination are *corporate governance, corporate finance, education and vocational training, industrial relations, and inter-firm relations*. Therefore, the VoC approach operates with a rather narrow definition of institutions. LME countries operate in competitive markets in all of the institutional areas, therefore stock market capitalization is high, (un-)employment protection is low, the education system is tailored towards fluid labor markets, and issues of labor-capital relations are dealt with on the firm level. CME countries, such as Germany, are characterized by a greater presence of non-market relationships. They have a high-level of (un-)employment protection, wages are coordinated by bipartite industry-level bargaining. Stock-market capitalization in CMEs is low, and the educational and vocational system is enabling the development of industry- or firm-specific skills.

The popularity of the VoC framework stems from its explanatory power regarding the apparent fact that late 20th and early 21st capitalism has not swiftly converged towards one model, i.e. the neoliberal one, as the early globalization

¹⁵ Peter Boxall, John Purcell, and Patrick M. Wright, *The Oxford Handbook of Human Resource Management* (Oxford: Oxford University Press, 2007), 71.

¹⁶ "Europe's Engine," *The Economist*, March 13th, 2010 2010.

debate had predicted. Apart from the *social* implications of liberalization, VoC is often presented as a functionalist argument why liberalizing an economy along Anglo-American lines may not be an *economically* effective strategy. Also, VoC can explain why some countries do particularly well in some sectors (USA in information technologies, i.e. radical innovations) why others perform better in other sectors (Germany in mechanical engineering). Furthermore the model is very elegant with its inherent parsimony and its assumptions oscillating around two models. As Bohle and Greskovits state, Hall/Soskice approach “effectively combines a *scientific appeal with a normative concern*¹⁷.”

Despite the increasing popularity of the Varieties of Capitalism approach in the early 2000s, not until quite recently has VoC been an issue that dealt extensively with the post-transition countries of CEE. However, recently a changing of the guard has taken place between research focusing on the legacy of state socialism (transitology) and approaches that focus on the path-dependence of capitalism in the post-transition political economies¹⁸. The CEE countries, as Bohle and Greskovits point out, have developed distinct and path-dependent patterns of capitalisms, patterns that are likely to determine the future development of CEE¹⁹. Therefore, the gradual consolidation of political systems, institutional setups and economic systems makes it appealing and worthwhile to analyze post-transformation countries. Indeed, several volumes that behold the region through the VoC lens have been published in the past few years.

¹⁷ Bohle and Greskovits: 361. Italics in original.

¹⁸ Jan Drahokoupil, "After Transition: Varieties of Political-Economic Development in Eastern Europe and the Former Soviet Union", *Comparative European Politics* 7, no. 2 (2009): 279-298, 293.

¹⁹ Dorothee Bohle and Béla Greskovits, "Neoliberalism, Embedded Neoliberalism, and Neocorporatism: Paths Towards Transnational Capitalism in Central-Eastern Europe", *West European Politics* 30, no. 3 (2007): 443-466, 463.

2.2 Varieties of Capitalism and Central Eastern Europe: A review

Reviewing the recent literature that deal with the Varieties of Capitalism approach in the context of the post-transition countries of CEE, three main positions can be detected. First, there are scholars who disagree with the VoC framework on the basis of empirical evidence and a rejection of its theoretical assumptions. One example of this line of argumentation, although mainly concerned with Germany, is Wolfgang Streeck's recent volume²⁰. Also, albeit less pronounced and polemic, Bohle and Greskovits do not adhere to the VoC framework, but challenge its fundamental assumptions and universal value by showing the various dead ends VoC runs into, when it comes to CEE²¹.

A second group of scholars accepts the VoC framework as valid and acknowledges the value of VoC for understanding the core of the world economy, yet shows that the LME/CME dichotomy is of limited use when it comes to analyzing countries outside the OECD. Myant²² shows that the reliance of FDI of the CEE countries as well as their institutional incoherence and instability renders an understanding of those countries exclusively on the grounds of an examination of domestic institutions (VoC) impossible. Other scholars also argue that the VoC framework offers little when it comes to analyzing the CEE countries which are characterized by their dependence on FDI. Instead of rejecting the VoC approach a valid framework to analyze CEE, these authors prefer customizing the framework.

²⁰ Wolfgang Streeck, *Re-Forming Capitalism: Institutional Change in the German Political Economy* (Oxford: Oxford University Press, 2009).

²¹ Dorothee Bohle and Béla Greskovits, "Neoliberalism, Embedded Neoliberalism, and Neocorporatism: Paths Towards Transnational Capitalism in Central-Eastern Europe," *West European Politics* 30, no. 3 (2007). Dorothee Bohle, "Race to the Bottom? Comparative Institutional Advantages? Competition of Capitalisms in the Enlarged European Union," in *Varieties of Capitalisms and Transformation*, ed. Satoshi Mizobata (Kyoto: Bunrikaku, 2008). Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court".

²² Martin Myant, "The Czech Republic: From 'Czech' Capitalism to 'European' Capitalism," in *Varieties of Capitalism in Post-Communist Countries*, ed. David Lane and Martin Myant (Basingstoke: Palgrave Macmillan, 2007).

King states that “the VoC approach has proven durable, and [...] offers great leverage for understanding the institutional make-up of the new capitalist countries of Eastern Europe.”²³ He proposes the term “liberal dependent capitalism” for CEE that is similar to the capitalism found in Western Europe (WE) yet distinct in the sense that it lacks “an effective, Weberian bureaucratic state”. King therefore proposes an analysis of CEE applying VoC, yet without the assumption of Hall and Soskice, that firms and the state act in a complementary way in order to optimize the comparative institutional advantage of the national economy. King is not the only one modifying VoC. Nölke and Vliegenhart propose a new ideal-type of capitalism that is represented by the Visegrád states, namely the *dependent market economy* (DME)²⁴. The DME approach pays attention to the infiltration of the V4 by foreign capital and the powerful presence of TNCs, thereby eliminating one of the already mentioned weak spots of VoC, its inherently national perspective. Institutions of DMEs are distinct from LMEs or CMEs, yet they are equally complementary and mutually enforcing (see section 2.3.2).

A third group of scholars tries to locate the CEE countries *within* the original VoC framework as proposed by Hall and Soskice by adhering to the CME-LME dichotomy proposed by Hall and Soskice. Some scholars observe that in CEE, national institutional setups can be found that accommodate both, CME- and LME-like institutions, e.g. the welfare provisions by the state are at levels of WE countries, while the system of industrial relations has more resemblance with that of the U.S. Therefore, they portray the V4 as “mixed” market economies²⁵. Others produce very

²³ King, 326.

²⁴ Nölke and Vliegenhardt.

²⁵ Vlad Mykhnenko, "Strengths and Weaknesses of 'Weak' Coordination: Economic Institutions, Revealed Comparative Advantages, and Socio-Economic Performance of Mixed Market Economies in Poland and Ukraine," in *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementaries in the European Economy*, ed. Bob Hancké, Martin Rhodes, and Mark Thatcher (Oxford Oxford

contradictory findings claiming that the CEE countries are converging towards either CMEs²⁶ or LMEs²⁷. While Crowley states that all the CEE countries except Slovenia come close to LMEs²⁸, Lane suggests that all the CEE countries except Latvia and Lithuania resemble the continental type of market capitalism (CME)²⁹. Also, Hancké considers the V4 in the midst of an ongoing convergence towards Western CME³⁰.

Three observations concerning the debate described above are worth noting in the context of this thesis and its research agenda. First, barely any analysis of contemporary comparative capitalism dispenses with the VoC framework as a reference point. VoC has had a deep impact on the study of capitalism and has various merits, such as scientific appeal, testability and explanatory power for capitalist diversity in a globalizing world. Therefore, this thesis uses VoC as a starting point for its investigation. This is not done, because VoC's assumptions and epistemology are accepted at face value, but rather because this thesis as an analysis of transnational business groups in different institutional environments can only benefit from *relating* to VoC. Doing so, we can weigh our findings against the

University Press, 2007). Sabina Neumann and Michelle Egan, "Between German and Anglo-Saxon Capitalism: The Czech Financial Markets in Transition," *New Political Economy* 4, no. 3 (1999). Peter Hall and Daniel Gingerich, "Varieties of Capitalism and Institutional Complementarities in the Macroeconomy," *MPIfG Discussion Paper* no. 5/04 (2004). <http://www-management.wharton.upenn.edu/guillen/Hall/Hall.MPIfGSpaper.pdf> [accessed 15.5.2010]. Also, the characterization of the V4 as "embedded neoliberal economies" by Bohle and Greskovits derives from observations, although they do not adhere to VoC. Bohle and Greskovits, "Neoliberalism, Embedded Neoliberalism, and Neocorporatism: Paths Towards Transnational Capitalism in Central-Eastern Europe."

²⁶ David Lane, "Post-State Socialism: A Diversity of Capitalisms?," in *Varieties of Capitalism in Post-Communist Countries*, ed. David Lane and Martin Myant (Basingstoke: Palgrave Macmillan, 2007). Clemens Buchen, "East European Antipodes: Varieties of Capitalism in Estonia and Slovenia," in *Varieties of Capitalism in Post-Communist Countries* (Paisley University: 2005).

²⁷ Stephen Crowley, "East European Labor, the Varieties of Capitalism, and the Expansion of the Eu.," (2005). <http://www.ces.colombia.edu/pub/papers/Crowley.pdf>.

²⁸ Ibid., 19.

²⁹ Lane, "Post-State Socialism: A Diversity of Capitalisms?," 35.

³⁰ Bob Hancké, "How Coordinated Capitalism Emerges in Central Europe," in *Political Economy Research Group PERG* (Central European University: 2007); Bob Hancké, Martin Rhodes, and Mark Thatcher, "Introduction: Beyond Varieties of Capitalism," in *Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementaries in the European Economy*, ed. Bob Hancké, Martin Rhodes, and Mark Thatcher (Oxford Oxford University Press, 2007).

various contributions using VoC and therefore contribute fruitfully to an existing debate.

Secondly, it has become apparent that applying the VoC framework to the CEE countries is not a straightforward issue. Due to its focus on Western capitalist societies, VoC understates the role that TNCs in alien institutional settings play. This analysis will thus proceed with laying a focus on the presence of TNCs in CEE and will evaluate VoC's explanatory power and shortcomings regarding transnationalized institutional environments such as Hungary. More concretely, we have to ask the question, whether VoC can sufficiently explain the increasing capital movements from the "ideal-type" CME Germany to Hungary.

Thirdly, it has become clear that VoC is not uncontested. Two major criticisms, that touch both on the general validity of VoC and its applicability to CEE are VoC's static epistemology and its downplaying the role of the state considering the latter endogenous to the economy. As this thesis deals with a relatively young institutional environment (Hungary) in which the role of transnational actors is still increasing, it is necessary to evaluate whether transnational actors (here: German investors) are shaping or are being shaped by domestic institutions, which direction this institutional transformation takes and what role the Hungarian state as an dependent or independent actor plays in this process.

2.3 VoC, FDI, and CEE: a troublesome ménage à trois

This section will elaborate on the importance of FDI in the CEE region. A focus will be laid on the Visegrád Four that by several scholars are considered a consistent

institutional subgroup within CEE³¹. Furthermore their classification along VoC lines is especially difficult, whereas the Baltic states (LME) or Slovenia (CME) are frequently said to resemble the VoC ideal types³². Thus, dealing with the V4 promises to offer a particularly insightful discussion of the VoC framework. An additional focus will be on Hungary and German FDI in the manufacturing sector.

I will argue that VoC's assumptions regarding globalization and EU-integration, *comparative institutional advantage* and *institutional arbitrage*, do not form a cohesive and holistic explanatory framework that can sufficiently explain the massive inflows of FDI into the region. Considering the increasing FDI stock of German FDI in the manufacturing sector in the absence of a clear convergence of CEE countries towards a CME or LME type of capitalism poses a serious puzzle for VoC. The recent approach by Nölke and Vliegenhart that introduces a third variety, the *dependent market economy* indeed eradicates some of the theoretical gap of VoC. However, the DME approach also has its inherent contradictions that are partly homemade and partly imported from the Hall/Soskice approach.

2.3.1 Institutional arbitrage and FDI

Hall and Soskice explicitly offer an explanatory framework that combines a national perspective, which is the outspokenly dominant point of view in VoC, with a transnational perspective. They claim that companies choose the location of their production sites or marketing sites not exclusively or even primarily for cost-efficiency, market-seeking, geographical or other reasons, but on the grounds of the institutional setup they find abroad. The concept by which VoC seeks to explain and understand globalization, Hall and Soskice coin *institutional arbitrage*.

³¹ Bohle and Greskovits, "Neoliberalism, Embedded Neoliberalism, and Neocorporatism: Paths Towards Transnational Capitalism in Central-Eastern Europe." Nölke and Vliegenhardt.

³² Buchen.

"By this, we mean that companies may shift particular activities to other nations in order to secure the advantages that the institutional frameworks of their political economies offer for pursuing those activities. Thus, [CME] companies may move some of their activities to [LMEs], not simply to lower labor costs, but to secure access to institutional support for radical innovation.³³

Institutional arbitrage indeed seeks to explain relocations and engagements across CMEs and LMEs that exploit the competitive advantages of their respective counterparts. Another side of institutional arbitrage comes to the fore when *similar* activities are outsourced to *similar* institutional setups, i.e. to countries whose national economies possess similar competitive advantages³⁴. This, in turn, can explain FDI from Germany to Austria or from Britain to the USA. A third factor for FDI concerns cost-efficiency. Hall and Soskice continuously stress that relocations from LMEs are more likely than from CMEs. This is so, because LMEs are more sensitive to negative changes in profitability and the possibility to exit these countries literally by "voting with their feet"³⁵ are higher than in CMEs, where lay-offs are more difficult to push through, where the shareholder value is not the dominant proxy for economic success and survival of a firm, and generally coordination problems are solved rather by *voice* than by *exit*³⁶. This being said, the toolbox that VoC offers for understanding globalization is basically outlined. Working with these tools implies that FDI, at least FDI in the manufacturing sector, should affect some activities that cannot be done as effectively at home, like radical innovation in CMEs. Secondly, when it comes to activities in which the respective country possesses a comparative advantage, FDI should take place directed to similar environments. Thirdly, purely cost-efficiency

³³ Peter Hall and David Soskice, "An Introduction to Varieties of Capitalism," in *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, ed. Peter Hall and David Soskice (Oxford: Oxford University Press, 2001), 57.

³⁴ Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court ": 361.

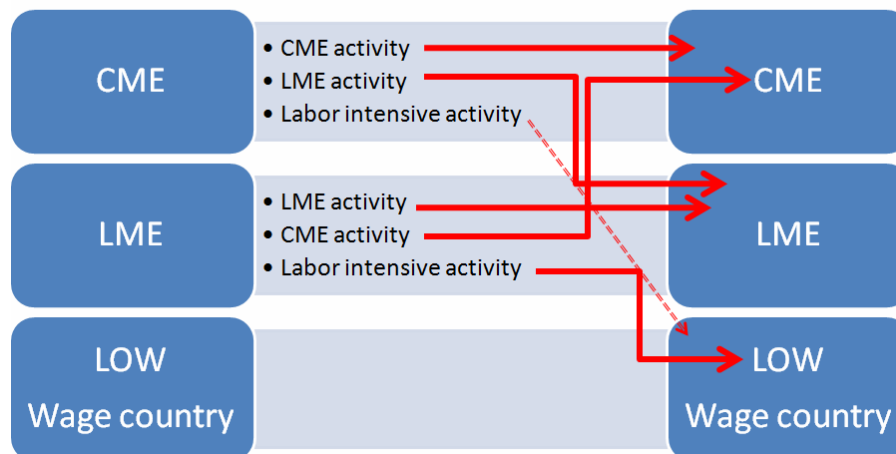
³⁵ Ibid.: 366.

³⁶ For further elaboration Hirschman's concept of exit and voice with regards to VoC, see Ibid.

driven relocations should be taking place much more intensely from LMEs (e.g. USA to Mexico), rather than from CMEs.

Figure 1

Implications of VoC (Hall/Soskice 2001) for transnational engagement (FDI)

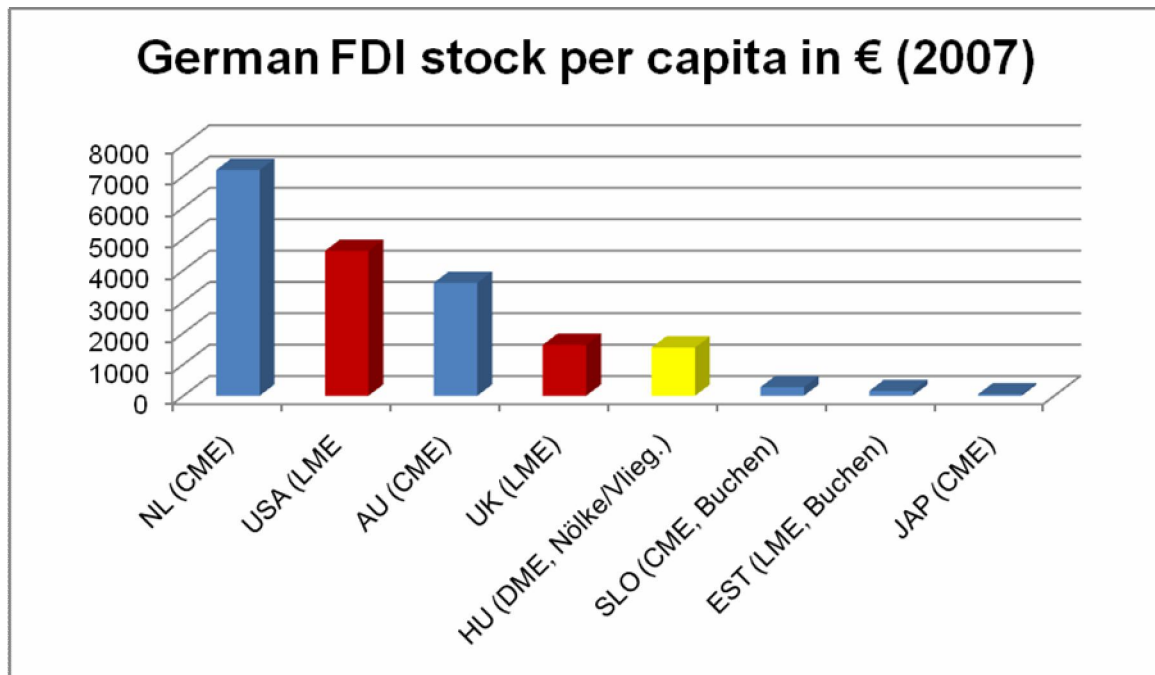


The assumptions of VoC regarding transnational engagement of firms, can indeed explain the quality and quantity of *some* FDI. Hall and Soskice deliver convincing arguments why “Deutsche Bank acquires subsidiaries in Chicago and London, [and] General Motors locates its engine plant in Düsseldorf rather than in Spain”³⁷. Also, institutional arbitrage can explain why German firms tend to invest more heavily in fellow CMEs than in LMEs. For example, the German FDI stock per capita in Austria is more than twice as high as that of Britain. However, this is immediately qualified when looking at the German FDI stock in the USA and in Japan³⁸.

³⁷ Hall and Soskice, "An Introduction to Varieties of Capitalism," 57.

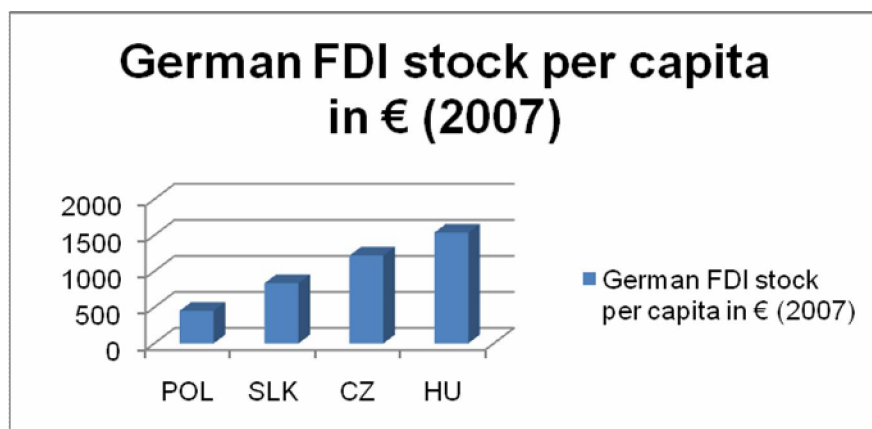
³⁸ Naturally, by merely looking at FDI stocks, it is hard to qualify how much of the investments are motivated by institutional similarity, dissimilarity, caused by a drive for cost-efficiency, market-seeking, or by other reasons. Furthermore the qualitative nature of FDI has to be borne in mind as well as the fact that liberal market economies should *per se* be more open to FDI. Also, VoC's concept of institutional arbitrage can explain why substantial relocations of production sites from CMEs to low-wage countries has so far not materialized.

Figure 2³⁹



However, VoC's accounts on transnationalization lead to more questions than they deliver answers. This becomes apparent when it comes to the CEE countries, especially the V4. First, assuming that these countries are neither LME nor CME but "mixed" or "mongrel" economies, it is surprising how much FDI they attract, especially from a CME like Germany.

Figure 3⁴⁰

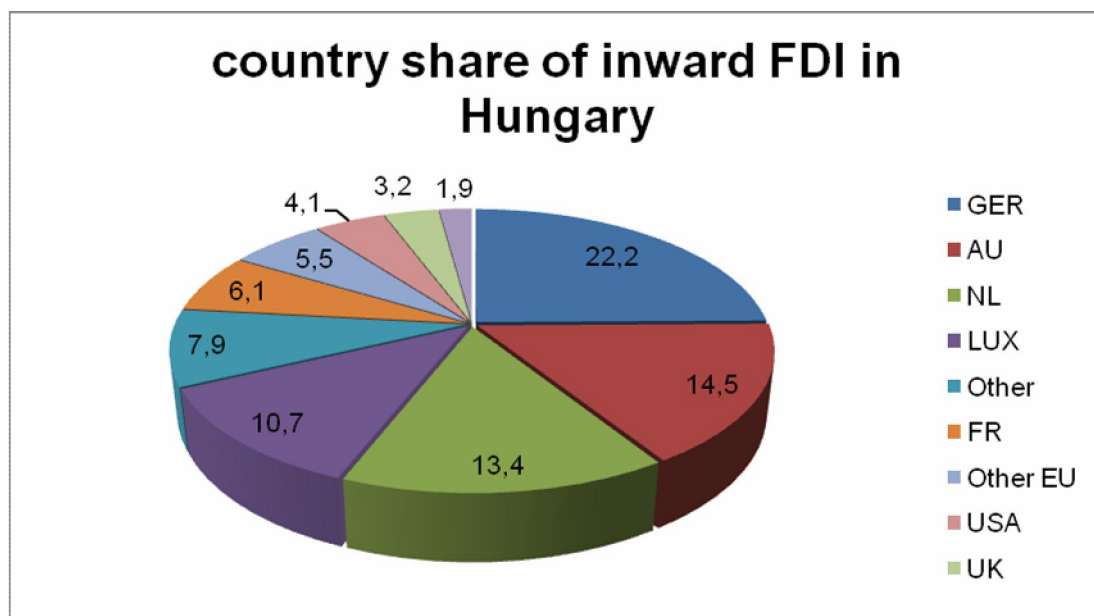


³⁹ Data based on Deutsche Bundesbank, "Foreign Direct Investment Stock Statistics," *Special Statistical Publication* 10 (2009).
http://www.bundesbank.de/download/statistik/stat_sonder/statso10_en.pdf [accessed 10.05.2010].

⁴⁰ Own calculations based on: Ibid.

This is especially valid considering German FDI in Hungary. Hungary has an impressive inward FDI stock of about 60% of GDP and €6270 per capita⁴¹, more than 60% of that coming from four European classical “Rhenisch” CME countries alone.

Figure 4⁴²



This poses a puzzle to the Hall/Soskice approach: Assuming, that Hungary does neither have a comparative advantage on LME nor CME activities as it is neither of the two, institutional arbitrage does not explain the massive and increasing investment flows into the country. Even if we bear in mind that Hungary is a low wage country, major FDI motivated by cost-efficiency reasons should take place from LMEs (due to domestic capital *exit*) rather than from CMEs (due to domestic labor *voice*). This however, is not the case. In fact, FDI from the LMEs USA and UK are clearly underrepresented in Hungary. This puzzle has been noted in the literature and is partly resolved by the Nölke/Vliegenhart approach by introducing a new variety

⁴¹ Calculation based on Deutsch-Ungarische Handelskammer, "Konjunkturbericht Ungarn 2010," (2010).

http://www.ahkungarn.hu/fileadmin/user_upload/Dokumente/Bereich_CC/Publikationen/Konjunktur/2010/DUIHK_Konjunkturbericht_2010_de.pdf; *Jahrbuch 2009/2010*, ed. Deutsch-Ungarische Industrie- und Handelskammer (Budapest: DUIHK, 2010).

⁴² Based on *Jahrbuch 2009/2010*. Data for 2008 (total FDI stock).

of capitalism for the V4 with a comparative institutional advantage in assembling of semi-standardized industrial goods (see 2.3.2). There are, however, many scholars arguing that the incapability of VoC to explain transnational capital movements from CMEs into the V4 illuminates the inherent and irresolvable theoretical misconceptions of the framework.

Bluhm points out that the VoC approach inherently downplays the relocation of production sites from Western Europe to CEE because it cannot explain the rapid increase of FDI flowing into those countries apart from mere cost-efficiency reasons, i.e. the fact that these countries are low-wage countries⁴³. The fact, however, that CEE countries are showing a steady increase of the general wage level and industrial upgrading sheds doubt on VoC's explanations for internationalization. Bluhm considers the weaknesses of VoC that outliers of their institutional dichotomy such as the CEE countries are treated as institutional blackboxes⁴⁴, and that the approach overstates the importance of institutions for processes of internationalization altogether. Firms may not be the perfectly informed actors that form their strategies on the basis of the complete knowledge of the institutional environments of their sites.

Also, firms may not always be rational and predictable actors, but rather deciding in a *situative* way, with a constantly changing hierarchy of preferences. Furthermore, VoC's dominant national perspective distorts real-world hierarchies between TNCs, as its concept of institutional arbitrage overstates the importance of the headquarters of TNCs. This top-down-perspective however, radically simplifies the decision modes of real world transnational capitalism⁴⁵.

⁴³ Katharina Bluhm, *Experimentierfeld Ostmitteleuropa? Deutsche Unternehmen in Polen Und Der Tschechischen Republik* (Wiesbaden: VS Verlag für Sozialwissenschaften, 2007), 51.

⁴⁴ Ibid.

⁴⁵ Ibid.

In a similar vein, Bohle and Greskovits express concerns about the explanatory power of institutional arbitrage regarding transnational institution building in the context of globalization. Building on Djelic and Quack⁴⁶, they stress that globalization and with it increasing capital movements are accompanied by *institutional change* on the domestic level as well as *institution building* on the transnational level⁴⁷. VoC, in contrast, focuses on institutional *persistence* on the *domestic* level and does not possess any explanatory framework to account for the emergence of *transnational* institutions. In fact, institutional arbitrage is epistemologically directed to the cross-country utilization of *existing* national institutional frameworks. Again, this renders the usefulness of VoC in explaining the transnationalization of post-communist CEE doubtful. The latter's increasing degree of inward FDI cannot be understood properly without taking into account the processes of institutional change as shaped by transnational actors as cosmopolitan and empowered actors. While these processes have been dealt with extensively in earlier transition literature⁴⁸, most of recent contributions working with VoC tend to neglect both, transnational elites as well as the role they play for institutional change.

An analysis of German firms in Hungary has therefore to overcome VoC's relative blindness towards institutional change and transnational players; it should direct its focus to the interplay between foreign and national actors. Djelic and Quack are right when they state that an alliance between "foreign dominant actors pushing their own rules of the game and [...] local fringe players"⁴⁹ is particularly operational for the emergence of transnational institution building. Furthermore, paying attention

⁴⁶ Marie-Laure Djelic and Sigrid Quack, *Globalization and Institutions. Redefining the Rules of the Economic Game* (Cheltenham and Northampton: Edward Elgar 2003).

⁴⁷ Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court ": 375.

⁴⁸ For example, Gil Eyal, Iván Széleányi, and Eleanor Townsley, *Making Capitalism without Capitalists* (London: Verso, 1998).

⁴⁹ Djelic and Quack, 25.

to the interplay between institutional change and transnational interests can add a highly interesting perspective to VoC that cannot be derived from the Hall/Soskice approach: namely, the possibility that firms that go transnational seek to “alter the host country’s institutions [and] are also likely to promote institutional change at home⁵⁰”.

As we have seen, the concept of *institutional arbitrage* cannot explain the increasing and considerable engagement of CME countries into CEE in a sufficient way. The reasons for this can be found in certain theoretical assumptions (such as the notion of perfect information) as well as in its rather static and inherently national perspective. When dealing with FDI from Western Europe in CEE, it seems advisable to broaden the VoC approach and allow for the possibility of institutional change as shaped by the interest foreign and domestic players. This perspective can open up new perspectives, for example when enquiring into German firms’ *interest* in and *impact* on in Hungary’s institutions as well as the role of Hungarian state and business actors to cooperate with or obstruct German firms.

2.3.2 Comparative institutional advantage: dependent market economies?

A key concept, by which Hall and Soskice explain differences between advanced political economies, is the concept of *comparative institutional advantage*:

“The basic idea is that the institutional structure of a particular political economy provides firms with advantages for engaging in specific types of activities there. Firms can perform some types of activities, which allow them to produce some kind of goods more efficiently than others because of the institutional support they receive for those activities in the political economy, and the institutions relevant to these activities are not distributed evenly across nations”⁵¹.

⁵⁰ Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court ": 376.

⁵¹ Hall and Soskice, "An Introduction to Varieties of Capitalism," 37.

Comparative institutional advantage therefore eliminates some explanatory shortcomings of the traditional theories of comparative economic advantage (e.g. Stolper and Samuelson) that cannot properly account for the increase of intra-industry trade across nations. Furthermore, the concept of comparative institutional advantage constitutes a genuine enrichment to agglomeration theory. While the latter can explain why software firms *cluster* in Silicon Valley and complex manufacturing industry *clusters* in Southern Germany, VoC can explain why *software firms* cluster in *the United States* and *complex manufacturing industry* clusters in *Germany*⁵². While the institutional coordination mechanisms in Germany are tailored towards firms engaging in activities entailing “lower risks, close inter-firm collaboration, and low rates of labor turnover”⁵³, the American strongly market oriented institutional setup provides firms with the perfect environment for sectors characterized by “high-risks, intense competition, and high rates of labor turnover”⁵⁴. The comparative economic advantage and therefore the economic constitution of these economies derives from the comparative institutional advantage, or as Bohle and Greskovits put it, “in the VoC perspective strategy follows structure”⁵⁵. The comparative advantages of CMEs and LMEs, according to VoC, are incremental innovation and radical innovation respectively. This explains the fact, and based that in LMEs firms engaging in biotechnology, chemical engineering do better than in CMEs, whereas the latter are more competitive in nuclear engineering, material processing, etc.⁵⁶

So far so good, but can we apply the concept of comparative institutional advantage to CEE? Again, trying to do so, one faces several difficulties. If we assume that the quantitative and qualitative nature of licensed patents in the high

⁵² Ibid., 36-37.

⁵³ Ibid., 37.

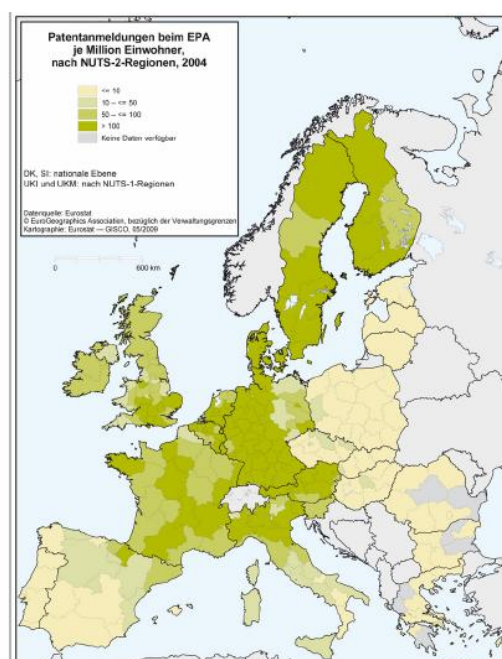
⁵⁴ Ibid.

⁵⁵ Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court ": 360.

⁵⁶ Hall and Soskice, "An Introduction to Varieties of Capitalism," 44-45.

technology sector qualifies as an indicator for an economy being CEE or LME⁵⁷, one can note, that the Visegrád states are neither of the ideal types, at least not on quantitative terms (Figure 5).

Figure 5: Regional density of novel patents per capita⁵⁸



In Germany's leading region Oberbayern, around 250 patents per million inhabitants were licensed (2001)⁵⁹, in contrast to 6 patents per million inhabitants in Hungary's most innovative region, Budapest (2002).⁶⁰

However, Hall and Soskice do explicitly point to the possibility, that there may be other institutional setups that provide with distinct comparative institutional

⁵⁷ Ibid.

⁵⁸ Licensed patents at the European Patent Office. Source: eurostat, *Eurostat Jahrbuch Der Regionen* 2009, ed. European Commission, Statistical Books (2009).

⁵⁹ "Deutschland: Anzahl Der Hochtechnologie-Patentanmeldungen Beim Europäischen Patentamt (Epa) Nach Regionen In Den Jahren 1996, 2001 Und 2006", statista <http://de.statista.com/statistik/daten/studie/49727/umfrage/deutschland---hochtechnologie-patentanmeldungen-beim-europaeischen-patentamt-nach-regionen/> (accessed 18.5. 2010).

⁶⁰ "Ungarn: Anzahl Der Hochtechnologie-Patentanmeldungen Beim Europäischen Patentamt (Epa) Nach Regionen In Den Jahren 1998, 2002 Und 2006", statista <http://de.statista.com/statistik/daten/studie/49738/umfrage/ungarn---hochtechnologie-patentanmeldungen-beim-europaeischen-patentamt-nach-regionen/> (accessed 18.5. 2010).

advantages⁶¹. Recently, Nölke and Vliegenhart have followed this call and proposed a third discrete and coherent variety of capitalism for the Visegrád Four, the *dependent market economy* (DME).

Institutions of DMEs are distinct from LME or CME yet they are equally complementary and mutually enforcing. The primary coordination mechanisms within DMEs are shaped by the intra-firm hierarchies of TNCs, investments are raised primarily by means FDI or foreign owned banks. Skilled labor is appeased by company level agreements; the education system is tailored towards semi-skilled labor while providing only limited resources. The main comparative advantage of DMEs vis-à-vis LMEs and CMEs lies in assembly platforms for semistandardized industrial goods (see Table 1).⁶²

The DME approach certainly has its merits. First, the approach offers a solution to the difficult classification of the V4 as either LME or CME. The discreteness of the V4 is founded on the combination several features that characterize the region: its extraordinarily high rates of inward FDI and low rates of outward FDI, the low provision of domestic credit to the private sector, the extremely high share of foreign ownership in key industrial sectors, the importance of the manufacturing sector, low R&D expenditures and national income rates in a middle position between Eastern and Western Europe⁶³.

⁶¹ Hall and Soskice, "An Introduction to Varieties of Capitalism," 44.

⁶² Nölke and Vliegenhardt: 680.

⁶³ Ibid.

Table 1: Comparative institutional advantage⁶⁴

Institution	Liberal Market Economy (LME, Hall/Soskice)	Coordinated Market Economy (CME, Hall/Soskice)	Dependent Market Economy (Nölke/Vliegenthart, Hall/Soskice)
Distinctive coordination mechanism	- competitive markets - formal contracts	- inter-firm networks	- dependence on intra-firm hierarchies within TNCs
Primary means of raising investments	- domestic and international capital markets	- domestic bank lending - internally generated funds	- FDI - foreign owned banks
Corporate governance	- outsider control - dispersed shareholders	- insider control - concentrated shareholders	- control by headquarters of TNCs
Industrial relations	- pluralist - market based - few collective agreements	- corporatist - consensual - sector-wide or national agreements	- appeasement of skilled labor - company specific collective agreements
Education and vocational training	- general skills - high R&D expenditures	- company- or industry specific skills - vocational training	- limited expenditures for further innovation
= Comparative institutional advantage ↓	↓	↓	↓
Comparative advantage	radical innovation in technology and service sectors (+competitive products in highly price-sensitive markets)	incremental innovation of capital goods (+ high quality industrial products)	assembly platforms for semi-standardized industrial goods

The DME approach also has the merit to put the presence of TNCs in the V4 at the core of its framework. Also, the DME framework has the virtue that it epistemologically starts at the mechanism that brings about comparative advantage; thereby it can explain the institutional setup (i.e. the comparative institutional advantages) of these countries as being shaped by the interest of TNCs. By turning the causal arrow of institutions and economic advantages around, the DME approach

⁶⁴ Derived from *ibid.*

allows for a dynamic perspective on institutions, avoiding the pitfalls the original Hall/Soskice approach that takes institutions largely for granted and explains the economic environment of a country as a *consequence* of an institutional environment⁶⁵.

However, the DME approach has some inherent contradictions that partly stem from its consequential adherence to the VoC framework, partly have their origin in its line of argumentation. The first question that may be raised about DMEs concerns their qualitative equality with LMEs and CMEs. It may be asked whether the DME type, which in many respects is an inferior sibling of the CME, can be considered an ideal type of an efficiency-seeking variety of capitalism. If the DME, however, is merely a transitional phase striving to grow up to become LME or CME as the authors imply for Ireland⁶⁶, then the question may be raised whether the DME approach is conceptually in line with VoC or should rather be understood as a development stage within the global commodity chain as elaborated by Gereffi⁶⁷.

Secondly, if the DME is an ideal-type of a VoC, why did it not develop earlier in other similarly dependent parts of the world? Although the authors point towards a possible application in other countries, one may remain skeptical, whether the DME type of the V4 is really useful for understanding countries in Latin America or South East Asia as the authors promise⁶⁸. If this is not the case, then DME would merely produce a variety of capitalism for four countries at a given time, which would admittedly mitigate its heuristic and universal value. Thirdly, the DME framework is contradictory when it comes to its very own *social* implications. The institutions of

⁶⁵ Jan Drahokoupil, "After Transition: Varieties of Political-Economic Development in Eastern Europe and the Former Soviet Union," *Comparative European Politics* 7, no. 2 (2009): 295.

⁶⁶ Nölke and Vlieghart, 695.

⁶⁷ Gary Gereffi, "Global Production Systems and Third World Development", In *Global Change, Regional Response*, ed. Barbara Stallings, 100-142 (Cambridge: Cambridge University Press 1995).

⁶⁸ Nölke and Vlieghart, 694.

LMEs and CMEs provide their population with social cohesion, the former by fluid and easily accessible labor markets, and the latter by inclusive labor markets and social benefits in case of unemployment. DMEs as constructed by Nölke and Vliegenhardt however, seem inclined to produce social destabilization and inequality which brings to the fore the question as to how such a variety of capitalism can be regarded as equilibrium seeking in the broad sense of the term. This dilemma is also noted by the authors who repeatedly take a skeptical stance towards their own ideal type as a stable institutional configuration⁶⁹.

Fourthly, one of the strengths of the approach may be considered a conceptual weakness. While TNCs are at the center of their analysis, Nölke and Vliegenhardt almost completely blind out domestic forces. The institutional framework of the V4, according to the DME approach, is entirely shaped by and fitted towards foreign owned companies. Consequently, in this view, the role of domestic politics is neglected, and potentials for conflicts caused by class cleavages are downplayed. Again, the firm-centered view of VoC that considers politics merely a vicarious agent for economic actors shines through. Fifthly, the DME framework cannot solve the epistemological gap of VoC's concept of institutional arbitrage in the sense as it leaves the question *why* TNCs come to the V4 unanswered. A consistent explanation stemming from within the VoC framework, i.e. reasons not primarily motivated by cost-efficiency reasons, are not provided by Nölke and Vliegenhardt.

Finally, the DME approach may in another respect not even go far enough in its understanding of the importance of transnationalization. Comparative institutional advantage between WE and the V4 may in fact be institutional *complementary*

⁶⁹ Nölke and Vliegenhardt: 695-697.

across borders⁷⁰. Indeed, given the nature of the EMU, the impact of the *aquis communautaire* and the transnational capital flows and division of labor, the EU can be regarded as a space of overlapping national and transnational institutional setups. The emergence of this space might go hand in hand with the retrenchment of fine-tuned mutually complementary institutional frameworks and lead to far more “*messier outcomes*”⁷¹ with more drastic social implications than the stability-oriented theoretical constructs of VoC can account for.

Hence, although Nölke and Vlieghart are well aware of the blind spots of their model, very rightly pinpointing towards the benefits of parsimony and asking for further research⁷², doubts regarding the coherence of the DME framework seem valid. As the DME approach offers a challenging and inspiring perspective on the contemporary institutional setup of the V4 countries, it will be the repeatedly used reference point when it comes to inquiring into the impact of German firms in Hungary.

2.4 Implications

This chapter has given an overlook over the contemporary debate about the VoC framework and touched upon some of the most controversial assumptions of VoC. It has become clear that the VoC framework’s explanatory power to provide with viable insights regarding the nature of institutions in CEE. It also remains doubtful, whether the concepts *institutional arbitrage* and *comparative institutional advantage* can sufficiently account for the motivation and impact of foreign direct investment flowing into the region. The DME approach, by exclusively dealing with the V4 and their

⁷⁰ Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court ": 380. In a similar vein, Robert Hancké and Lucia Kurekova, *Final Report: Varieties of Governance in Central Europe* (London: London School of Economics and Political Science, 2008), 53.

⁷¹ Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court ": 382.

⁷² Nölke and Vlieghart, 673.

institutional settings provides a framework that enhances VoC by introducing a new ideal type, bearing in mind transnationalization. That the DME approach is not free of shortcoming has been discussed in detail.

This chapter shall be briefly concluded with the implications that the VoC approach and the DME approach offer regarding the *direction* in which the V4 countries are moving. These implications will serve as a blueprint against which the finding of the following analysis will be held. The theses I like to introduce, are the “DME thesis” and the “convergence thesis”.

Deriving from Nölke and Vliegenthart, the DME thesis can be formulated:

Capital exporters seek institutional advantages in host countries. In the case of WE and the V4, this results in a complementary division of labor between the two parties as well as in coherent, stable and distinct institutional settings. The industrial content of the V4 will remain at a lower level than in WE. Employment protection will remain at a lower level than in WE, however skilled labor is appeased and employment protection and wages will therefore remain rather stable.

Based on the VoC logic and partly derived from Hancké, another thesis is conceivable, labeled the “convergence thesis”:

High asset specific FDI, such as investments in complex manufacturing will eventually establish an institutional environment that is similar of those of the capital exporter. This means that the V4 countries whose FDI imports go into complex manufacturing financed by CME countries will end up as CMEs. TNCs are engaged

in shaping an institutional environment in the manner the find at home, for example by establishing close inter-firm networks. Also, their presence raises the industrial content of the country. Through spillovers the host economy can gain an independent upward momentum. The V4 countries are slowly moving in the direction of coordinated market economies specializing in similar activities as Western European economies⁷³.

When we will present empirical data and evidence in the next section, we will therefore relate to those theses and further comment on them.

⁷³ Hancké, "How Coordinated Capitalism Emerges in Central Europe." In this paper, Hancké does not address all the VoC institutions, his account does not aim to be an all-embracing framework as the DME-approach. He focuses primarily on inter-firm relations and vocational training, leaving out industrial relations and other institutions. The "convergence thesis" therefore is not a claim made by Hancké, but rather it a tentative effort to take up the implications of his account.

CHAPTER 3: GERMAN FIRMS IN HUNGARY

The following chapter will enquire into the institutional impact of German TNCs in Hungary. The analysis will be drawing from the discussion of the VoC framework in the preceding chapter. The following key questions will be addressed: Why do German firms invest in Hungary? Do they make their decision to locate in Hungary depending on institutional complementarities of any kind? Do they try to alter Hungary's institutions as understood by VoC? How is their presence to be correlated with Hungary's overall industrial development?

First, I will give a brief overlook on the presence German TNCs in Hungary (3.1). Focusing on the manufacturing sector, I will enquire into what the main driving forces for German firms are to locate in Hungary (3.2) and how they consider the institutional environment in Hungary (3.3). Section 3.4 will be an assessment of the institutional impact of German firms in Hungary. After evaluating the role of German firms for the development of industrial content in Hungary, I will evaluate the impact of German institutions on vocational training and industrial relations.

3.1 German FDI in Hungary

Hungary was the frontrunner in opening the gates to its country for FDI. The country started to invite foreign investors as early as 1972, FDI rates however remained low until the late 1980s⁷⁴. In the transition period Hungary soon gained the top-position within the V4 in attracting FDI, later its advance to the other V4 countries was lost at

⁷⁴ Robert Werner, "Location, Cheap Labor and Government Incentives: A Case Study of Automotive Investment in Central Europe since 1989," *Chazen Web Journal of International Business*, no. Spring 2003 (2003). http://www1.gsb.columbia.edu/mygsb/faculty/research/pubfiles/194/Auto_Europe.pdf.

the end of the 1990s⁷⁵. In fact, in the 1990s the FDI stock of Hungary grew to a larger extent than in the first decade of the 21st century. This is especially valid for German firms, the bulk of whose investments were done in the 1990s and whose shares in total FDI in Hungary has been shrinking in the past years.

Figure 6⁷⁶

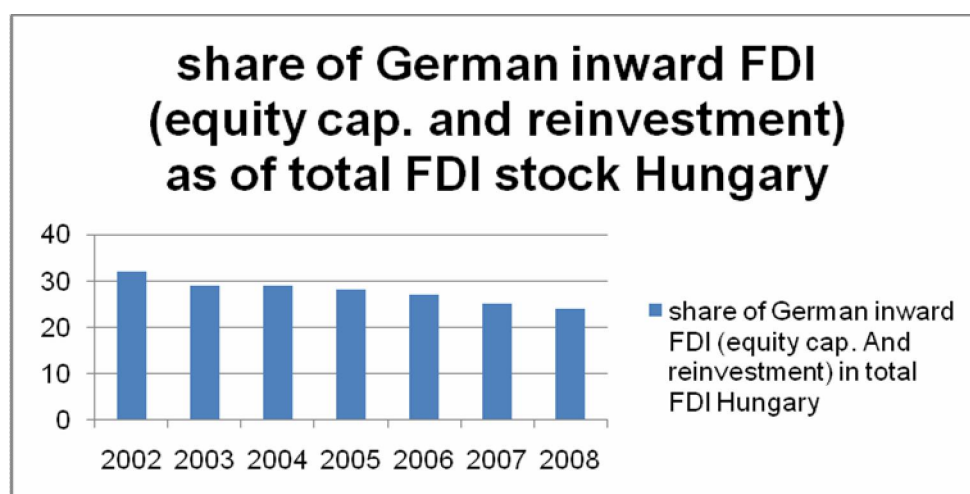
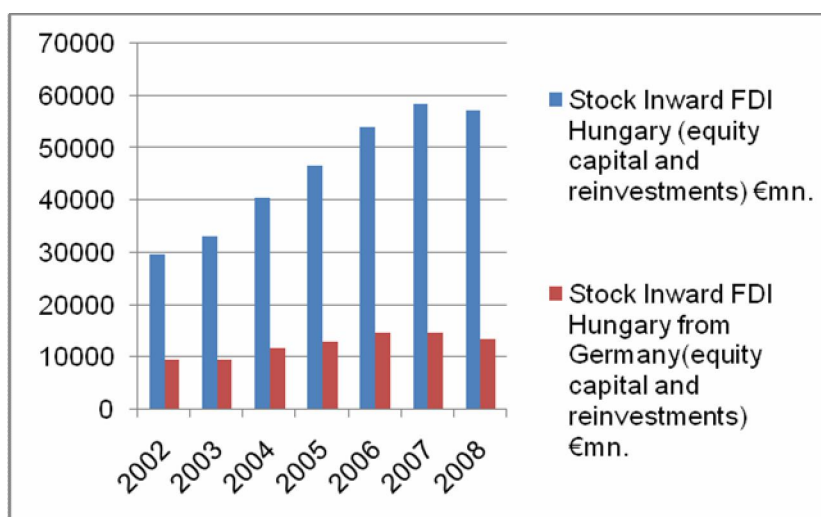


Figure 7⁷⁷



⁷⁵ Magdolna Sass, "Competitiveness and Economic Policies Related to Foreign Direct Investment," *Ministry of Finance Working Paper 3* (2003). [http://www.pm.gov.hu/web/home.nsf/portalarticles/7E4F6C12872CCE3DC1256E8D003862DA/\\$File/3_eng_040223.pdf](http://www.pm.gov.hu/web/home.nsf/portalarticles/7E4F6C12872CCE3DC1256E8D003862DA/$File/3_eng_040223.pdf).

⁷⁶ Own calculations based on Bundesbank; *Jahrbuch 2009/2010*.

⁷⁷ Own calculations based on Bundesbank; *Jahrbuch 2009/2010*.

However, Germany is still the most important importer of FDI into Hungary. German firms employ 146000 people in Hungary (see Table XX) and therefore provide 3,7% of the Hungarian total employment.⁷⁸

Table 2⁷⁹

Subsidiaries of German TNCs (direct ownership, equity capital)	
Number of firms	623
employees	146.000
Revenue	€40.1bn

By trend, German FDI is in several respects qualitatively different from FDI originating from other countries. First, German firms do engage more heavily in higher value-added manufacturing sector than other countries which are more engaged in the service sector, such as the Netherlands or Luxembourg. Although comparative data that illuminates the origin of FDI by sector and activity is hard to access, it can be assumed that German FDI in the manufacturing sector is overrepresented. In, 2006 Audi Hungaria's share alone contributes to 15% of the FDI stock in the manufacturing sector and to 53% of the FDI in the transport equipment sector.

⁷⁸ Own calculations based on Bundesbank and DUIHK. Data for 2007.

⁷⁹ Source: Bundesbank.

Figure 8⁸⁰:

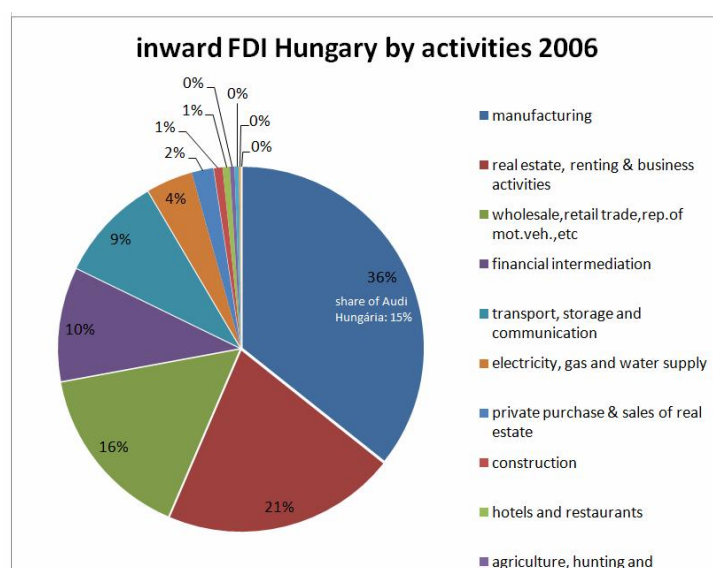
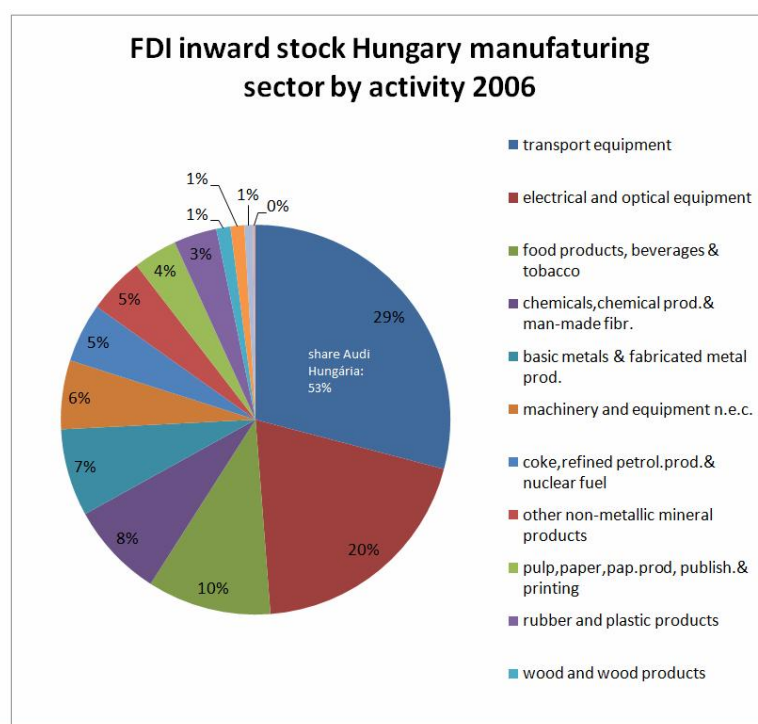


Figure 9⁸¹:



⁸⁰ Calculation based on Vienna Institute for International Economic Studies (WIIW) and "Drittes Quartal Bei Audi Hungaria", http://www.audi.hu/deu/hirek/hir.php?hir_id=86 (accessed 20.05. 2010).

⁸¹ Calculation based on Vienna Institute for International Economic Studies (WIIW) and Ibid., (accessed).

Related to this, German firms in the manufacturing sector are more inclined to exporting their goods and are less interested in the local market. Again, Audi Hungária alone provides 9% of Hungarian exports⁸². This trend, shrinking German FDI due to the current economic crisis notwithstanding, is likely to continue with upcoming major investments such as the Daimler assembly plant in Kecskemét that will operate from 2012. Furthermore, when it comes to reinvested earnings, German firms are clearly the leading group of foreign firms to reinvest in Hungary

Table 3⁸³: FDI and reinvested earnings in Hungary 2000-2008

	Average Share of inward FDI in Hungary 2000-2008	Share of total reinvested earnings by foreign firms 2000-2008
Germany	27%	50%
Austria	16%	16%
Luxembourg	11%	6%

Putting these facts about German FDI in the context of our research question, several issues are notable: First, German TNCs in Hungary invest heavily in sectors, in which Germany, according to VoC, has a comparative advantage (complex manufacturing and incremental innovation, e.g. in the automotive sector). Second, their investments are of a long term nature, therefore their presence in Hungary can be considered an important factor in the TNCs' corporate strategy. Hence, the TNCs

⁸² "Audi Hungaria: 15 Millionen Motoren in 15 Jahren",
<http://www.pressebox.de/pressemeldungen/audi-ag/boxid/175805> (accessed 18.05. 2010).

⁸³ Own Calculations based on GHCOG.

interest in Hungary can be considered overall distinct from market access or privatization opportunities. Thirdly, as German firms have been present as the most important investors in the region for two decades now, it is likely that they, more than any other investor group, have had an impact on Hungarian institutional setup.

Therefore, the next section will address the question why German firms engaged in complex manufacturing have come here in the first place and how they evaluate the Hungarian institutions. Do they come primarily for cost-efficiency or market-seeking reasons as Dunning's eclectic theory would suggest⁸⁴? Or do they rather seek institutional arbitrage, as VoC would propose? Or do German firms consciously build up a stable institutional setting tailored towards their interest as the DME-approach implies? It is deemed a promising strategy to ask the firms themselves, which will be done in the following section.

3.2 Why Hungary? Motivations for German FDI

In order to enquire into the motivation for German firms to engage in Hungary as well as to evaluate their impact on several Hungarian institutions, five interviews were conducted (for details, see tables A1 and A2, appendix). Apart from the German-Hungarian Chamber of Commerce (GHCOC) and a sales division of a German TNCs producing pumps and mountings (TNCS), managers from three major firms engaging in the heavy-complex manufacturing sector were interviewed (TNCM 1-3).

The Hungarian Investment and Trade Development Agency advertizes Hungary as a country characterized by “essentially lower wages compared to Western Europe, [...] world class training and education” and “ahead in labour

⁸⁴ John H. Dunning and Sarianna M. Lundan, *Multinational Enterprises and the Global Economy* (Cheltenham: Edward Elgar Publishing Limited, 2008), 59.

productivity”⁸⁵. This characterization can be confirmed evaluating the interviews that have been conducted for this thesis.

The primary reason that the interviewees of the three manufacturing firms mentioned as their initial reason to locate in Hungary, is hardly surprising. They were attracted by the low labor costs in Hungary. When the companies came to Hungary in the early 1990s, the wage gap between Germany and Hungary was considerable higher than today. However, even in 2009, Hungarian wages account for roughly a fourth of German wages⁸⁶, the wages of highly skilled engineers being in the range of 40% of the German level⁸⁷. Other important reasons for the investment and the expansion of investments concern the quality of the labor force. Labor in Hungary is characterized by the firm representatives as relatively well skilled, and flexible and currently abundant⁸⁸. Further motivations that were mentioned by the interviewees concern more the question, why their enterprises chose Hungary and not another V4 country that are structurally similar. The reasons mentioned range from cultural ones (traditional open-mindedness of Hungarians towards Germany), to geographic (proximity to headquarter and other production sites) and political ones (support of the Hungarian government in the early 1990s as opposed to other V4 states, preservation of intellectual property).

Can these motivations be reconciled with the VoC framework? Before we approach this question, a temporal distinction is required. It seems that German firms’ interest in Hungary has qualitatively changed over the years, i.e. the reasons for their presence in Hungary are not exactly the same in the 2000s as in the early

⁸⁵ "Automotive", Hungarian Investment and Trade Development Agency ITDH
http://www.itdh.com/engine.aspx?page=itdh_priority_sectors_automotive (accessed 25.5. 2010).

⁸⁶ *Jahrbuch 2009/2010*.

⁸⁷ Interview GHCO.

⁸⁸ This reflects the labor supply as a cause of the current economic crisis which has led to an ebbing of labor shortages.

1990s. Back then, TNCs came to Hungary seeking both, an entry to the local market and cheap labor to produce a diversified array of products for the Western and the Eastern market. This “double strategy”⁸⁹ failed for several reasons. First, the regional demand in CEE did not increase as was hoped for; secondly those consumers who could afford Western products preferred the original instead of the “Eastern” versions. Production exclusively for the regional market was soon discontinued, as in the case of Opel in Szentgotthard⁹⁰. Thereafter, German firms in the manufacturing sector incorporated Hungary strategically in their production schemes via vertical integration. Within this vertical integration schemes, there is a clear trend towards more complex and therefore relatively less labor intensive and more skill-intensive activities⁹¹. While labor-intensive activities, especially in the light-industry sectors are gradually moved further to the East⁹², activities in the heavy industry are less mobile and are gradually accompanied by more knowledge intensive activities. This trend results in changing patterns of motivational preconditions for TNCs to (re-)invest in Hungary. Within the (for the V4) advantageous nexus of labor costs, locational advantages, and labor skills⁹³ the importance of the latter is increasing relatively to the former. This goes hand in hand with a decreasing wage and productivity gaps between Hungary and Germany. Between 2000 and 2008, productivity rates in Germany increased by a 10%, in Hungary by 25%⁹⁴.

⁸⁹ Bluhm, 274.

⁹⁰ David Bartlett and Anna Seleny, "The Political Enforcement of Liberalism: Bargaining, Institutions, and Auto Multinationals in Hungary," *International Studies Quarterly* 42 (1998).

⁹¹ Bluhm, 136.

⁹² A case in point is the relocation of Siemens VDO (assembly of electronic devices) from Hungary to China in 2006. See also Dorothee Bohle and Béla Greskovits, "Capital, Labor, and the Prospects of the European Social Model in the East," *Working Paper of the Center for European Studies* 58 (2004).

⁹³ Károly Fazekas, "The Impact of Foreign Direct Investment Inflows on Regional Labour Markets in Hungary," *Budapest Working Papers on the Labour Market* 2000/8 (2000): 11-14.

⁹⁴ "Labour Productivity Growth", OECD <http://stats.oecd.org/Index.aspx?DatasetCode=LEVEL> (accessed 20.05. 2010).

With respect to the VoC framework, it becomes clear that institutional arbitrage cannot sufficiently explain the massive investment of German firms in Hungary. Neither did German TNCs originally come to exploit comparative advantages that were generated by a certain institutional environment, neither to get access to a similar market environment nor to a similar institutional (CME-VoC) environment. The reasons to invest in Hungary were primarily motivated by cost-efficiency reasons.

However, considerable change can be detected. On the one hand, German TNCs invest more and more in similar activities as they pursue at home, i.e. diversified quality production on the basis of incremental innovation. This points in the direction of convergence with the West, as Hancké suggests. On the other hand, assembly sites in the complex-manufacturing sector that benefit from a relatively stable wage gap with Germany do not lose their importance. The recent €800mn investment of Daimler in an assembly site for mid-range vehicles is a case in point. This observation, in turn, seems to prove the DME-thesis right. In order to mitigate the confusion that arises with the question, whether Hungary is institutionally converging with Germany, or rather consolidating its status as a strategically important assembly platform with an institutional setup tailored exactly towards these activities (DME), we need to inquire more into the issue of institutions.

3.3 The firms' view on institutional differences

The VoC approach is often criticized for being inherently firm-centered. The framework is based on the assumption that firms can instruct states and governments how to shape the economy and that a main responsibility of politics is

designing institutions that maximize the efficiency of firms⁹⁵. The DME-approach does not contradict this assumption, rather it affirms it. In DMEs, transnational firms are the main agents in *creating* the very institutions they benefit from, assigning to the state the role of an acquiescent henchman. Therefore, firms should have a distinct opinion on institutions, even more so, if one takes the assumptions of the DME approach seriously, that each economy, Germany as a CME and Hungary as a DME is basically in a state of efficiency-seeking equilibrium, then German TNCs in Hungary should assess the institutional setup in Germany *and* Hungary throughout positively.

The interviews that were conducted, point to a mixed result in this respect. Indeed, the *features* of the core institutions elaborated by VoC and DME are quite congruent with the assessment of the representatives of German firms in Hungary. They are also congruent with the practice that these firms apply regarding industrial relations, financial governance and vocational training (see table 1). While this seems to verify VoC and DME, doubts arise when it comes to the actual *assessment* of institutions. As the focus is primarily directed to industrial relations and education and vocational training, the treatment of these core institutions of VoC shall suffice here.

When managers assess institutions in Germany and Hungary, a double contradiction with the DME and VoC approaches comes up. First, the interviewees deem the system of industrial relations in Hungary throughout laudable, if not worth imitating. Secondly, they criticize the Hungarian system of vocational training and education and wish for a transplantation of the German training system including in-house apprenticeships. This is also reflected in a recent survey with 174 German firms⁹⁶. This is a puzzle for VoC/DME because German employers should largely

⁹⁵ Streeck, 20.

⁹⁶ Survey in: Handelskammer.

appreciate the system of industrial relations (i.e. industry-level bargaining with high bargaining coverage) in Germany as it provides them with highly skilled and loyal employees that are unlikely to be poached by other firms or make trouble on the firm level⁹⁷. This seems not to be the case. The director of TNCM3 considers the German “Flächentarife” and the labor-regulations rather a burden for the German industry. Put in technical metaphors of the engineer, the dominance of firm-level labor relations is strongly favored, as the “brush” (unions) can never be as exact and effective as the “pencil” (work council)⁹⁸. Furthermore, according to two managers, the labor regulations in Germany inhibit the firm from hiring and firing according to the market needs, which constitutes to a comparative *disadvantage* of Germany vis-à-vis Hungary.

Presuming a certain general trend behind the statements of the interviewees, the puzzle that is posed by VoC regarding these observations can be resolved in two ways. Either, the firms’ representatives do not appreciate the coordinated system to the extent it deserves to be appreciated; therefore they are somewhat blind to the benefits of German industrial relations that in fact enforce the comparative advantage and therefore the economic performance of Germany and their own firm. However, if we do not accept the working of the *invisible hand* of institutional complementarity, we can argue with Wolfgang Streeck that the presence of the German industry-wide collective bargaining does not mean that firms are “normatively socialized or even content with the system” but rather forced by other social forces⁹⁹. In this perspective, the firm’s preference of work councils vis-à-vis trade unions is indeed a symptom of liberalization of the German economy, or a victory of exit over voice¹⁰⁰. This implies

⁹⁷ Hall and Soskice, "An Introduction to Varieties of Capitalism," 24.

⁹⁸ Interview TNCM3.

⁹⁹ Streeck, 244.

¹⁰⁰ Ibid.

also that transnationalization can lead to institutional change at home, both by an alteration of preferences of managers as well as by pressures arising through increased competition between the (coordinated) home and the (more liberal) host country that specializing in similar activities¹⁰¹.

The second puzzle is constituted by the rejection of German firms of the Hungarian education system. It concerns the DME approach by Nölke and Vliegenhart. Whereas it is true that TNCs do not invest much in vocational training and do largely dispense with providing apprenticeships as they do in Germany, they do indeed *demand* a system like the German one (see 3.4.3).

A further observation that needs to be addressed is that the exclusive focus on the institutions that VoC treats as its core institutions is not sufficient. It is not surprising that German managers direct most of their criticism as well as expectations to the state. Taxes, bureaucracy, and corruption are by far the issues that the interviewees complained most about¹⁰². Also, improving the vocational system and making the labor market more flexible is deemed a task of the state, not of TNCs. All these factors, however, are insufficiently addressed by both the firm-centered VoC-approach and the TNC-centered DME approach. The latter implies that in the V4 states are rather weak vis-à-vis TNCs and their policies are either done according to the needs of DMEs, if they matter at all. This is not validated by the interviews conducted, neither by the surveys on German firms. While it is not probable that firms can really instruct states to serve their needs at home (VoC), it is even less imaginable that foreign firms can instruct or forgo states abroad, as the DME approach implies. The role of the state should therefore be seriously considered when dealing with capitalist varieties.

¹⁰¹ Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court ": 362.

¹⁰² See also survey in Handelskammer.

This section has illuminated that the VoC framework and its implications are not consistent with the attitudes of managing staff of German TNCs in Hungary. First, institutional setups are assessed not as complementary; managers would rather “pick out” the most efficient beneficial institutions from both Germany (e.g. vocational training) and Hungary (e.g. firm-level industrial relations) than trust on any sort of institutional equilibrium. This indeed points to the assumption of Bohle and Greskovits, that transnational capitalism is setting in motion a process towards institutional incoherence rather than establishing and stabilizing mutually enforcing and complementary institutions¹⁰³.

Furthermore, it has become clear, that VoC’s focus on five core institutions cannot explain institutional configurations in a sufficient way and is therefore too narrow. Especially the role of the state is pointedly downplayed by the VoC framework, even more so by the DME approach.

3.4. The Institutional impact of German firms in Hungary

After having outlined the importance of and motivations for German FDI in Hungary and the stance of German firms towards the institutional environment in Hungary, in the final section of this thesis, I will inquire into the actual impact that TNCs exercise on Hungarian institutions. Three fields will be analyzed: Industrial relations, vocational training and industrial upgrading. While the former are core institutions in the VoC logic, the latter is chosen because industrial upgrading tells a lot about the comparative advantage and therefore about the institutional environment of a country (see table 1).

¹⁰³ Bohle and Greskovits, "Varieties of Capitalism and Capitalism Tout Court ": 181.

3.4.1 Industrial upgrading

The issue of industrial upgrading is central to the question how CEE's types of capitalism can be characterized. The DME approach implies that the V4 countries serve as an assembly line for Western CME manufacturing goods that were developed in the West. The highest value-added processes remain in the CMEs. The convergence thesis points towards a steady upgrading of the Hungary's industries and towards TNC-led convergence with CMEs concerning institutional setups and production profiles¹⁰⁴.

In order to navigate through these different arguments, a first step to go is to look at the activities German firms carry out in Hungary. The table below shows details about the engagement of transnational German firms in the manufacturing sector. The list includes Hungarian subsidiaries of TNCs with their legal base in Germany (Table 4).

The following observations can be noted. First, German TNCs carry out very diversified activities in Hungary. Taking the number of employees as a reference point, we can say that with the exception of the light-basic sector, the activities of German firms are quite equally shared between heavy-basic, heavy-complex, and light-complex activities. Regarding the export statistics however, it can be assumed that German firms are overrepresented in the heavy-complex and light-complex industries¹⁰⁵.

¹⁰⁴ Hancké, "How Coordinated Capitalism Emerges in Central Europe."

¹⁰⁵ Many suppliers for the heavy-complex industry in Hungary do not appear in the export statistics. Less labor-intensive and higher value-added activities are adding more to the exports than their number of employees indicate. Audi Hungaria is a good example for this. While the firm employs merely 0,15% of the Hungarian labor force, it contributes to 9% of Hungarian exports.

Table 4¹⁰⁶**Hungarian subsidiaries of German TNCs in the manufacturing sector 2009**

type of industry	number of firms	share of type of industry per number of firms	employees	average number of employees in type of industries	share of firms per number of employees
light-basic	17	13%	4327	255	8%
heavy-basic	54	43%	15894	294	29%
light-complex	39	31%	19107	490	35%
heavy-complex	16	13%	15031	939	28%
total	126	100%	54359	495	100%

Foreign firms provide together 70% of Hungarian exports¹⁰⁷. It can be assumed that German firms as the largest group of foreign firms contribute a lot to the status of the V4 that Greskovits, in style of Wallerstein defines as *semi-core*¹⁰⁸. In fact, “the Visegrád Four export to the west what the west usually exports to the ‘the rest’”¹⁰⁹.

However, Hungary and Germany certainly are characterized by very distinct production profiles which are not revealed by the statistics provided so far. In transnational capitalism, the actual *position* of a country in the production chain might be concealed by export statistics or their leading sectors¹¹⁰. So, what role does

¹⁰⁶ For further details, see table 2.1 Appendix

¹⁰⁷ Handelskammer.

¹⁰⁸ Béla Greskovits, "Leading Sectors and the Variety of Capitalism in Eastern Europe," *Actes du GERPISA* 39 (2005): 115.

¹⁰⁹ Ibid.

Greskovits: 115.

Hungary play in producing the goods it exports? Is there convergence with Germany, or is Hungary merely a slightly upgraded “extended workbench” of Germany (DME)?

While exhaustive statistics on the adjustments of TNCs’ strategies in CEE do not exist, the individual cases of TNCM2 and TNCM3 are revealing. Looking at the production profiles of the two firms shows that industrial upgrading is taking place to a considerable extent and in ways that neither the DME-approach nor the Hall/Soskice framework can account for. Both subsidiaries started out in the early 1990s as lower value-added manufacturing sites. In the course of the decade, the sites were expanded and production became more and more complex. Also, more and more R&D and engineering facilities were built up. TNCM2 started out with 10 engineers in 1994; in 2008 they employed more than 400. Almost 40% of the R&D of the corporate group which TNCM2 is part of is carried out in Hungary. While this may be an exceptional case in respect of industrial upgrading, it illustrates that Hungary seems to be a very attractive and lucrative place for German firms to locate activities requiring highly-skilled professionals to¹¹¹.

The case of TNCM3 points to a similar direction and reveals even more the complexity of transnational production networks. While in the 1990s TNCM3 served exclusively as a production site, in the 2000s it is now operating with a R&D office employing 30 engineers. While the company produces turbine blades that mainly are exported to and processed in Germany, the local engineers develop and design parts for turbines and condensers exclusively for a production site in Indonesia. This also illustrates that R&D facilities are strategically located in Hungary, not just for reasons of synergies and closeness to the production site but also because it is an attractive place for German firms to strategically invest in highly knowledge intensive

¹¹¹ Another case in point is the establishment and recent upgrading of a major R&D center of Bosch (March 2010, investment volume (€33,3mn). *Jahrbuch 2009/2010*.

industries. This points towards an increasing comparative advantage of Hungary specializing in ever more complex activities that can be carried out at considerably less costs than in Germany.

This statement, however, is a contradiction to the assumptions of the DME approach that envisages an ever increasing specialization of Germany in the types of activities that are apparently set up in Hungary and portrays Hungary as specializing and consolidating in labor-intensive lower-skill activities. Indeed, one cannot rightfully say that DME-approach does not sufficiently capture the *status quo*. Admittedly, the cases analyzed might be considered merely an illustration of VoC's notion that institutional environments might accommodate *some* activities of a different kind, while the activities in which the economy has a comparative advantage resulting from a certain institutional configuration, dominate¹¹². Indeed, TNC1-3 carrying out considerable R&D are rather the exception to the rule and Hungary all but lacks behind in R&D expenditures when compared to Germany¹¹³. It is also true that R&D done for German TNCs in Hungary does benefit the value-added chain of the German political economy as much as Hungary's, perhaps even more so. However, to portray Hungary as a perpetuated extended workbench of Germany seems at least as misplaced considering it the future Baden-Württemberg.

How can the discrepancy between the VoC/DME approach and a presumed industrial upgrading in Hungary be explained on theoretical terms? One reason might be found in the incapability of the VoC framework to grasp the complexity of today's transnational capitalism. Institutions and institution building is more and more not any longer exclusively determined by national institutions (i.e. the German institutional setup has an impact on the Hungarian one) but rather by an "emergent mode" of

¹¹² Hall and Soskice, "An Introduction to Varieties of Capitalism," 9.

¹¹³ eurostat, R&D Expenditure in the Eu27 Stable at 1.85% of Gdp in 2007.

transnational institution building that is shaped by transnational actors¹¹⁴. Transnational institutions may indeed overarch and overlap with country borders and one country might host more than one institutional arrangement. This requires that the parsimonious and predictable VoC framework needs to be reformulated or abandoned. However, doing so, we are faced with the uncomfortable truth that the transnational process of institution building and institutional (re-)shaping is one of a “high complexity which makes outcomes rather unpredictable”¹¹⁵.

TNCM2 serves perfectly to illustrate this complexity. The Hungarian subsidiary is currently setting up a production and R&D site in India. The planning and responsibility of this capital-extensive undertaking is exclusively in the hands of (the Hungarian) TNCM2 which will also be the legal parent company of the India venture. The question may be asked, what the implications regarding national institutional setups are when a Hungarian subsidiary of a German TNC sets up a multi-level production site in India, this all being financed by German capital? Furthermore, how can we understand the motivations of this investment on institutional terms? Sufficient answers to these questions seem indeed unlikely to be generated neither by the DME-approach, nor by VoC.

This section has shown that TNCs seem indeed to be involved in upgrading the industrial content of Hungary, albeit admittedly the evidence presented is rather anecdotal in nature. Firms in the early 1990s setting up “extended workbenches” are gradually upgrading their sites towards rationalized producers or even strategically independent subsidiaries. This process implies that more and more R&D facilities are gradually located in the V4 states. While this hypothesis stands in stark contrast to the DME-approach it can also not sufficiently be explained by the convergence

¹¹⁴ Djelic and Quack, 31.

¹¹⁵ Ibid.

thesis. To the contrary, the fact that more and more German firms are outsourcing or expanding R&D activities to Hungary is a contradiction to VoC and points towards a de facto liberalization of the German economy where TNCs make use of increasing exit options, seeking the advantages of the cost advantages and skilled labor in CEE. On the other hand, this process might also be a consequence of an insufficient supply of engineers in Germany which in turn would point towards an institutional dysfunctionality of the German vocational training and education system (section 3.4.3).

To sum up, Hungary can be characterized as an economy where the light-complex and heavy-complex sectors dominate. This status is heavily determined by large foreign firms "that have played a critical role in [industrial] upgrading"¹¹⁶. Industrial upgrading is an ongoing process that happens either through spillovers or through further FDI in the relevant sectors. However, Hungary will remain embedded largely in the production networks of Western TNCs, the changes of an upgrading of the Hungarian industries will therefore be dependent on the strategies of foreign firms which can allow for higher quality and research-intensive production as well as they can inhibit it¹¹⁷.

3.4.2 Industrial Relations

If it was just about the system of industrial relations, on first sight Hungary would fare well as a liberal market economy. Union density is almost at the low level of the U.S.,

¹¹⁶ Hancké, "How Coordinated Capitalism Emerges in Central Europe," 19.

¹¹⁷ A case in point is Skoda. Skoda, while having a comparative advantage concerning labor costs in the Czech Republic, has been specializing more and more in the production of upper range, high quality cars, thus competing with the German VW Golf and even more prestigious vehicles. The qualitative upgrading of the Czech branch of Volkswagen however, has been recently repressed by the headquarters in Germany, which imposed a strategy on Skoda forcing the Czechs to return to the production of lower price and lower quality cars. Dietmar Hawranek, "Wettkampf Der Schwestern," *DER SPIEGEL*, 8.3.2010
2010.

the collective bargaining coverage just slightly higher than in the U.K. The dominant level of bargaining takes place at the firm level¹¹⁸. The deterioration of labor unions in the former socialist countries is a complex irony of history that cannot be elaborate on here¹¹⁹. On the other hand, it would be false to consider Hungary a “satanic mill” where labor has no rights at all. Hungary’s socialist heritage concerning working practices (e.g. overtime work), some aspects of labor legislation as well as the impact of the EU cast doubt on Hungary structural congruence with the U.S.¹²⁰.

Germany as the doyen of CMEs has a higher collective bargaining coverage at around 60%¹²¹ in the absence of a high union density (23%)¹²². Collective bargaining in general takes place at the sectoral level. Although the system of industrial relations in Germany is clearly subjected to a process of liberalization which is a reason among others for Wolfgang Streeck’s recent sweeping swipe against the VoC framework¹²³, the institutional environments in both countries can be described as very distinct.

Above, I already elaborated on the fact that German employers welcome and even favor the Hungarian more liberal model of Industrial relations. In fact, the results of weak labor (very low strike rates especially in the private sector¹²⁴, low wages and relatively “flexible” labor regulation) constitute a lot to the attraction of the CEE countries. The first impression therefore is that German firms actually do nothing to change this system or transplant any German way of collective bargaining to

¹¹⁸ Nölke and Vliegenhardt: 685.

¹¹⁹ David Ost, "The End of Postcommunism: Trade Unions in Eastern Europe," *East European Politics and Societies* 21, no. 1 (2009).

¹²⁰ Bluhm, 281.

¹²¹ *Industrial Relations in Europe 2008*, ed. European Commission (Luxembourg: Office for Official Publications of the European Communities, 2009, 2008), 78.

¹²² *Industrial Relations in Europe 2008*, ed. European Commission (Luxembourg: Office for Official Publications of the European Communities, 2009), 74.

¹²³ Streeck.

¹²⁴ Strike volumes in CEE are about 10% of strike volume in WE (Data of 2004). Guglielmo Meardi, "Multinationals in the New Eu Member States and the Revitalisation of Trade Unions," *Debatte* 15, no. 2 (2007): 178.

Hungary. The interviews that were conducted point to a similar direction. There is nothing like an initiative of German TNCs promoting for example a greater organization of employers and the firm-level work councils are considered as all but sufficient and even more effective “small unions”¹²⁵. The expectation that management of German firms would consciously and strategically promote a system of industrial relations similar to the West is therefore beside the point. The same is true for other German actors close to business, such as the German-Hungarian Chamber of Commerce, an institution that, according to Hancké, is elsewhere engaging in transplanting institutional practices from the home- to the host-countries¹²⁶.

Nölke’s and Vliegenhart’s observation that skilled labor is appeased on the firm-level holds true. Work councils are preferred to trade unions, and several cases have revealed in the past that management can in fact be more non-cooperative when it comes to trade union organization than the general depiction of very harmonious capital-labor relations in CEE implies¹²⁷. Rather, incentive packages are granted to the workers, including health care provision, or consumption vouchers. When it comes to wages, the impact of German firms in Hungary is difficult to evaluate.

While German firms in general pay 30% more than Hungarian firms¹²⁸, this has certainly to be qualified by the fact that they employ more highly skilled professionals than the average employers in Hungary and that they are less likely to circumvent taxes by applying cash-payments while employing at the minimum wage. The issue of a potential wage increase of Hungary is met with utmost suspicion by

¹²⁵ Interview TNCM3

¹²⁶ Hancké and Kurekova, *Final Report: Varieties of Governance in Central Europe*, 34-35.

¹²⁷ A case in point is the continuous struggles over union organization in a major German TNC in Hungary (more than 5000 employees). Meardi.

¹²⁸ GHCOG

managers. One interviewee states that a significant increase of wages in Hungary would be “fatal” for Hungary, as this would deprive the economy of one of its most important advantage vis-à-vis the West. The ability of German firms to “deliver German quality at Chinese prices, just a stone’s throw away from Munich”¹²⁹ would be undermined with an increasing wage level and production would likely be relocated.

However, it would be inappropriate to conclude that Western TNCs have no impact at all on industrial relations in the East. One form of impact is a restrictive one. German firms do inhibit the development of the creation of a CME-like system of industrial relations. On the other hand, they influence domestic practices of industrial relations, in the opposite direction. Meardi’s recent study provides with several insights in this respect. While it seems insignificant whether a TNC’s origins from an LME or a CME¹³⁰, there have been various cases where foreign firms played a central role for the “revitalization” or new establishment of trade unions. The positive effects of the TNCs stem from various directions. In some cases, unions from Germany assisted the Hungarian unions, German practices of industrial relations therefore “is often a very important source of inspiration”¹³¹ for their Eastern European counterparts.

On the other hand, TNCs with a large demand of skilled labor are more likely to grant concessions to labor as soon as labor shortages in the region appear¹³². TNCs, such as Audi Hungária in the Győr region, certainly can be said of providing a futile ground for increasing capital-labor accords, if only at the firm level. Audi engages in capital-intensive protections, employing a skilled workforce in a region with low

¹²⁹ Interview TNCM3

¹³⁰ Meardi.

¹³¹ Ibid.: 191.

¹³² Ibid.: 183.

unemployment, criteria which according to Bohle and Greskovits raise the likelihood of a labor-capital accord¹³³.

As becomes clear, the impact of German TNCs on industrial relations in Hungary is very multi-faceted. It is true that business does have little intention to transplant German industrial relations to Hungary. When it comes to industrial relations, Hungary is not being moved towards becoming a CME by German firms who deliberately would promote an institutional setup based on the German model. Thus, the convergence thesis can be ruled out when it comes to industrial relations. Indeed, the DME approach seems to capture the nature of industrial relations in the V4 well and it seems also valid that German firms have a strategic interest in rather weak labor. After all, weak labor can be said to be one reason why they came to the V4 in the first place. Also, management clearly wishes the state to push forward a further deregulation of labor legislation.

Whether this means that practices of industrial relations in the V4 and Germany can be considered as being distinct forms of institutional configurations in equilibrium that produce a certain comparative economic advantage (DME), remains doubtful. First, we have seen that the impact of German TNCs on industrial relations is more complex than the DME framework implies. Secondly, the location of German production might have a serious impact on German industrial relations. Being increasingly faced with direct competition from abroad, German labor faces increasing pressure for major concessions. The decline of trade unions and collective bargaining coverage¹³⁴ in recent years as well as the significant increase of untypical work¹³⁵ points to that direction. Certainly, significant direct relocations and dramatic

¹³³ Bohle and Greskovits, "Capital, Labor, and the Prospects of the European Social Model in the East."

¹³⁴ Streeck, 38-55.

¹³⁵ Markus Dettmer and others, "Ära Der Unsicherheit," *DER SPIEGEL*, 22.3.2010 2010.

outflows of jobs from Germany to CEE have not materialized¹³⁶. However, the threat of increasing relocations, especially in the context of industrial upgrading in the East puts considerable pressure on German labor. Therefore, rather than lagging behind Western Europe, CEE might in fact be the “vanguard of further liberalization”¹³⁷.

These developments render VoC’s notion of “punctuated equilibrium” doubtful. Indeed, in Hungary as well as in Germany, inter-societal and inter-firm cleavages are apparently increasing. In the absence of strong sectoral bargaining, wage inequality in Hungary is among the highest in the EU¹³⁸. Transnationalization might indeed point towards more fragmented and unequal societies. While strong sectoral unions flounder (Germany) or do not become revitalized (Hungary), smaller unions of skilled and highly skilled workers, speaking on behalf of a small elite might be the model for the future, both in East and West¹³⁹.

3.4.3. Vocational training and education

The issue of vocational training is of central importance to the VoC framework and is closely related to the system of industrial relations. In coordinated economies, firms are engaged in supplying their workers with a high degree of industry-specific or company-specific skills, strong employer organizations providing inter-firm coordination, prevent the poaching of workers by other firms¹⁴⁰. The partly state-subsidized system of apprenticeships in Germany that provides with mainly practical industry-specific skills can therefore be regarded a prime example of coordination in

¹³⁶ Henning Klodt, "Schreckgespenst Arbeitsplatzexport: Auslandsinvestitionen Und Inländischer Arbeitsmarkt," *Internationale Politikanalyse Politik Info* September 2006 (2006). <http://library.fes.de/pdf-files/id/03949.pdf> [accessed 04.14.2010]. This is not to say, that relocations did not take place. Prominent examples are relocations, of Nokia from Bochum to Romania (2008), and from AEG/Electrolux from Nürnberg to Poland (2007).

¹³⁷ Crowley.

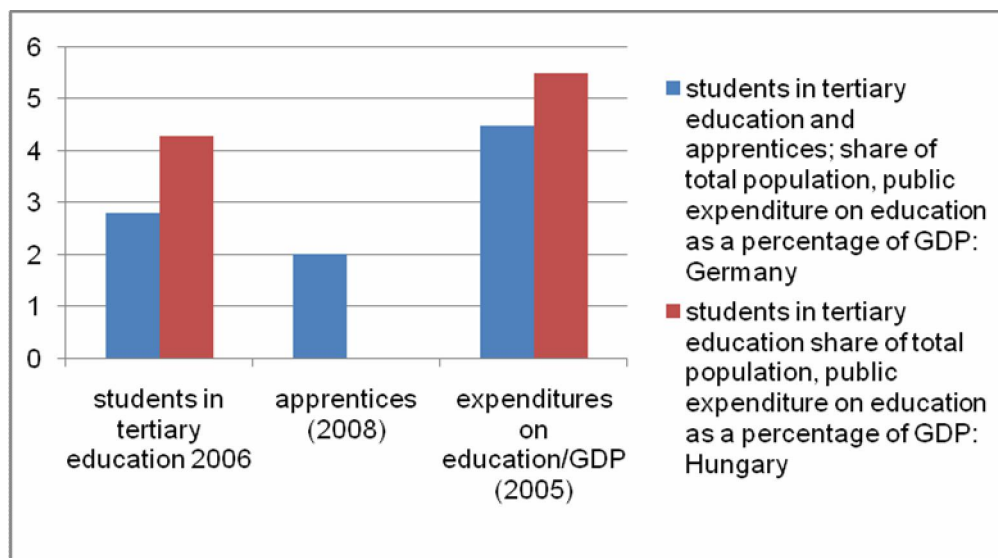
¹³⁸ *Industrial Relations in Europe 2008*, 88.

¹³⁹ Ost: 30.

¹⁴⁰ Hall and Soskice, "An Introduction to Varieties of Capitalism," 25-26.

the VoC sense. Apprenticeships as a career choice are highly appreciated in Germany. As a result, numbers of students participating in tertiary higher education in Germany has traditionally been significantly lower than in other OECD countries.

Figure 10¹⁴¹



Above, we already illustrated that German firms operating in Hungary appreciate the German system of vocational training and miss the high-level of practical industry-specific skills in the foreign environment. Hungary has also had a tradition of apprenticeships stemming from the times of the Hapsburg-monarchy; however this system was modified in communist times as it was run by the state and gradually lost efficiency due to the lack of competitive markets and the orientation towards the demands of a planned economy¹⁴². The system of vocational training was largely neglected in the transition years and deteriorated¹⁴³. In-house apprenticeships today have significant less importance than in Germany, while participation rates in tertiary education are considerably above Germany. Apprenticeships are not a popular career choice as they do not provide with the solid

¹⁴¹ Data derived from eurostat and Statistisches Bundesamt.

¹⁴² Crowley.

¹⁴³ Hancké, "How Coordinated Capitalism Emerges in Central Europe," 17.

career and wage prospects as they do in Germany. Also, vocational training in Hungary provides less with practical and more with theoretical skills. Training takes place about 75% in school and 25% in the plant, a reversal of the relation to Germany.

This situation is paradox when thinking in VoC terms. Whereas the education system in Hungary is closer to that of an LME which is partly a result from a weak system of industrial relations, foreign firms have a great demand for a labor force that CMEs provide with, i.e. skilled blue collar labor. This situation in the past has already led to significant labor shortages, a phenomenon that is far from confined to Hungary¹⁴⁴. It could therefore be expected that vocational training is the first field where German firms would try to alter the Hungarian institutional environment and therefore work towards convergence of the two economies, as the German system is appreciated by managers and there are increasing shortages in the labor supply. Apparently this is not necessarily the case.

Despite the fact that management demands a system more oriented to the German vocational system, German firms remain rather passive. The TNCs analyzed in this thesis illustrate this. While one firm does not provide initial vocational training at all, two firms offer it, but the number of apprentices is much below German levels. While this observation complies with the Nölke/Vliegenhart model, the authors have to be contradicted in several respects. The statement that “the withdrawal of governmental involvement no longer allows for a strong public education system that counterbalances limited vocational training with a high-quality general-skills education along Anglo-Saxon lines”¹⁴⁵ remains doubtful. It is true that Hungarian expenditures on education were cut in the 1990s; however the Hungarian state

¹⁴⁴ "East, West and the Gap Between," *The Economist*, 26.11.2005 2005.

¹⁴⁵ Nölke and Vliegenhardt: 687.

invests more in education than the average of the EU-27 countries, its expenditures related to GDP being higher than both the U.K. (LME) and Germany (CME).

On the other hand, it remains doubtful to state that foreign TNCs in Hungary deem “existing vocational skills [...] largely adequate”, that they do “not find it rewarding to invest heavily in their own workforce”, and do not care about deteriorating skill levels “given their potential to relocate production”¹⁴⁶. While it is true that German firms do not invest heavily in initial vocational training in Hungary, they very well do invest in their own workforce. Vocational training is happening as in-house further training. Given an accumulated investment of more than €3bn, it is not conceivable that a firm like Audi Hungária does not care about improving the skills of its employees and would seriously take comprehensive relocations into consideration. While this firm might be regarded an exception to the rule, similar is valid for the other companies that were investigated on. The DME approach can be regarded as somewhat misleading in this context. This stems from the focus of the framework on foreign firms that necessarily have to be content with institutions which themselves have brought about. In the case of vocational training, this however, does not hold true. It rather seems that the Hungarian state and the German TNCs pursue different goals concerning education. While the state seems to put a stronger focus on higher education in public and private schools and on a more LME-like education, German firms demand skilled blue collar labor.

The reason why German firms do not engage much in initial vocational training may therefore not be found in the fact that they do not like to invest in their workforce, but rather in the fact that the Hungarian system of initial vocational training does not provide workers with the skills they need, which is why TNCs prefer to train their

¹⁴⁶ Ibid.: 686-687.

workforce in the course of further in-house training. TNCM1 recently founded a private institution of education where employees of the firm as well as outsiders can take several programs ranging from language courses to CAD-programming. The teaching content is directly adapted from a similar German academy, which points towards a certain transplantation of German practices of education and training, albeit distinct from apprenticeships.

There seems to be a *discrepancy* between the Hungarian educational policy and the interests of German rather than satisfaction of the latter with the status quo. As one interviewee states: “If I was to make education policy in Hungary, I would close down half of the universities and invest in decent vocational training.”¹⁴⁷ In 2003, the German-Hungarian Chamber of Commerce has been involved in working out a strategy to implement a system of vocational training oriented to the German one, an initiative that remained without effect. Hopes to revitalize this initiative are put in the recently elected FIDESZ-government. This initiative is a good example, how German firms try to have an impact on the Hungarian education system. It also illustrates that the chambers of commerce abroad can to some extent be regarded a substitute of employer associations at home¹⁴⁸. However, it remains to be seen whether these initiatives lead to some results, i.e. to what extent the German interest to introduce more German practices of vocational training are successful.

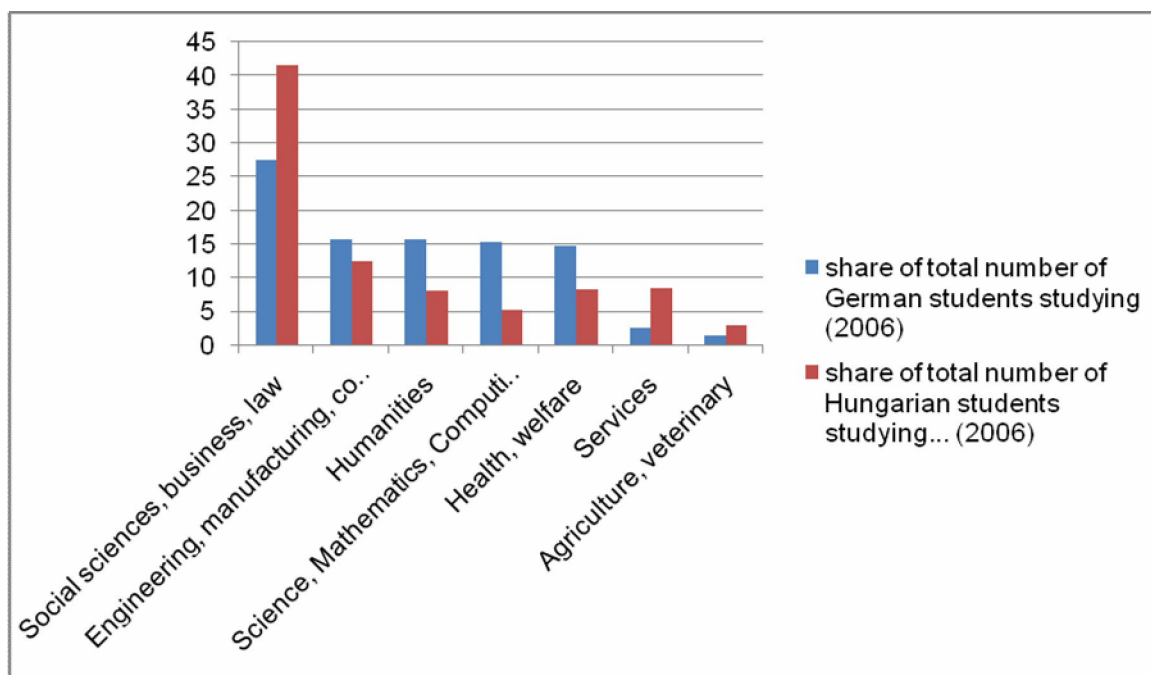
Seen from another vantage point, the Hungarian shortage of blue-collar labor might be even compensated by the state’s investment into education aiming towards higher value-added activities. The share of Hungarian students taking classes in engineering is almost at the level of Germany (figure 11) and the consequential abundance of skilled engineers in the absence of sufficient skilled blue-collar labor

¹⁴⁷ Interview TNCM2

¹⁴⁸ Hancké and Kurekova, *Final Report: Varieties of Governance in Central Europe*, 33-35.

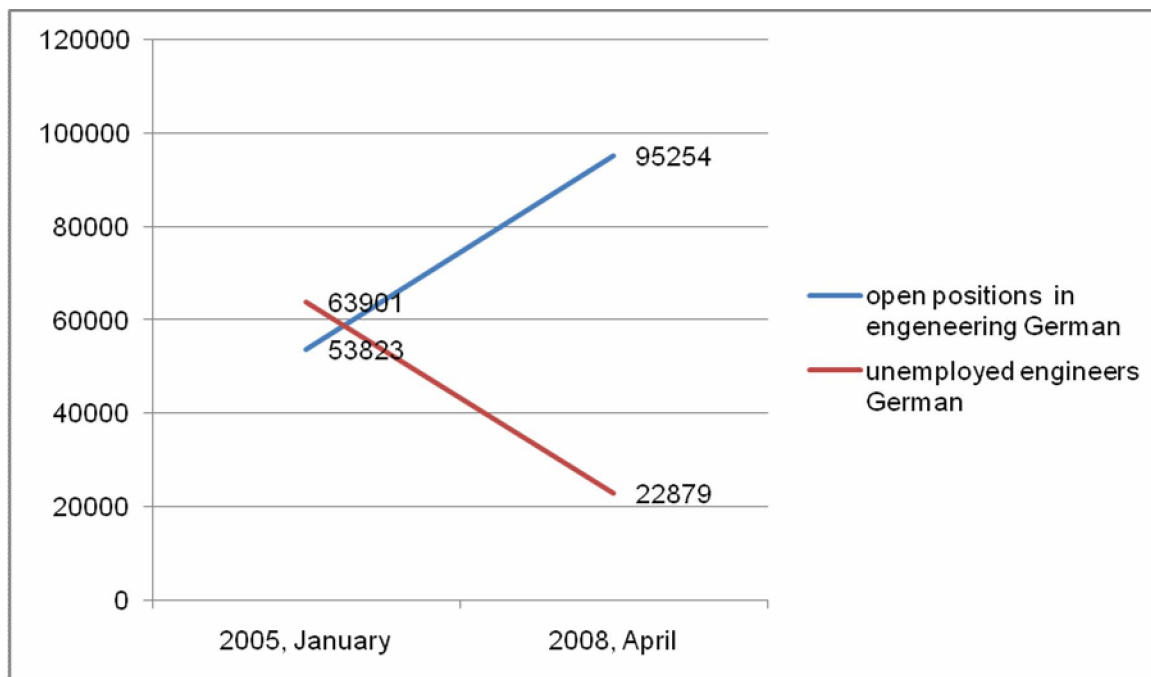
might even shift the interest of German TNCs from assembly activities to R&D activities. Additionally, the increasing scarcity of engineers in Germany (figure 12) as well as the considerable wage gap between German and Hungarian engineers might account for considerable push and pull factors facilitating the industrial upgrading of Hungary.

Figure 11¹⁴⁹: Germany and Hungary: Students in Tertiary education by subject



¹⁴⁹ Source: "Students in Tertiary Education", eurostat
http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Students_in_tertiary_education,_2006_%281%29.PNG&filetimestamp=20090430100017 (accessed 20.05. 2010).

Figure 12¹⁵⁰ Germany: Shortage of Engineers



Ongoing upgrading, however, would argue directly against the notion of the DME approach that Hungary has a comparative advantage as an assembly platform. Neither would the institutional convergence thesis be proved right. Given such a development, Hungary would develop a similar comparative advantage as Germany precisely *because of the lack* of the institutional setup of Germany, not because of an institutional configuration similar to Germany.

Thus, it becomes clear that the DME approach does not capture the complexity of the relationship of foreign TNCs and the domestic institutional environment in Hungary. The satisfaction of German firms with the existing system of vocational training seems to be lower, the need for skilled labor higher than the DME framework implies. On the other hand, it remains doubtful whether German firms really have the capacities to instruct the Hungarian state to implement a German

¹⁵⁰ Source: "Ingenieure: Mangel Wird Größer", SPIEGEL online <http://www.spiegel.de/fotostrecke/fotostrecke-36425-7.html> (accessed 13.05. 2010).

system of vocational training or build such a system on their own, which in consequence would lead to converging institutional setups in Hungary and Germany. Therefore, the ability of both the DME-approach and the convergence thesis are rendered doubtful. This stems from the inherent underestimation of a potential conflict of interest between the state and firms as well as from the assumptions that institutional setups have necessarily to be complementary and in equilibrium to produce consistent and sustainable economic advantages.

CONCLUSION

This thesis started out with two research questions. The first question concerned the reasons for German TNCs to invest in Hungary as well as their impact on Hungarian institutions as understood by the VoC framework. I investigated into industrial relations, vocational training and education, and industrial upgrading. The second research question asked, whether we can derive implications about the VoC framework from the results of the insights gained while dealing with the first research question. At the end of this thesis, we can consider these questions largely answered.

It has become clear that German firms' engagement in Hungary cannot be explained sufficiently using the tools that the VoC framework offers. The concepts *institutional arbitrage* and *comparative institutional advantage* cannot explain the massive inflows of German FDI into Hungary. Institutional arbitrage fails to do so because Hungary's economy cannot be considered possessing a comprehensive institutional configuration that produces a specific economic advantage that German firms would miss at home and therefore locate certain activities to Hungary. While the Nölke/Vlieghart approach proposes that the V4 have indeed developed a comparative institutional advantage constituting an economic advantage in lower-end assembly activities, it leaves the essential question open *why* the TNCs came to Hungary in the first place. The 1990s saw a heavier inflow of German FDI than the 2000s, therefore FDI came to Hungary at a time, when the institutional setup as described by the DME approach was present, if at all, in embryonic forms. The

inability of the VoC framework to convincingly address the question *where institutions come from* becomes apparent.

Furthermore, cost-efficiency reasons, which can be regarded the pull forces for German firms to locate in Hungary are conceptually downplayed by the VoC framework which cannot account for the extent of the capital flows from the CME Germany into the V4-region. FDI, however, is of utmost importance to understand the contemporary political economies of the two regions. The comprehensive setting up of German production sites in the V4 can be regarded a *de facto* “disintegration of the German company network in the course of economic internationalization”¹⁵¹ which goes hand in hand with the disintegration of the key features of a CME altogether. In this view, VoC is rendered insufficient an analytic concept because its functionalist assumptions based on the notion of “punctuated equilibrium” are *per se* inapt to explain destabilization.

Another problematic issue of the VoC framework that we have encountered several times in this thesis is its inherent functionalism. As I have shown, existing institutions both in German and Hungary are not necessarily producing or sustaining a certain economic advantage. In fact, managers of German firms are much more focused on profitability, shareholder value, target-setting and the competitiveness of their firm, than the VoC framework would suggest. Instead of considering the system of industrial relations in Germany a rule system that establishes the comparative advantage of Germany, German managers deem strong national trade unions rather an ineffective threat to the competitiveness of the *Standort Deutschland* and demand more flexible capital-labor relations, such as they find in Hungary. On the other hand, the system of vocational training is heavily missed in Hungary, especially in the

¹⁵¹ Streeck, 244.

context of increasing labor shortages. Several initiatives of German TNCs (such as extensive in-house training, private institutions of education) try to transplant the German practices to Hungary. This renders the notion of DME doubtful that the institutional configurations both in Hungary and Germany are tailored towards the firms needs. Rather it points to the possibility that transnational engagements of firms can lead to institutional destabilization at home.

Also, the minor role that VoC attributes to the state, leads to analytical problems. In Hungary, the relationship between the management of German firms and the state is much more significant than the DME approach suggests and much less calibrated than Hall and Soskice imply. Additionally to the fact that VoC's perspective on five core institutions may be too narrow, this again shows the problematic functionalist assumptions of VoC that do not allow for a discrepancy between firms' needs and state action.

It is certainly true that institutions matter for firms as much as certain institutional configurations produce certain outcomes. Hall and Soskice have convincingly shown this with great rigor for Germany and the USA. However, this thesis has shown that *similar* outcomes can be reached in very *different* institutional environments. Hungary is in a process of industrial upgrading but not in a process of institutional convergence. On the other hand, the disintegration of the German system of industrial relations and considerable deregulation of the German labor market shows that economic advantage might not be as much dependent on mutual enforcing institutional setups to the degree that the VoC framework proposes. Decisions, both in the political and the economic sphere, are more and more made on the grounds of sustaining competitiveness and profitability. This sheds doubt on

the VoC framework, especially on its notion that the institutional configurations of CMEs are sustainable in transnational capitalism.

However, the insights that this thesis has produced, point rather towards more *hybrid* institutional setups, than towards a liberalization of CMEs along the lines of the Anglo-Saxon LME model. The reasons for this are that the institutions of CMEs develop in a path-dependent way and some of the institutional arrangements in CMEs may very help to increase profitability whereas others may not. The adherence to or the undermining of institutions by capital happens in a much more *situative* and contingent way than the VoC's notion of an institutional "domino-effect" of CMEs becoming LMEs implies. This renders one of the greatest strengths of VoC, its parsimony, critical. However, if parsimony is to be favored over eclecticism, instead of enquiring into interplay of equilibrium-seeking national institutions, the future task of research will be to establish parsimonious approaches that shed more light on the logic of (global) capitalism. Those models might be less comforting than the Varieties of Capitalism framework, however, more to the point.

APPENDIX

Table A1: Information about conducted interviews

company	TNCM1	German-Hungarian Chamber of Commerce	TNCM2	TNCS	TNCM3
type of interview	semi-structured interview	semi-structured interview	semi-structured interview	semi-structured phone interview	semi-structured interview
date of interview	May 5th, 2010	May 6th, 2010	May 10th, 2010	May 25th, 2010	May 21st, 2010
duration of interview	60 minutes	60 minutes	45 minutes	30 minutes	60 minutes
position of interviewees	director of further training office	division manager communication	director advanced engineering and Location Leader	division manager marketing	1. director 2. communication responsible
nationality of interviewee	Hungarian	German	Hungarian	Hungarian	1. German 2. Hungarian

Table A2: Firm-specific information

Firm	TNCM1	TNCM2	TNCM3	TNCS
in Hungary since	1993	1990 (1960s)	1991	1992
employees	Ca. 5500 <ul style="list-style-type: none"> - 4400 manufacturing engines - 700 assembly TT - 100 R&D - 300 management and administration 	Ca. 1500 <ul style="list-style-type: none"> - ca. 1000 manufacturing - 400 R&D - 100 management and administration 	ca. 600 <ul style="list-style-type: none"> - 450 manufacturing - 70 management and administration - 30 R&D 	25 <ul style="list-style-type: none"> - Ca. 20 sales
activities	<ul style="list-style-type: none"> - engine plant - assembly - R&D - training 	<ul style="list-style-type: none"> - manufacturing of systems for commercial vehicles - R&D for systems for commercial vehicles 	<ul style="list-style-type: none"> - manufacturing of turbine blades and different turbine components - R&D for turbine and condensers 	Sales for pumps and mountings
industrial relations	firm-level	firm-level	firm-level	firm-level
vocational training	<ul style="list-style-type: none"> - 100 apprenticeships - further training (in-house) 	<ul style="list-style-type: none"> - further training (in-house) - apprenticeships - further training (in-house) 	<ul style="list-style-type: none"> - further training (in-house) 	<ul style="list-style-type: none"> - further training (in-house)
distribution	<ul style="list-style-type: none"> - export to Germany - R&D for local plant 	<ul style="list-style-type: none"> - export to German and American manufacturing sites - R&D for East Asian production site - Mainly export to European customers - R&D for global production 	<ul style="list-style-type: none"> - export to German and American manufacturing sites - R&D for East Asian production site 	- n/a
main reason to engage in Hungary as brought forward by interviewee	<ul style="list-style-type: none"> - labor costs - geographic location - skilled labor force - government incentives and support in the 1990s - friendliness of Hungarian people and state towards Germany 	<ul style="list-style-type: none"> - earlier licensing - labor costs - safe patents - skilled labor force - highly skilled engineers 	<ul style="list-style-type: none"> - labor costs - flexible employees - safe patents - skilled and abundant labor force 	<ul style="list-style-type: none"> - local customers

Table A3¹⁵²: Hungarian subsidiaries of German TNCs in the manufacturing sector 2009

type of industry	number of firms	share of type of industry per number of firms	employees	average number of employees in type of industries	share of firms per number of employees	export statistics ¹⁵³ Of Hungary 2003 type of industry per total exports
light-basic	17	13%	4327	255	8%	11%
heavy-basic	54	43%	15894	294	29%	18%
light-complex	39	31%	19107	490	35%	42%
heavy-complex	16	13%	15031	939	28%	29%
total	126	100%	54359	495	100%	100%

The classification of industries is done according to Greskovits¹⁵⁴.

Heavy-basic industries: agriculture, oil, gas, electricity, coal, stone, non-ferrous metals, paper, rubber, plastic, ferrous metals (SITC-classification¹⁵⁵: 0-20, 21, 22, 23, 25, 27, 28, 29, 32-35, 62, 64, 66, 67, 68, 69).

Heavy-complex industries are chemicals (except pharmaceuticals), transport and heavy industrial machinery, railways, planes, etc. (SITC-classification: 5 excluding 54, 71, 72, 73, 74, 78, and 79).

Light-complex industries include pharmaceuticals, electronics, and electrical, light machinery (SITC-classification:

¹⁵² The table is based on *Kontakter. Das Mitgliederverzeichnis Der Deutsch-Ungarischen Industrie- und Handelskammer*, (Budapest: Deutsch-Ungarische Industrie- und Handelskammer, 2010).

Included are Hungarian firms that are members of the German-Hungarian Chamber of Commerce and have a listed parent company legally based in Germany. The data refers exclusively to firms with more than 50 employees carrying out manufacturing activities in Hungary

¹⁵³ Export statistics and domestic production activities should not be understood as correlative or even congruent. There are several reasons for this. To mention only three, some activities are primarily serving the domestic markets, and therefore do not appear in the export statistics. Second, local suppliers for large heavy-complex producers (e.g. Audi) appear as heavy-basic in the table above, whereas in the export –statistic they do not appear, but contribute to the heavy-complex exports. Thirdly. Thirdly the table above refers mainly to employees in a sector, whereas export statistics refer to the value of goods. Therefore, higher value-added and less labor-intensive activities can be assumed as being underrepresented in the table above vis-à-vis export-statistics. Fourthly, the table above is based on the *main* activity of the firm, firms with diversified activities are thus represented in a simplified way.

¹⁵⁴ Greskovits. As opposed to Greskovits, SITC -72 classifies here as heavy complex industry; software firms mainly engaged in programming activities were included as "light-complex."

¹⁵⁵ "Sitc Rev.3, (Standard International Trade Classification, Rev.3)", United Nations Statistics Division <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=14> (accessed 20.05. 2010).

54, 75, 76, 77, 87, 88) as well as software industry mainly involved in programming activities.

Light-basic industries include wood, simple wood products, textiles, clothes, footwear, furniture, etc. (24, 26, 60, 61, 63, 65, 80-85, 89).¹⁵⁶

Table A4¹⁵⁷: Subsidiaries of German firms in the manufacturing sector (more than 50 employees)

		light- basic	heavy- basic	light- complex	heavy- complex
Audi Hungária Motor	5155				x
Robert Bosch Elektronika	3084			x	
AFL Hungary	2500		x		
Zollner Elektronik Gyártó és Szolgáltató	2400			x	
Robert Bosch Power Tools	1800				x
EPCOS Elektronikai Alkatrész	1440			x	
Continental Teves	1127			x	
FAG Magyarország Ipari	1100		x		
Luk Savaria	1100				x
Temic Hungary	1051			x	
Veritas Dunakiliti Csatlakozástechnikai	1046		x		
Digital Disc Drives (BOSCH)	1000			x	
Hammerstein	980				x
Villeroy & Boch Magyarország	950	x			
Güntner-Tata Hűtőtechnika	943			x	
Autoliv	900				x
Hauni Hungária Gépgyártó	880				x
Knorr Bremse Fékrendszerek	768				x
Knorr Bremse Vasúti Jármű Rendszerek	670				x
ZF Hungária	667				x
Balda Solutions Hungária	612			x	
Roto Elzett Certa	584		x		
Siemens Erőműtechnika	584				x
BOS Automotive Products Magyarország	570	x			
Kienle & Spiess Hungary	550		x		
B.Braun Medical	524		x		
Balluff Elektronika	500			x	
Lufthansa systems	500			x	
OAM ÓZDI Acélművek	500		x		
Harman/Becker Automotive Systems	496			x	
Richard Fritz Müanyag és Gumi Autóalkatrészeket	490		x		
Hirschman Car Communication	476			x	

¹⁵⁶ Greskovits: 115.

¹⁵⁷ Compilation based on *Kontakter. Das Mitgliederverzeichnis Der Deutsch-Ungarischen Industrie- Und Handelskammer*. Classification of sectors based on Greskovits.

Carl Zeiss Vision	471			x	
Conti Rubber Tech	467		x		
Provertha Electronic Components	458			x	
LAING Szivattyu	450				x
SAP	450			x	
Kuka Robotics Hungária	446				x
AMB Components Hungary	442		x		
STI Pétöfi Nyomda	420		x		
Spinner Hungária	400			x	
SUOFTEC	400		x		
Ziehl-Abegg	390			x	
Eismann Automotive Hungária	385	x			
Merz Fashion	385	x			
BENTELER Autótechnika	366		x		
PEX Hungária	360		x		
IBV Hungária	350			X	
Kübler Hungary	350	x			
Claas Hungária	337		x		
Freudenberg-Simmeringe	337		x		
Rosenberg Ventilatoren	325			x	
Präzi Flachstahl Contarex	300		x		
Robert Bosch	297			x	
Wilisch Hungaroplast	280		x		
Eckerle Industrie	270			x	
RAFI Hungaria	269			x	
Messer Hungarogáz	260				x
Büchl Entsorgungswirtschaft	250		x		
Nordenia Hungary	250		x		
Poppe & Potthoff Hungária	250		x		
Rösch Mode	250	x			
Bott Hungária	230				x
Magnatech-Ungarn	230		x		
Frimo Hungary	225		x		
MSK Hungary	220		x		
Rosenberg Hungária	213		x		
Büttner&Co	210		x		
Duna-Dráva Cement	200		x		
MAG Hungary	200		x		
Termelés	197		x		
Hipp Termelő Kereskedelmi	185		x		
MOM Vízme'restechikai	185			x	
Sió-Eckes	182		x		
BOSS2006 Hungária	180		x		
Freudenberg-NOK	180			x	
Haribo Hungária	174		x		

MEY Hungariá	174	x			
Rampf Formen	165		x		
Wiedenmann	162		x		
IMS Connector Systems	158			x	
LKH Leoni	150		x		
Nematech	150			x	
METZ CONNECT	148		x		
Creaton Hungary	142		x		
Duna Vitex Csiszolóanyag Gyártó és Forgalmazó	140		x		
Evonik Agroreform	140		x		
Zarges Gyártó és Kereskedelmi	140		x		
Xella Magyarország	136		x		
Berolina Pannónia	120			x	
Hitscher Hungária	120	x			
IND	120			x	
Europe Match	115	x			
Ritz Mérőtranszformator	110			x	
Elektro-Metall Paks	100		x		
Faulhaber Motors Hungária	100			x	
Türk+Hillinger	100			x	
halbo mce	98		x		
Heitz Élfurnér Művek	98	x			
Fekoral	95	x			
KACO Hungary	95		x		
Konica Minolta Magyarország	95			x	
Bernstein	87			x	
BOSCH Rexroth	85			x	
AutoVision Magyarország	80			x	
BT Fitting	80	x			
Zentis Hungária	80		x		
SEISSENSCHMIDT Precision Components	78				x
Basalt Középkő Kőbányák	74		x		
Kirchhoff Hungária	70		x		
Koepfer Hungária	70		x		
PANA	70	x			
Rehau	70		x		
schoen+sandt Hungary	70			x	
MANZ Automation Hungary	63				x
Solvaro	59		x		
Bausch	55	x			
KK Kavics-Beton	55		x		
Rubach Elektro-Bau	55			x	
Vass és Társai	55		x		
Profilplast	54		x		

SMR Hungary	53			x	
Kähny Gépgyártó	52		x		
Beta Systems Fióktelep	50			x	
Lodenfrey	50	x			
Sakret-Hungaria	50		x		
total manufacturing	54359				

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