INDUSTRIAL TRADITION AND ITS ROLE IN THE PROCESS OF ECONOMIC CONVERGENCE: THE CASE OF THE CZECH AND SLOVAK REPUBLICS

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Submitted to
Central European University
Department of International Relations and European Studies
in partial fulfilment of the requirements for the degree of

MASTER OF ARTS

Supervisor: Professor Július Horváth

(Word count: 16,723)

Budapest, Hungary
2014

Abstract

This thesis contributes to the existing literature on economic backwardness, foreign direct investment and its embeddedness in the economy by carrying out the comparative analysis of the automotive industries of the Czech and Slovak Republic to the interconnection of the theories of economic backwardness and FDI embeddedness and proves that the development of the Slovak and Czech automotive industries based on path dependency has been decisively influenced by the factor of industrial tradition. The thesis argues that, unlike the conventional explanation of its role, in the context of the Czech and Slovak automotive industries of 1989-1998, the presence of industrial tradition has been the source of slower labor productivity and GDP growth and therefore the source of the catching up in a negative sense. As it is demonstrated in the thesis, the industrial tradition together with the transition models have been the primary sources of continuing economic convergence of the Czech and Slovak republics in 1998-2014.

Acknowledgements

My thanks go first and foremost to my supervisor, professor Július Horváth, for his friendly advice and sharing of professional experiences, precious comments and constructive criticism. I would also like to express my thanks to Kristin Makszin who inspired me and helped me to find the right angle to look at the automobile industry in the Czech and Slovak republics, and to Petra Stretavská for the interview and invaluable data sources.

Declaration

I hereby declare that no parts of this thesis have been accepted for any other degrees in any other institutions. This thesis contains no materials previously written and/or published by another person, except where appropriate acknowledgement is made in the form of bibliographical reference.

Branislav Jesenský
June 3, 2014

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Introduction

Twenty five years after the Velvet revolution, the transitional period of the Central and Eastern European (CEE) region – the group of states consisting of four Visegrád Group (V4) countries, three Baltic republics (B3), Slovenia, Croatia, Romania and Bulgaria – has been almost fully completed. Accession of the CEE countries to the European Union (EU), North-Atlantic Treaty Organization (NATO) and, in some cases, to the Organization for Economic Cooperation and Development (OECD), Schengen Area (SA) and the Eurozone could be seen as the most obvious and perceivable aspect of this success. The main outcome of the transformation, fostered by the simultaneous pre-accession processes shaped by the conditionality and technical as well as financial assistance of the EU, has been, until the advent of the economic crisis in 2009, the economic convergence of the CEE with the other EU member states (MS). This economic convergence was characterized by two complementary phenomena. The first, and most obvious one, was the reduction of disproportions between the economic performances of the old MS and the group of CEE states which joined the EU in 2004 and 2007. However, there was another observable phenomenon that took place in the CEE economic space – the reduction of economic disparities among the CEE countries. This intra-regional catching-up process is best illustrated with the case of the Czech and Slovak republics, which in 1918-1989[1] comprised two parts of one single state – Czechoslovakia.

The importance of turning the attention to these particular countries is multiplied by the fact that since 1993 the Czech Republic has been the second most developed CEE country and the most developed country among the V4 and B3 groups of states and thus a good reference point for evaluation of the successfulness of the transformation and catching up processes performed by other CEE countries. Slovakia, on the other hand, "has been the country with the

[1] Except for the period of 1939-45. During the World War II, Czechoslovakia had been divided into several parts which were incorporated into the Third Reich, Hungary, Poland and the wartime Slovak state.

highest pace of catching up with the most developed European countries in last 20 years."[2] In the period between 2000 and 2010, it showed the "highest average annual GDP growth (4.9%) among the EU member countries."[3] In this sense, Slovakia could be considered the most economically progressive country among the CEE countries. Therefore, this thesis discusses these *most obvious and relevant case of the catching-up phenomenon in the CEE framework*.

In order to be able to identify and analyze the sources of the economic convergence of Slovakia and the Czech Republic, narrowing the scope of research is needed that results in the selection of the areas and sectors into which the most significant inflow of foreign direct investment (FDI) has been recorded and which have the greatest contribution to the countries' overall GDPs. This thesis thus concentrates on the *automotive industry* as the leading branch of Slovak and Czech economies in terms of the amount of FDI attracted and the share in the total GDPs.[4] Special attention is paid to the most obvious and substantial differences between the Czech and Slovak automotive industries in the onset of the 1990s – the *industrial tradition* and, stemming from this tradition, the *embeddedness* of the automotive industry in local economy – which have a strong impact on the economic convergence of the Slovak and Czech economies. The near-absence of the automotive industry tradition in Slovakia and its presence in the Czech Republic, as well as the economic catching up of Slovakia with the Czech Republic, lead to the

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[2] Xénia Makarová, "Vyspelú Európu sme zatiaľ dobiehali najrýchlejšie," *Trend*, March 6, 2013, http://ekonomika.etrend.sk/ekonomika-slovensko/vyspelu-europu-sme-zatial-dobiehali-najrychlejsie.html (accessed March 7, 2014). All translations made by author (if not specified differently).

[3] TASR, "Slovensko dobieha Západ najrýchlejšie," *Hospodárske noviny*, March 15, 2012, http://finweb.hnonline.sk/spravy-zo-sveta-financii-126/slovensko-dobieha-zapad-najrychlejsie-492416 (accessed March 7, 2014).

[4] The share of the automotive industry production in the overall Czech and Slovak GDPs is more than 6%. Had one taken into consideration the production of contractors and subcontractors as well, the numbers would be much higher. As Tirpak puts it,

> [t]he impact of the car industry on overall economic activity goes beyond its statistical definition. This is due to backward and forward (or upstream and downstream) linkages within the industry. Backwards linkages in the car industry manifest themselves in its dependency on inputs from other industrial sectors. … Forward linkages are mostly car repair services, fuel stations, car wash facilities, etc. These inter-industry linkages increase the importance of car manufacturing in terms of both the production, and number of employees.

Marcel Tirpak and Agata Kriozen, "The Automobile Industry in Central Europe," *IMF Note* (November, 2006): 4, http://www.imf.org/external/cee/2006/1106.pdf (accessed May 7, 2014). See also Appendix 5.

assumption that the industrial tradition – generally considered as a factor contributing to greater attractiveness of the country or region for FDI, but under certain circumstances might cause the opposite – may become a source of economic conversion in a negative sense.

This master thesis analyzes in several stages the impact of the industrial tradition as the main distinguishing factor of the conditions prevailing in the Slovak and Czech automotive industries – which pretend to be the pillars of the economic growth of the Czech and Slovak republics and of their industrial production – **on the amount and character of FDI into the automotive industry and, subsequently, on the economic convergence of the Czech and Slovak republics.**

The results of the analysis acknowledge the importance of FDI, flowing into particular sectors of economy and realized in particular forms, for the transformation processes taking place in the post-socialist countries, and uncover some of the sources of the catching-up phenomenon. This is of particular relevance, especially when the post-socialist South-East European (SEE) countries in the transformation are taken into consideration. Following the Slovak case or at least having some knowledge about the sources of the successful Central European convergence they could shorten the time needed to finish the transformation process and to start the caching-up with the CEE and other EU member countries.

The main contribution of this thesis consists in the identification of the factor of presence/absence of the industrial tradition as the tool by which the theoretical concepts of economic backwardness, embeddedness and catching up can be interconnected and explained in the framework of leading industries of certain countries in specific transformation modes.

The thesis consists of three chapters. The first one is dedicated to the specification of the factual and theoretical background and brings insight into the scholar's disputes about the phenomena of economic backwardness, as well as the possibility and ways of its elimination (catching up).

The second chapter deals with the analysis of the genesis of the Czech and Slovak automotive industries in 1960-1998, identifies them as the main sources of catching up with the

advanced economies and specifies the factors with the greatest impact on the economic convergence. The thesis will show that the factor of presence/absence of industrial tradition leads in the framework of automobile industries of the Czech and Slovak republics in 1990s to several phenomena contributing to the economic convergence of the two countries.

The explanatory potential of the claim that the presence/absence of the industrial tradition influenced the countries' ability to catch up with more advanced economies not only in the 1990s, but also in the first fourteen years of the twenty first century, is analyzed in the third chapter.

Chapter 1 – Why Industrial Tradition?

As it has been outlined above, the main empirical motivation for this research is the fact that one of the factors that are generally considered as an advantage in the process of attracting the FDI – the industrial "embeddedness" or tradition – might have in reality under certain circumstances (i.e., the environment of post-socialist CEE countries in 1990s and 2000s) a relatively adverse impact on the mid- and long-run growth of labor productivity, economic growth and competitiveness of particular countries. However, before precise specifying the research questions and formulating the hypotheses, one has to proceed with a detailed depiction of contextual framework and analysis of the theoretical approaches.

1.1 Context

After the 1993 dissolution of the Czechoslovak Federative Republic (CSFR), the Czech and Slovak republics found themselves, despite the decades of their intertwined political and economic development, in a different economic and social situation. "[In] 1993, the economic performance of Slovakia (measured in GDP PPP p.c.) reached only approximately 60% of that of the Czech Republic."[5] In 2013, however, the differences between economic performances of the two countries have been reduced, and Slovakia's GDP PPP p.c. reached the level of 95%[6] of the Czech one.[7] This was in contrast with many predictions based on the knowledge of previous orientation of Slovak and Czech industries, applied models of the economic, political and social transition in the two countries and their efficiency. Despite Bohle's and Greskovits's claim that all V4 countries opted for the *embedded neo-liberal transformation model*, there were substantial

[5] Ľubomír Koršňák, "Slovenská ekonomika pomaly dobieha českú," *UniCredit Bank Weekly N.O.T.E.S.*, Issue No. 1 (January, 2013): 1, http://www.unicreditbank.sk/sk/Tlacove-centrum/Makroekonomika-a-trhove-analyzy/Unicredit-bank-weekly-N.O.T.E.S. (accessed March 7, 2014).

[6] On the other hand, Fidrmuc, Horváth and Fidrmuc in their empirical research on the Czechoslovak intrastate regional convergence claim that similar level of economic convergence as was reached in 2013 was observed already in 1970-80s as a result of convergence policies introduced by the Party. "The Communist governments always asserted that resources were being transferred to Slovakia in order to promote its catching up with the Czech lands." See Jan Fidrmuc, Julius Horvath and Jarko Fidrmuc, "The Stability of Monetary Unions: Lessons from the Breakup of Czechoslovakia," *Journal of Comparative Economics* 27 (1999): 761-762.

[7] Based on the AMECO data (annual macro-economic database of the European Commission's Directorate General for Economic and Financial Affairs).

differences among the four, even between the *national capitalist models* of the former federal parts of Czechoslovakia – the Czech Republic and Slovakia. "For Slovak … reformers independence was a means to achieve broader socio-economic goals that could not be realized within their respective federation."[8] As Bohle and Greskovits put it further on, "privatization [in Slovakia] allegedly sought to create a national entrepreneurial class that would conduct business in Slovakia's interest."[9] However, Slovak Prime minister "Mečiar's increasingly open authoritarianism ultimately prevented neo-corporatism from seeking deeper roots in Slovakia."[10] Czech Republic preferred the "mass privatization through vouchers, rather than creating the clear-cut private property relations."[11] As this strategy of the Czech government appeared to be inefficient, the country turned towards the welfarist model based on the tripartism. Predictions, as mentioned above, favored the Czech economy in the contest to attract the maximal possible amounts of FDI and therefore expected relatively more rapid pace of economic growth of the Czech Republic. However, this was not the case. Except for the periods of 1993-1995 (as a result of the impact of the dissolution of Czechoslovak federation and ineffective Slovak transformation under the government of Prime Minister Mečiar), 1999-2000 (due to the change of the government in Slovakia and, consequently, implementation of the modifications of the transformation model in Slovakia) and 2009 (because of the financial and economic crisis that hit Slovakia slightly more intensively than the Czech Republic), Slovakia reached higher rates of annual GDP growth than the Czech Republic (see Figures 1.1-A and 1.1-B). As many scholars put it, it was the 1998 change of government that made possible the significant shift in the transformation processes ongoing in Slovakia. The result was the adoption of the more genuine *neo-liberal model* that put the country on reformist path and caused the higher inflow of the FDI into Slovakia. A higher inflow of the FDI, generated not only by well thought out policies adopted by local governments, but also by the structure and features of the

[8] Dorothe Bohle and Béla Greskovits, *Capitalist Diversity on Europe's Periphery* (New York: Cornell University Press, 2012), 75-76.
[9] Ibid., 145.
[10] Ibid., 148.
[11] Ibid., 145.

labor markets and by the tradition of certain industrial production, which substantially influenced the governments' decision-making process regarding the developmental and reform policies, has generated the growth of the productivity of labor that contributed to the higher growth of states' GDPs and, at the same time, played a crucial role in the decision-making process of the investors. During the period of 1996-2013, the average annual growth of the productivity of labor (measured as the GDP at current market prices per person employed) reached nearly 6% in Slovakia, while the average rate of productivity growth in the Czech Republic in the observed period of time has been 3.63%.[12] Since 2009, Slovakia has had higher labor productivity than the Czech Republic.[13]

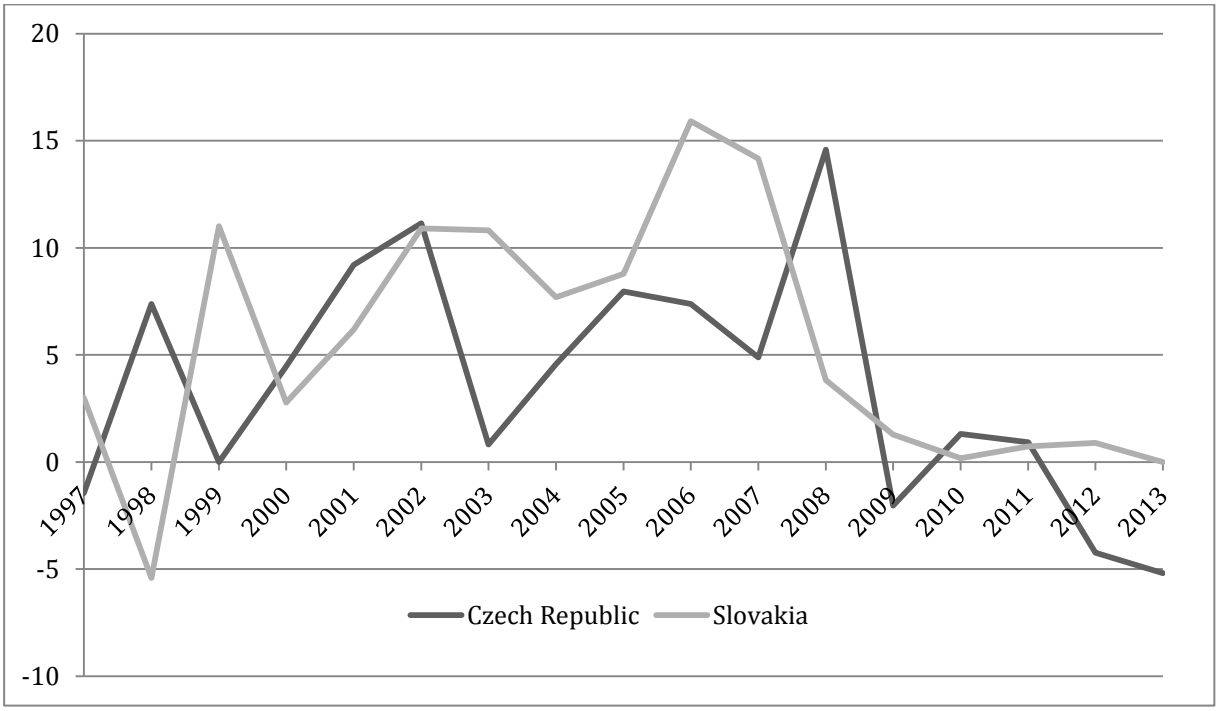

Figure 1.1-A: Growth of labor productivity (%) in the Czech and Slovak republics.
Source: author's calculations based on the data from AMECO and EUROSTAT.

[12] Author's calculations based on the data from AMECO.
[13] See Ľubomír Koršňák, "Slováci pomaly dobiehajú Čechov," *Hospodárske noviny*, January 5, 2013, http://finweb.hnonline.sk/spravy-zo-sveta-financii-126/slovaci-pomaly-dobiehaju-cechov-533761 (accessed March 2, 2014).

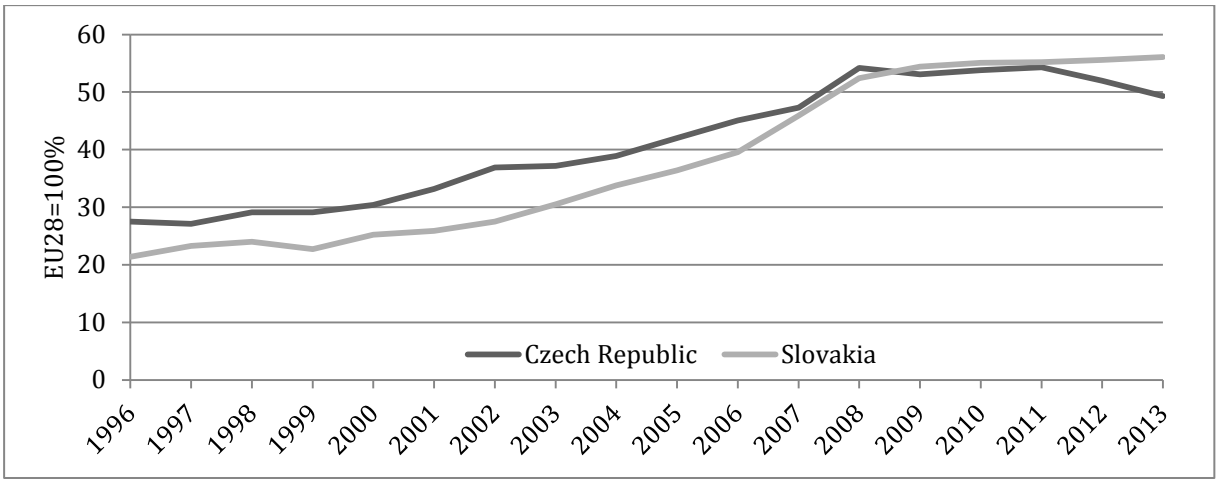

Figure 1.1-B: Gross domestic product at current market prices per person employed.
Source: AMECO.

1.2 Literature review

While discussing the phenomenon of economic convergence or catching up, one operates, though only implicitly, with two basic assumptions. The first assumption can be characterized as the logically expected difference between the economic performances of the states included into observation. The second one is related to the logical need for states' different starting positions in the process of economic development and convergence. Therefore, it is the factors of the speed and economic backwardness which are directly linked with and stand for the basic preconditions leading to appearance of the phenomenon of economic catching up.

The aspects of the speed of the economic development and the economic backwardness (both for the capitalist and socialist economies) are discussed by and the theoretical framework for them is set by Alexander Gerschenkron. For explanation of the two phenomena leading to the economic convergence he uses the historical perspective. Its contribution, he claims, "consist in pointing at *potentially* relevant factors and at *potentially* significant combinations among them which could not be easily perceived within a more limited sphere of experience."[14] Gerschenkron defines the basic elements of backwardness by stressing the Marxist idea, according to which the development of the less developed countries is pre-defined by the history of the more developed industrial countries. However, he admits that the "development of the

[14] Alexander Gerchenkron, *Economic Backwardness in Historical Perspective: A Book of Essays* (Massachusetts: Belknap Press, 1962), 6.

backward country may … tend to differ fundamentally from that of an advanced country."[15] These sources of difference might include divergent speed and character[16] of economic development, which in fact can be derived from 1) a use of non-analogous institutional instruments in advanced and undeveloped countries; 2) the distinct 'intellectual climate' standing for a background of the industrialization processes; 3) the 'degree of backwardness'; and 4) the industrial potential of the countries. Even though Czechoslovakia had been already an industrialized country in the early 1990s, the obvious technological gap between the latter and the Western advanced economies contributed to the general conviction that this case partially fits into the Gerschenkron's theoretical framework. Gerschenkron uses Veblen's idea of 'borrowed technology' contributing to "a high speed of development in a backward country…."[17] He implements the factor of borrowed technology into his hypothesis that "the greater the relative disparity in development levels between a country at the outset of a process of industrialization and the already industrialized part of the world, the faster the rate at which the backward country can catch up."[18] By application of this idea on the regime change and subsequent economic and social transformation of the CEE countries (including CSFR and its successors, the Czech Republic and Slovakia), the role of the FDI as a primary source of the technology and know-how needed for successful fulfilment of the objectives of the economic transformation (mainly the accomplishment of successful economic convergence and catching up with the advanced West European countries) becomes excessively important in the transformation models of the CEE countries in the 1990s and 2000s. Bohle and Greskovits accept the undisputedly important role of FDI in the process of industrialization of the CEE region in the early 20th century and during the transformation period of the 1990s and 2000s and define a palette of transformation regimes concepts implemented in particular CEE

[15] Gerchenkron, *Economic Backwardness in Historical Perspective*, 7.
[16] Under distinct character of economic development Gerschenkron understands the different productive and organizational structures emerging as a result of industrialization processes in more and less advanced countries.
[17] Gerchenkron, *Economic Backwardness in Historical Perspective*, 8.
[18] Roland Findlay, "Relative Backwardness, Direct Foreign Investment, and the Transfer of Technology: A Simple Dynamic Model," *The Quarterly Journal of Economics*, 1 (1978), 2.

countries. According to the foregrounding of different objectives (divided into *neoliberal*, such as 'creation of effective markets', *welfare-capitalist*, including 'compensations for the costs of transformation', and *democratic-corporatist*, i.e. prioritizing electorate's and organized business's and labor's influence over the decisions of the competent public authority) they recognize three capitalisms in the CEE region: "a *pure neoliberal* type in the Baltic states, an *embedded neoliberal* type in the Visegrád countries, and a *neocorporatist* type in Slovenia."[19] Taking into consideration particular objectives mentioned above, the three different transformation models allow for different 'power positions' of investors and, consequently, generate different degrees of attractiveness of economies for the FDI. At the same time, they stand for a natural filter enabling for realization of specific forms of investment projects. Greskovits also "stresses the importance of the types of integration into global and European systems of production via particular *leading export sectors*, and explores how these industries shaped Eastern Europe's *transnational variety of capitalism*."[20] Including the leading export sectors into analysis allows for a more detailed analysis of the connection between the degree of completion of transformation (dependent on the transformation models representing different paces and intensities of the implementation of reforms) and the resulting economic convergence or divergence of the advanced and backward countries (standing for successful and failed transformation respectively). Greskovits argues that "the proposition … that the transition success stories resulted from rapid and radical market reforms, while the failures resulted from gradualist and cautious strategies, is not clearly confirmed by the data."[21] The main factor

[19] Bohle and Greskovits, *Capitalist Diversity on Europe's Periphery*, 22 (emphasis added).
[20] Béla Greskovits, "Leading Sectors and the Variety of Capitalism in Eastern Europe," in *State and Society in Post-Socialist Economies*, ed. John Pickles (New York: Palgrave Macmillan, 2008), 19 (emphasis added).
[21] Ibid., 27. This is in partial opposition to the Bevan, Estrin and Meyer's paper on the determinants of the location of FDI. They claim that there is clear correlation between the "specific institutions with positive influence: private sector growth; development of the banking sector; foreign exchange and trade liberalization; and legal development;" and the attraction of the FDI. See Alan Bevan, Saul Estrin and Klaus Meyer, "Foreign investment location and institutional development in transition economies," *International Business Review*, 13 (2004), 45. Greskovits' and Bevan, Estrin and Meyer's assessment of the factors of attraction of FDI is, however, state based and does not recognize the need for sub-state level analysis. An important insight into the intra-state factors of FDI location offer Damborský, Říhová and Rajtr (for the Czech Republic) and Uramová and Marcineková (for Slovakia). See Milan Damborský, Gabriela Říhová, and Vojtěch Rajtr, "Regionální lokalizace automobilového průmyslu v České republice," *Acta Oeconomica Pragensia*, no. 2 (2012): 21-39; and Mária Uramová and Zuzana Marcineková, "Priame zahraničné

influencing the convergence, according to him, is rooted in the CEE countries' 'favorable institutional legacies' from their socialist past. Smith and Swain supplement this factor by dynamic elements, such as the 'interaction of people (agents) with formal and informal institutions (structures) leading to socio-economic change', 'the latter's constitutiveness of and through the discourse and institutional legacies' embodied in the "material practices which form the boundaries and the nature of regional economies" and 'multiple-path dependency' resulting in 'path shaping function' of the policy choice.[22]

On the other hand, there is a multitude of literature based on the neoliberal political economy which highlights the dominant role of the rapid and intensive institutional and structural reforms[23] aimed at "separation of state and market, with the emphasis on unleashing the power of the market, … which will inevitably allow the institutions, regulations, habits and practices associated with the 'normal' functioning of a capitalist market economy to emerge."[24]

In case of automotive industries of the Czech and Slovak republics and their impact on the process of convergence of their economies, one might observe the importance of both sets of claims. On the one hand, Slovakia and the Czech Republic are, according to Bohle and Greskovits, examples of countries using the same type of transformation model. On the other hand, they admit that Slovakia's shift in the transition strategy of the first decade of twenty first century can be considered as the temporary change of the embedded neoliberal model of transformation for the pure neoliberal one.

This has several implications. First of all, for the beginnings of transformation in 1990s can be stated that the character of the undertaken measures and steps aimed at effective marketization, liberalization and democratization of the economy were relatively similar in the

investície v kontexte regionálnej politiky," *Region Direct*, no. 1 (2008): 88-98, http://nhf-new.euba.sk/rsa/images/stories/doc/0108uramova_marcinekova.pdf (accessed May 1, 2014).

[22] Adrian Smith and Adam Swain, "Regulating and Institutionalising Capitalisms: The micro-foundations of transformation in Eastern and Central Europe," in *Theorising Transition: The Political Economy of Post-Communist Transformations*, ed. John Pickles and Adrian Smith (London: Routledge, 1998), 27.

[23] Often referred to as a 'shock therapy'.

[24] Smith and Swain, "Regulating and Institutionalising Capitalisms," 26. See also Francis Fukuyama, *The End of History and the Last Man* (London: Penguin Books, 1992); Jeffrey Sachs, "Eastern European Economies: What is to be done?" *The Economist*, Jan 23, 1990. http://www.economist.com/node/13002085 (accessed April 25, 2014).

Czech Republic and Slovakia. However, similarity of the transition processes in these two states cannot explain the different outcomes of their transformation processes. Even if one admits that *some* differences between the paces of carrying out reforms in Slovakia and the Czech Republic in the 1990s had been persisting, it is still obvious that the rapid reforming of domestic economies without the appearance of major negative externalities was not possible and that the institutional and social reforms could not be implemented in the 'shock mode', since it would be incompatible with the embedded neo-liberal way of transformation implemented in both the Czech and Slovak republics.

Thus, the theory of smooth and quick shock therapy cannot be applied for this period of time. All the implemented measures rather had to be adjusted to specific conditions of the local economies, pre-defined by the legacies of central planning and the results and consequences of decisions made before. At the same time, different legacies of socialism in the Czech Republic and Slovakia can, additionally to similarities of their transformation models (demonstrated by Greskovits) which contributed to their ability to economically outperform other CEE (especially B3 and SEE) countries, explain some minor distinctive features of the post-soviet development of Slovakia and the Czech Republic. As it has been already stressed, with regard to the automotive industries of the Czech and Slovak republics, absence of the tradition in car production in Slovakia and presence of the latter in the Czech Republic in 1990s, stood for the main difference between the two states' socialist legacies.

There is a multitude of literature that discusses the history of the automotive industry of Czechoslovakia and its successors with regard to the international- and national-level distribution of the production. The development of the regional structure of car plants' and suppliers' location within Czechoslovakia, the evolution of the Czechoslovak automotive industry, as well as the peculiarities of the Slovak automotive industry, delay in the start of production and its backwardness are analyzed by Studeničová and Uhrík.[25] The factors influencing the decision-making process in the Czechoslovak automotive industry, which

[25] Marika Studeničová and Jozef Uhrík. *Od tankov k Touaregu*. Bratislava: Verbis, 2009.

became after the 1989 Velvet Revolution part of the virtual basis and source of the Czech and Slovak historical legacies, are described by Pavlínek.[26] He defines the decisions of the Council for Mutual Economic Assistance (COMECON) – coordinating the car production in all the member countries and thus allowing for some kind of production while giving command for abandoning another – as the main external factor. The most relevant instance of such impact he mentions is the late 1970s "project by Skoda to produce a new car with front-wheel drive and 1,600 cu. cm engine [which] had to be abandoned to avoid competition with Soviet-made Ladas."[27] As for the internal factor influencing the development of the Czechoslovak automotive industry, Pavlínek emphasize the factor of automotive industry tradition, claiming that "[o]nly the Czech part of former Czechoslovakia … experienced the indigenous development of passenger car production prior to World War II."[28]

There is, however, one theoretical question that has not been addressed yet: why did the new Slovak governments decide to implement in the years 1999-2006 radical and rapid economic, political and institutional reforms, if there was no real evidence of the correlation between the successful transformation (see economic convergence) and implementation of strategy of shock therapy? The answer on this question stands for one of the main objectives of this thesis and will be addressed in the third chapter.

Regardless of their transformation models, power position of the FDI in their economic policies and their historical legacies, the FDI played a crucial role in the Czech and Slovak transition. Following Smith and Swain's idea of path-dependent transformation, there are two distinct forms of FDI varying according to their outcomes.[29] The first type of FDI, based on the projects called 'tombs-in-desert' and 'cathedrals-in-desert', creates production nodes without any or with only minimum ties to domestic economic and social networks (including supplier

[26] Petr Pavlínek, "Restructuring the Central and Eastern European Automobile Industry," *Post-Soviet Geography and Economics* 43, no. 1 (2002): 41-77, http://www.tandfonline.com/doi/abs/10.1080/10889388.2002.10641193#.U4EZxvl_smM (accessed May 7, 2014).
[27] Pavlínek, "Restructuring the Central and Eastern European Automobile Industry," 43.
[28] Ibid., 42-43.
[29] See Smith and Swain, "Regulating and Institutionalising Capitalisms."

networks). These FDI projects might be included into global industrial networks with an aim to rationalize and decrease the costs of production. Radosevic and Rozeik consider this incorporation into global network as the result of the 'new model of competition'.[30] However, on the state level they lead to deskilling of the labor and its wage-decreasing.[31]

The second type of FDI is the one resulting in an 'embedded' economy. According to Pavlínek and Smith, the 'embeddedness' can "revolve around the integration of inward investment into local economies."[32] Similar importance of the foreign investors' relations with the domestic supplier networks for the concept of embeddedness stress Dicken, Forsgren and Malmberg. They claim that the degree of the embeddedness of the FDI is influenced also by "the extent to which the local subsidiary is free to choose its suppliers"[33], as well as "the extent to which there are local potentials for such networks to be developed."[34]

1.3 Research questions and hypotheses

Having defined the contextual framework of the Czech-Slovak economic convergence and proceeded with a review of actual theoretical concepts allowing for tracing the linkages among the forms of FDI, their embeddedness in the local economies, Socialist legacies of the latter and industrial tradition, one can articulate the research questions related to Slovakia's catching-up process with the Czech Republic:

[30] See Slavo Radosevic and Andrew Rozeik, "Foreign Direct Investment and Restructuring in the Automotive Industry in Central and East Europe," *Working paper 53* (London: Centre for the Study of Economic & Social Change in Europe, 2005);
[31] John Dunning, "The prospects for foreign direct investment in Eastern Europe," in *Foreign Investment in Central and Eastern Europe*, edited by Patrick Artisien, Matija Rojec, and Marjan Svetlicic, 25-31 (New York: St. Martin's Press, 1993); Smith and Swain, "Regulating and Institutionalising Capitalisms"; Gernot Grabher, "Adaptation at the cost of adaptability? Restructuring the eastern German regional economy," in *Restructuring Networks in Post-Socialism: Legacies, Linkages, and Localities*, edited by Gernot Grabher and David Stark, 107-134 (Oxford: Oxford University Press, 1997).
[32] Petr Pavlínek and Adrian Smith, "Internationalization and Embeddedness in East-Central European Transition: The Contrasting Geographies of Inward Investment in the Czech and Slovak Republics," *Regional Studies*, 32 (1998), 622.
[33] Peter Dicken, Mats Forsgren and Anders Malmberg, "The local embeddedness of transnational corporations," in *Globalization, Institutions and Regional Development in Europe*, ed. Ash Amin and Nigel Thrift (Oxford: Oxford University Press, 1994), 38.
[34] Pavlínek and Smith, "Internationalization and Embeddedness in East-Central European Transition," 621.

Question 1: *What kind of impact did the element of industrial tradition of the automobile production in the Czech Republic have on the development of its labor productivity and the absence of industrial tradition on Slovakia's process of economic catching up with the Czech Republic?*

Hypothesis 1: The resulting effect of the industrial tradition in the Czech Republic (embodied in the existing network of domestic suppliers and car plants which had to go through the processes of internal consolidation, modernization and privatization first) under the circumstances of the period of 1993-2004 was a slower pace of growth of labor productivity in the Czech Republic, whereas the cutting-edge technologies and methods of human resources management in the newly built factories imported to Slovakia via FDI projects allowed to skip the period of transformation of the automotive industry and led to the higher labor productivity growth pace. The difference between the paces of growth of labor productivity in the Czech Republic and Slovakia could thus be considered as one of the sources of economic caching up.

Question 2: *Has the factor of industrial tradition been the source of different paces of labor productivity and GDP growths in the Czech Republic and Slovakia after 2004?*

Hypothesis 2: Since 2002, the automotive industry has already been embedded in the Czech and Slovak economies and therefore there have been other factors leading to the catching up process, i.e. the advantages of the Baltic liberal transformation model adopted by Slovakia in 2002 compared to the Central European liberal embedded model applied in the Czech Republic.

1.4 Methodology and research design

The use of the methodological approaches applied during the research can be divided into several stages which together stand for a continual process tracing leading to the linking of the phenomenon of the industrial tradition with the observable economic conversion of the Czech and Slovak republics.

The first stage is aimed at defining the industrial tradition and recognizing its presence in the post-1989 Czechoslovakia (separately for the Czech and Slovak republics within the Czechoslovak federation). Since there are little incentives for the foreign investors to invest in particular industries of countries with no or weak industrial tradition in that particular area (for

the industrial tradition is, according to some sources, one of the main factors the country in attracting FDI[35]), the inquiry on the Volkswagen's incentives to invest in the Slovak Republic (SR) at the same time as it had invested in the Czech Republic (CR) and its automotive industry with a great tradition had to be carried out.[36] The with-in case method is used at this stage of the process tracing as an instrument for gathering the data regarding the tools Slovak government used for attracting Volkswagen (VW) as a potential investor: the official Slovak governmental economic guidelines and strategies, official wordings of Slovak economic policies of early 1990s and privatization contract signed between the government of the SR and VW in 1991 are analyzed here.

Simultaneously, the analysis of the official Czech governmental economic guidelines and strategies and of the Czech economic and privatization policies of early 1990s has been carried out. Through the comparative analysis of the conditionality and offers of benefits of the Slovak and Czech governments, the differences between the Slovak and Czech approaches towards the VW as the first major investor in the automotive industry of the two countries (two parts of Czechoslovak federation in that time) have been identified. The results of the above mentioned comparative analysis should have disclosed the influence of the industrial tradition on the state economic and privatization policies and facilitated clarification of the relations between the industrial tradition and the nature of conditionality of the privatization contracts of the Czech Republic and Slovakia with regard to VW. The different parameters of conditionality of the Czech and Slovak privatization contracts with VW stand for an evidence of the causal relations between the industrial tradition, conditionality of the privatization contracts and the dilemma of the investor who, in the Czech case, considered the variable of the industrial tradition to be more important than the other variables identified before, however, in case of Slovakia it appreciated other variables (i.e. low labor costs) much more. However, the conditions anchored in the Slovak privatization contract had to be much less strict and committing in order to enable VW to fully

[35] See Pavlínek and Smith, "Internationalization and Embeddedness in East-Central European Transition," 626.
[36] Abbreviations CR and SR are used if the federal parts of the Czechoslovak Federative Republic (CSFR) are discussed.

use all the other advantages (see variables) of Slovak economy which would counterweight the absence of industrial tradition. On the other hand, the strict and committing conditions of the Czech privatization contract are expected to be the source of the VW's need to transform, consolidate and re-organize for several years not only the car plants but also the supplier networks while being exposed to the contractual requirements of the preservation of the jobs, contracts with labor unions and of the co-operation with domestic (Czech) companies. This, in turn, can be expected as the obstacle in the transformation process of Czech automotive industry and the potential source of the caching up phenomenon.

In order to find the evidence of the existence of the link between the privatization contract conditionality (based on the assumption of the presence of industrial tradition) and the pace of transformation of automotive industry, an analysis of the ownership structure and geographical location of the VW's supplier network in the Slovak and Czech republics in the beginning of the 1990s and in 2000s has been undertaken. The relevant data has been analyzed which was gathered through the (already above mentioned) interview with the VW representatives and found in the databases of the Slovak and Czech foreign trade agencies (SARIO and CzechInvest/CzechTrade). The aim of this step is to confirm the hypothesis that the ownership structure and geographical location of the Czech suppliers has changed in last 10-20 years and nowadays is similar to that one that can be found in Slovakia. This "delay" is to be connected with the delay in transformation.

This, in turn, can be linked with the development of the labor productivity in the Czech and Slovak republics. The data on the labor productivity growth rates (both for the whole countries as well as for their automotive industries) have been obtained from the Statistical Offices of both countries.

The biggest FDI realized in the 2000-10s in the Slovak and Czech automotive industries operated already with similar (or, to put it in other way, almost identical) variables for both countries. The industrial tradition was already a reality in Slovakia as well. Even though the differences in variables cannot be found by our analysis, the caching up process has continued.

The inability to directly explain this phenomenon by the process-tracing method as described above is probably the biggest limitation of this approach. However, this problem can be solved by supplementary analysis of the data on the motivation of the "new" investors (gathered through the interviews with the representatives of KIA, Hyundai and PSA) which can shed the light on the effects of bandwagoning, economies of scale and common network of suppliers.

Chapter 2 – Data, documents and measures analysis

This chapter deals with the analysis of the genesis of the Czech and Slovak automotive industries in twentieth century, identifies them as the main sources of catching up with the advanced economies and specifies the factors with the greatest impact on the economic convergence. It also examines what role plays the factor of presence/absence of industrial tradition in the framework of automobile industries of the Czech and Slovak republics in 1990s.

2.1 History of the automotive industry in Czechoslovakia and its successors

The post-WWI period is a time of the establishment and existence within a democratic framework of the "first" Czechoslovak Republic, a country built on the ruins of the Austro-Hungarian Empire. In fact, Czechoslovakia of the 1920-30s consisted of at least two (if not three) markedly distinct economies: relatively developed and highly industrialized Bohemia and Moravia (or Czech lands) and backward, agriculture-based, less industrialized Slovak land.[37] The earlier industrialization of Czech lands had several consequences. First of all, it was the concentration of progressive industrial branches in Bohemia and Moravia. Slovakia, with its delayed industrialization and geologic-geographic pre-dispositions, was later largely tied to the heavy and military industry, as well as mining and quarrying.

In spite of the different levels of reached economic development, the regions incorporated into Czechoslovakia had not been treated individually but as a whole (since the Czechoslovak Republic in 1918-1969 had been considered, according to the constitution, as a unitary state). Therefore, many authors claim that "former Czechoslovakia … had the *strongest tradition in automobile production* in the CEE, with Škoda, the largest and oldest car manufacturer in the region, dating back to the nineteenth century."[38] Except for Škoda (former Laurint & Klement), in

[37] As for the third type of "economy" within Czechoslovakia we can identify the Carpathian-Ruthenian land which, similarly to the Slovak land, was an underdeveloped agrarian region. However, unlike Slovakia which was one of the most industrialized and developed parts of Hungary, Ruthenia had been considered as the poorest and most backward part of it. The economic backwardness of Ruthenia outlasted even to the times of the independent Ukraine, the part of which Ruthenia (nowadays Trans-Carpathian Ukraine) became after the WWII. See Judy Batt, "Transcarpathia: Peripheral Region at the 'Centre of Europe'", *Regional & Federal Studies* 12, no. 2 (2002), 157.

[38] Malgorzata Jakubiak, Peter Kolesar, Ivailo Izvorski and Lucia Kurekova, "The Automotive Industry

the pre-WWI Czechoslovakia there existed other car brands as well, such as Aero, Tatra, Praga, Zbrojovka Brno, etc. The distinctively greater strength of the Czechoslovak automobile industry, when compared to other countries, resulted from the fact that "the development of the automobile industry was quite limited in CEE before the state socialist period. Only the *Czech part of former Czechoslovakia* [author's emphasis] and the area that became East Germany experienced the indigenous development of passenger car production prior to World War II."[39] However, the WWII had a disruptive effect on civil car production, since majority of the car production capacities of Czechoslovakia (but de facto only the capacities of protectorate of Bohemia and Moravia, since Czechoslovakia dissolved in 1939 – Ruthenia was annexed by Hungary and part of Slovak lands became an independent state) were incorporated into German Reich's military industry.

After the WWII, the automobile industry in Czechoslovakia had been influenced by the far-reaching political, economic and societal changes. After 1948, the Czechoslovak automotive industry, similarly to all other branches of economy, went through nationalization. The production had to comply with the central state plans and with the obligations resulting from Czechoslovakia's membership in COMECON. Furthermore, an undeniable lack of investment into production technology had been observable in 1950s and early 1960s.[40] Concentration of the automobile industry exclusively to the Western part of Czechoslovakia outlasted until early 1970s. This was despite appearance of some new factories in Slovak part that had been producing one-track vehicles (mopeds, motorbikes and scooters)[41] and automobile components for Czech car plants. The Eastern part of Czechoslovakia, however, completely lacked the genuine car production.

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in the Slovak Republic: Recent Developments and Impact on Growth," *Working Paper No. 29* (Washington: Commission on Growth and Development, 2008), 10, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/12/02/000356161_20101202015912/Rendered/PDF/577280NWP0Box353766B01PUBLIC10gcwp029web.pdf (accessed May 7, 2014). The first car designed and produced in CEE was Tatra Prezident produced in 1897 in Tatra Kopřivnice. See Marika Studeničová and Jozef Uhrík, *Od tankov k Touaregu* (Bratislava: Verbis, 2009), 79.

[39] Petr Pavlínek, "Restructuring the Central and Eastern European Automobile Industry: Legacies, Trends, and Effects of Foreign Direct Investment," *Post-Soviet Geography and Economics* 43, no. 1 (2002), 42-43, http://www.tandfonline.com/doi/pdf/10.1080/10889388.2002.10641193 (accessed May 7, 2014).

[40] See Pavlínek, "Restructuring the Central and Eastern Automobile Industry," 43-44.

[41] Považské and Podunajské strojárne (Považská Bystrica, Rajec, Kolárovo) in 1947-90.

In 1950s, due to the growing number of the public transport vehicles and personal cars, the Party decided to build a network of brand service stations which significantly contributed, according to Studeničová and Uhrík (2009), to the start of car components production on territory of today's Slovakia. Other factors leading to the need for beginning of new car production facilities in Slovak part of Czechoslovakia were the insufficiency in the car supplies for the internal Czechoslovak market, as well as the calls for modernization and diversification of automobile production with regard to the continuation of the industrialization of Slovakia and simultaneous need for reduction in dependency of Slovak economy from the heavy and military industry.

However, the final decision to build new car plant in Slovakia was made only after federalization of Czechoslovakia and suppression of the Prague Spring in 1969. It was in 1968-1969 when the common project of Alfa Romeo and Škoda was launched, however, it was replaced by the genuinely Czechoslovak one due to political changes of August 1968. New model Škoda 720 should be produced in the new factory in Bratislava, construction of which was announced in 1971. Bratislavské automobilové závody (BAZ) thus became first automobile factory in SR which objectives were to develop and produce new Czechoslovak model of vehicle.

Nevertheless, the strong lobby of the Škoda Mladá Boleslav cluster and restrictions introduced by COMECON resulted in slow progress in construction of the car plant in Bratislava and completely erased the efforts for design and development of new models of cars. "BAZ, initially proposed as a bodywork-assembly plant, remained due to improper decisions without final production program for many years and was dependent only on production of equipment and subassemblies for 'old' Czechoslovak automakers, as well as on the production of industrial robots and manipulators."[42] The operation of assembly hall started in 1981 by licensed production of Škoda Garde, initially developed and produced by Škoda factory in Mladá Boleslav. Any other production plans had not been realized.

[42] TASR, "Profil Bratislavských automobilových závodov (BAZ)," *Teraz.sk*, April 14, 2013, http://www.teraz.sk/ekonomika/profil-baz-automobilka-priemysel/43164-clanok.html (accessed May 7, 2014).

Such a development of automobile industry in Czechoslovakia (and its federal parts) had wide-ranging consequences on the embeddedness of the automobile industry in Czech and Slovak economies after the dissolution of Czechoslovakia and on the potential of Czech and Slovak economies to attract the FDI into the automotive industry.

First of all, the unrealized mass production of new generation of cars in BAZ caused that the Czechoslovak automobile industry's contribution to the overall development of other branches of industry and economy was reduced, if not completely eliminated. The obsolescence of Czechoslovak automobile industry thus (after 1989) became the first factor leading to inevitability to fill the technological gap between the western automobile industries and the Czechoslovak one. The survival and potential success of the Czechoslovak automobile industry was a harsh condition for preserving thousands of jobs and ensuring stable incomes and acceptable social environment for people employed in automobile industry in Czechoslovakia.

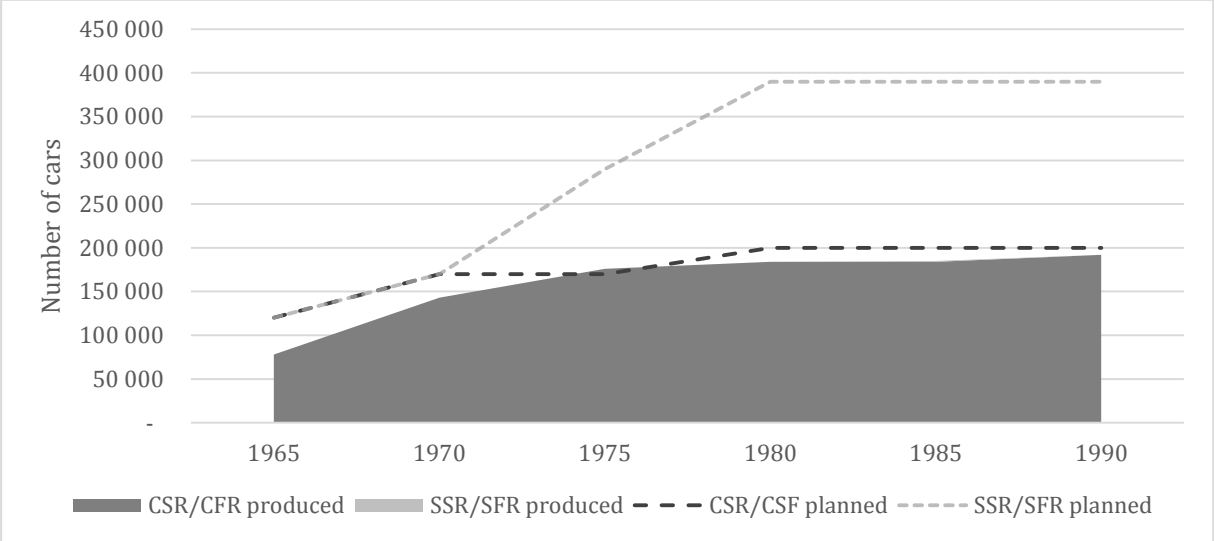

Figure 2.1-A: Cumulative number of cars produced and planned to produce in SR and CR in 1965-1990.
Source: Table 2.1-A.

Secondly, as it is clear from Table 2.1-A and Figure 2.1-A, the share of Slovak car production in the overall results of Czechoslovak automobile industry stayed disproportionally low in 1950-1990 and, at the same time, BAZ and Trnavské automobilové závody (TAZ) were only assembling cars consisting of components produced first and foremost by suppliers located in CR. This reflected in the low embeddedness of the automobile industry in SR and stand for

hidden risk factor which proved to be relevant after process of privatization of Škoda Mladá Boleslav had started and the dissolution of Czechoslovakia became more probable. Since 1993, the ties of the Slovak and Czech automotive companies have been definitely broken: Slovak suppliers became foreign ones and therefore it has not been of an interest of the Czech government or VW to support them and include into the production chain. Most of them were easily replaced by German, American and Asian suppliers of components cooperating with VW.

Thirdly, the potential of privatization of the Slovak car plants and the amount of FDI inflows into Slovak automotive industry were thus lower than those in the Czech Republic and similarly less observable were the intentions of potential investors to invest in Slovakia under the same conditions as they invested in the Czech Republic. A more detailed analysis of the FDI inflows and state investment into automotive industries of the Czech and Slovak republics is carried out in next subchapter.

Table 2.1-A: The actual and planned production of personal and light utility cars in Czechoslovakia in 1950-1990 (thousands).

Year	1950	1955	1960	1965	1970	1975	1980	1985	1990
CSR/CR produced	25	13	57	78	143	176	184	184	192
CSR/CR planned	n/a	n/a	n/a	120	170	170	200	200	200
SSR/SR produced[i]	0	0	0	0	0	0	0	1	0[ii]
SSR/SR planned	n/a	n/a	n/a	0	0	120	190	190	190
CSSR/CSFR produced	25	13	57	78	143	176	184	252	260
CSSR/CSFR planned	n/a	n/a	n/a	120	170	290	390	390	390

Notes: [i]Without production of the medium utility vehicles Škoda 1203 (estimated production in 1980, 1985 and 1990 not more than 3,000 cars a year); [ii]Since 1987, production of Škoda Garde/Rapid has been stopped. In 1988-1991, no passenger cars had been produced in Slovakia.
Source: Author's calculations based on David Sadler, Adam Swain and Ray Hudson, "The Automobile Industry and Eastern Europe: New Production Strategies or Old Solutions?" *Area* 25, no. 4 (December, 1993): 341; Pavlínek, "Restructuring the Central and Eastern Automobile Industry," 45; Studeničová and Uhrík, *Od tankov k Touaregu*, 78-131; Ivan Škoda, "Kupé z Bratislavy," *Auto*, 11 (1995): 50-51.

2.2 Investment as a source of convergence

As it was mentioned in the previous subchapter, the events interfering with the modernization of Czechoslovak automobile industry and development and embedding of the automobile industry in the SR had serious impact on later potential and starting positions of the Czech and Slovak republics in the bargaining process with investors into local automobile industries. In this subchapter we concentrate more deeply on the latter and explain the main trends in investment inflows and national income reinvestment in order to demonstrate the importance of the phenomenon of the industrial tradition in the process of FDI attraction and in productivity growth.

When analyzing the relation of the development pace of and the amount of investment in the Czech and Slovak republics (CSR/CR and SSR/SR), the historical insight into the topic might be helpful. In order to be able to comprehend the changing character of the above described relation, the division of the time framework (1950-2012) is necessary.

2.2.1 Historical review of investments in the CSR and SSR in 1950-89

Before 1989, the share of the FDI[43] on the overall investment in the CSR and SSR had been negligible. The substantial part of investment in Czechoslovakia in 1950-1989 had been realized by reinvestment of the national income. During the whole period of 1950-89, the real investment per capita in SSR had been higher than in the CSR[44] (Figure 2.2-A). This can be justified as the attempt of the official representatives of Czechoslovakia to make the Czech and Slovak economies converge and adjust differences in their main economic indicators that had existed during the whole existence of Czechoslovakia.

As for the rates of growth of Slovak and Czech GDPs, one can observe clearly higher pace of growth of SSR's national product than that one of the CSR's national product and long-lasting convergence in the field of labor productivity (see Table 2.2-A). Therefore, the analysis of the

[43] Selected investment projects, which exceeded the national economic framework and were strictly planned within COMECON and funded by COMECON International Investment Bank in Moscow.
[44] Real investment per capita in SSR as to the CSR's national income p.c. adjusted reinvested national income p.c. of the SSR.

gradual economic convergence of two parts of the CSSR shows that the latter had been accompanied by the higher rate of investment in the Slovak part and by higher growth of productivity of labor.

Table 2.2-A: SSR/SR's share of selected economic indicators for Czechoslovakia, 1939-89 (%).

Year	1937	1948	1960	1970	1980	1990
Population of SSR/SR (% of population of CSSR/CSFR)	24.5	27.9	29.3	31.6	32.6	33.7
National income of SSR/SR (% of national income of CSSR/CSFR)	12	19.2	23.5	28.5	29	30.4
Labor productivity of SSR/SR (% of labor productivity of CSSR/CSFR)	n/a	62	81	91	92	96
National income per capita of SR (CR=100%)[i]	42.0	61.4	74.1	86.3	84.4	85.9

Source: adopted from Adrian Smith, *Reconstructing the Regional Economy*, 124; [i]Author's calculations based on Smith's (1998) data.

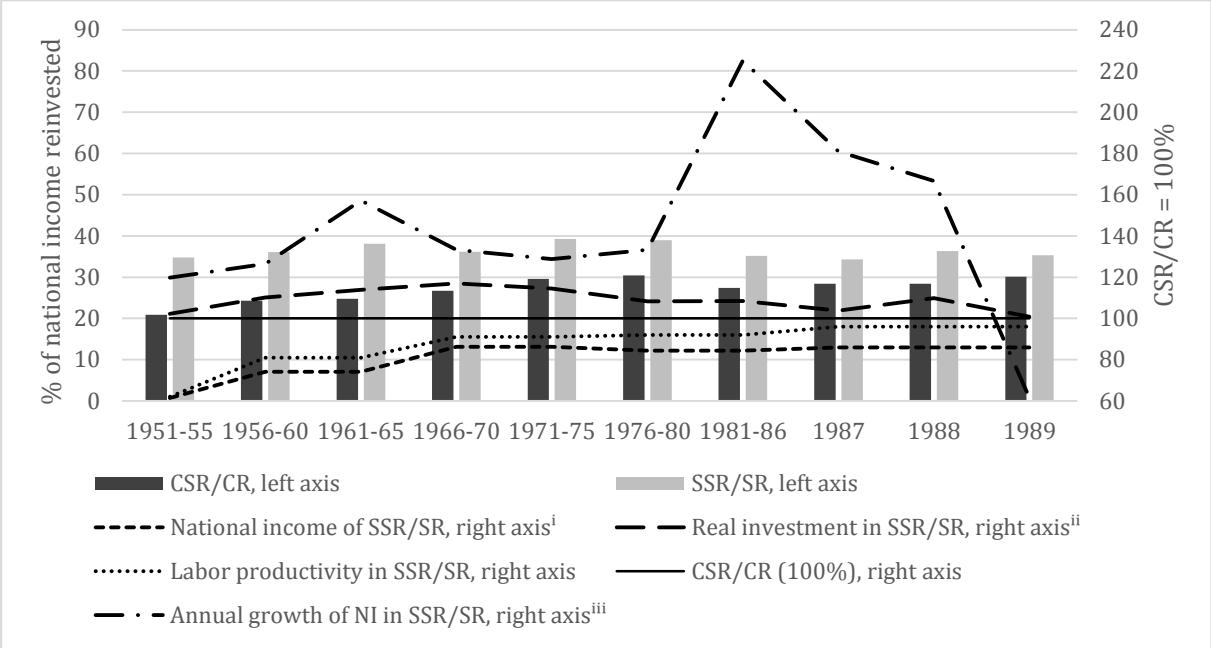

Figure 2.2-A: Percentage of reinvested national income and development of labor productivity, annual growth of national income, real investment* and national income of the SSR/SR (CSR/CR = 100%).
*Under real investment is understood an investment carried out under the same economic preconditions in the CSR/CR and SSR/SR (assuming that the national incomes p.c. in the CR and SR are equal).
Source: adopted from Adrian Smith, *Reconstructing the Regional Economy: Industrial Transformation and Regional Development in Slovakia* (Cheltenham: Edward Elgar, 1998), 124-129; [i, ii, iii] author's calculations based on Smith's (1998) data.

2.2.2 FDI inflow to the Czech and Slovak Federative Republic (CSFR) in 1989-92

The situation changed rapidly after 1989. The Velvet Revolution of 1989 and subsequent abandoning the centrally planned economy, as well as the rightly recognized need for modernization through inflow of foreign capital initiated the race for attracting as much FDI as possible among the CEE countries. Czechoslovakia, according to many sources, was considered as one of the leaders (together with Hungary). As the EBRD reported,

> [w]hile cumulative FDI flows into the region [of CEE] amounted to over US$ 12 billion between 1990 and 1993, the Czech Republic, Hungary and the Slovak Republic alone attracted two-thirds of the total. Together with Estonia and Slovenia, these countries accounted for shares of inflows into the region out of proportion to their size. The rest of the region, with 91 per cent of the population, received only 32 per cent of cumulative inflows.[45]

Nevertheless, the success of the CSFR was hiding the intra-federation differences in the FDI-attraction capacity of the CR and SR. In this sense, the CR had been much more successful in attracting foreign investors in 19890-1992 than the SR, since it accommodated about 90% of the overall amount of FDI inflow into Czechoslovakia, while "Slovakia received only 10% of total FDI entering the federal state and by early 1992 just under one-quarter of all joint ventures, the majority of which were small in terms of volume of capital investment, were located in Slovakia."[46]

The reasons for such a location of FDI were certainly the result of a mixture of factors, such as "perceived differential capacity of industry in the two parts of Czechoslovakia to restructure"[47], as well as the role of the CR in the CEE space in which it posed a 'bridgehead' for the investors who tried to invest in CEE countries (due to many factors, such as an image of Czech lands and Prague as the most developed places of Eastern Europe with significant

[45] EBRD, *Transition report: October 1994* (London: European Bank for Reconstruction and Development, 1994), 122, http://www.ebrd.com/downloads/research/transition/tr94.pdf (accessed May 7, 2014). See also Kai Carstensen and Farid Toubal, "Foreign direct investment in Central and Eastern European countries: a dynamic panel analysis," *Journal of Comparative Economics* 32 (2004): 17, http://hdl.handle.net/10419/17819 (accessed March 24, 2014).
[46] Pavlínek and Smith, "Internationalization and Embeddedness in East-Central European Transition," 623.
[47] Ibid.

industrial tradition, relative political and economic stability and geographical proximity to Germany and Austria).

On the other hand, the above mentioned factors favoring the CR over the SR in the eyes of investors did not completely prevent investment to come to some of the Slovak regions. However, it is necessary to highlight the fact that most of the FDI (60%)[48] realized in SR had been located in the region of Bratislava. It is not surprising then that Smith, while identifying so called 'vital axes of the European economic dynamism' according to the "identified three broad types of regional capacities in transnational economies – problem agricultural regions, declining industrial regions and centres of economic growth and dynamism"[49] and generally accepted division of Europe into the economic core and periphery, includes Bratislava and its neighborhood into the Central Europe's growth axis, consisting of Budapest, Vienna, Prague, Warsaw and Berlin. Certainly, the geographical propinquity to Austria (Vienna) and Budapest, well developed infrastructure and institutional basis can be accounted for the source of attraction of the FDI inflows.

Considering relations between the investment inflows, GDP growth and labor productivity (mentioned when the period of 1989-1992 discussed), and the greater embeddedness of the automobile industry in CR, one might claim that the lower FDI inflow into the SR than into the CR in 1989-1992 should be reflected in lower pace of SR's GDP and labor productivity growth, since a greater amount of know-how, new technologies and new methods of labor organization (embodied in the higher FDI p.c. in the CR) and suitable channels for diffusion of the cutting-edge technologies and methods into local economy (represented by the phenomenon of embeddedness of the FDI in the local Czech supplier chains and networks) were in early 1990s present in the CR, while partially or almost fully absent in the SR. The expectations, however, do not fully correspond with what had been really observed in CSFR of that time. According to Onaran and statistical data of AMECO, the GDP of SR had decreased

[48] Ibid., 625.
[49] Smith, *Reconstructing the Regional Economy*, 56.

approximately to the same extent as the CR's one. On the other hand, the growth of labor productivity in SR had grown relatively faster than productivity of labor in the CR (Appendix 1).

2.2.3 Two Volkswagen investment projects, two federal parts: 1991-1998

The source of greater growth of productivity in SR can be found in the analysis of the most important and far-reaching FDI projects in SR and CR of the first half of 1990s – the privatization of Škoda Mladá Boleslav (CR) and BAZ (SR) in 1991. Those two events are relevant for this analysis from many points of view. First of all, by studying the divergent forms of investment realized by VW and the substantially different positions of governments of the CR and SR in the bargaining with VW, it is possible to demonstrate the impact of industrial tradition and embeddedness of automobile industry in the economy on the negotiations with VW, the conditionality of the contracts closed between the SR/CR and VW, as well as on the subsequent effects of such contracts on the economic performance of the Czech and Slovak republics after the dissolution of the CSFR in December 1992.

Starting from the knowledge of historically different roles of automobile industry in SSR/SR and CSR/CR, as well as different degrees of embeddedness of automobile industry in the respective economies, we come to interesting finding: even though in the time of privatization of Škoda Mladá Boleslav and BAZ both Slovakia and Czech Republic were parts of one state, and therefore enjoyed similar or identical policies and instruments aimed at attraction of the FDI, the results of the negotiations with VW, forms of its investment and their overall impact on the Slovak and Czech economies were distinct from each other. In order to be able to identify the sources of such different path dependences, we have to build upon the already mentioned different historical development of Czech and Slovak automobile industries and analyze the preconditions present in CR and SR before and during the negotiations that took place before the privatization contracts had been signed.

First of all, it is legitimate to assume that, despite the negotiations of Slovak and Czech representatives with those of VW had proceeded separately from each other, the very factor of existence of the Czechoslovak federation as one state with lower level of federalization had been

a precondition for application similar policies and tools aimed at attracting the FDI in both the CR and SR.[50] If the absence of tradition in car production and the disembeddedness of the latter in SR's economy are considered as well, the difference in the type and effects between the privatizations of Škoda and BAZ are not so surprising.

The comparative analysis of the two privatization contracts should definitely start with the amount of shares bought by VW. In case of Czech Škoda, VW received 31% of all shares for DM 620 million, compared to 80% of BAZ in Slovakia bought for DM 48 million.[51] The numbers say a lot about the situation in which Škoda and BAZ factories found themselves in early 1990s. While Škoda more or less successfully introduced a new and technically advanced model Favorit (followed by extended Forman version) and became an interesting company to invest to, the BAZ's serial production of Garde/Rapid ended in 1987 and since then the car plant had stayed almost fully unused. The tiny serial production of cars in BAZ in 1982-1987 did not succeed to give an inception to a new industrial tradition to the eastern part of Czechoslovak federation or to embed the automobile production into SR's economy. A logical result of this was an image of two extremes: on one hand, a huge, modern but unused and deteriorating production facility of BAZ in SR, on the other – a huge trust of car plants in the CR with viable and technologically non-obsolete production of hundreds of thousands of vehicles a year with serious financial problems.

[50] As evidence supporting this assumption can be considered the different preconditions in the field of automobile industry existing in the CR and SR which resulted into the already mentioned disproportion in FDI inflows. Second argument supporting this assumption is certainly the fact that FDIs stand for foreign or supranational entities, the regulation of and communication with which had been realized by the Czechoslovak federal institutions and not by the Slovak or Czech institutions. Another factor is that "all legislation in the late communist period governing the relations between industry and the state was applied equally across Czechoslovakia, leaving Czech and Slovak industry in an equivalent legal … position." See Hilary Appel and John Gould, "Identity Politics and Economic Reform: Examining Industry-State Relations in the Czech and Slovak Republics," *Europe-Asia Studies* 52, no. 1 (2000): 112-113, http://works.bepress.com/john_a_gould/5/ (accessed May 7, 2014).

[51] See TASR, "Profil Bratislavských automobilových závodov (BAZ)," *Teraz.sk*, April 14, 2013, http://www.teraz.sk/ekonomika/profil-baz-automobilka-priemysel/43164-clanok.html (accessed May 7, 2014); Dušan Sabadka, *Typológia automobilového priemyslu* (Technická univerzita v Košiciach), 244, https://www.google.sk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0CDgQFjAB&url=http%3A%2F%2Fnechodimnaprednasky.sk%2Fstiahnut%2Fprednasku%2F5348%2F3889308%2Ftypologiaavprednasky.pdf&ei=iyKBU63lIcSM7AagjoCoDQ&usg=AFQjCNErhW-zIPlq6a79FmDp8TUbs6J-aQ&sig2=yf89wvdvO5D-CAsEQ7IRaA&bvm=bv.67720277,d.ZGU (accessed May 7, 2014).

This situation thus had to be reflected not only in the price for which the shares of BAZ and Škoda had been sold, but also in the divergent plans VW had with the two companies.

In case of BAZ, VW established a joint-venture company Volkswagen Bratislava (VW Bratislava) and preferred the strategy of quick acquiring of full control over this company. This plan was successful and in December 1994, VW became owner of 100% shares of VW Bratislava.[52] "The entry of foreign capital to [BAZ] and the founding of Volkswagen Bratislava brought the start of new car production in Slovakia, in which there had been, until then, no such tradition."[53] However, already in 1995 it was clear that VW did not have any interest to preserve the autonomous development and design center. By the full *substitution* of Škoda components production by VW components and car production, VW Slovakia contributed to further disembedding of the automotive industry from local economy and stood for a form of FDI which became an integral part of VW global network. Domestic suppliers had no chance, since after the rapid change of production in former BAZ they found themselves incompatible with the new materials, methods and quality standards and majority of them bankrupted or was made to substitute the production of components for automobile industry by some other products for different branches of machinery. In 1990s, VW production consisted of assembly of 95-99% of components imported from abroad (85% from Germany).[54]

In case of Škoda, the situation regarding the conditions anchored in the privatization contract was somewhat more positive for the Czech car producer (in spite of claims of Pavlínek, 2008 and Pavlínek and Smith, 1998 that the bargaining position of government of the CR was relatively weak). Thanks to the functioning car production, successful technological development and long-lasting industrial tradition, relatively stronger position of CR's government in negotiations with VW resulted in setting several important obligations for VW,

[52] By paying DM 12 million for the remaining shares aimed by the state owned BAZ.
[53] Lubos Vagac, "The automotive industry in the Slovak Republic," *South-East Europe Review for Labour and Social Affairs*, Issue No. 2 (2000): 143, https://www.google.hu/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0CEQQFjAD&url=http%3A%2F%2Fwww.ceeol.com%2Faspx%2Fgetdocument.aspx%3Flogid%3D5%26id%3Da3f27be7c260428998a820d150f657c9&ei=z01yU5vvDKje7Aaj0IDIAQ&usg=AFQjCNFAwjbUX3KIZuEghZu7fQ7xjWKmHQ&sig2=rP87Wp6ASkmMxFlcC-AoZg (accessed May 7, 2014).
[54] Based on the interview with Petra Stretavská, Ministry of Economy of the Slovak Republic and Pavlínek and Smith, "Internationalization and Embeddedness in East-Central European Transition," 629.

embodied in its commitments to invest additional DM 8.1 billion into broadening local car production, preserve all the jobs, and to preserve and prefer the local suppliers.[55] In order to check the fulfilling of the obligations by VW and probably prolong its impact on Škoda, CR's and later Czech government had not sold its "treasure" as quickly as the Slovak one had – it took VW almost ten years to become 100% owner of the Czech car producer. Škoda thus became, unlike BAZ, an integral and equal part of VW conglomerate, consisting of Audi, VW, Seat and Škoda.[56]

2.3 Industrial tradition as a factor influencing effects of FDI on the economies

As it has been demonstrated, the industrial tradition played an important role in the process of FDI attracting and determination of the forms and impacts of the investment projects during 1989-92 in CSFR. In 1993, the federation split into two independent states. This event interfered with next economic development of Czech and Slovak economies (including their automotive industries).

Table 2.3-A: Real GDP change (%).

Year	Slovakia	Czech Republic
1990	-2.5	-1.2
1991	-14.6	-11.5
1992	-6.5	-3.3
1993	-3.7	0.6
1994	4.9	3.2
1995	6.9	6.4
1996	6.6	3.9
1997	6.5	1.0

Source: Appel and Gould, "Identity Politics and Economic Reform: Examining Industry-State Relations in the Czech and Slovak Republics," 118.

As Figure 2.3-A demonstrates, the FDI inflow (including FDI inflow p.c.) had been significantly weaker in case of newly established Slovakia than the inflow into the Czech Republic in 1993-2001. This can be explained by several facts. First of all, the dissolution of

[55] See Pavlínek and Smith, "Internationalization and Embeddedness in East-Central European Transition," 626. Together, there were more than 30 obligations (out of which 6 were 'fundamental'). VW, after having tied to fulfill all the fundamental obligations defined by the CR's government, had been chosen by the latter as a privatizer of Škoda. See Dušan Kütner, "Škoda Auto: od vtipů k vlajkové lodi," *E15.cz*, April 11, 2011, http://zpravy.e15.cz/byznys/prumysl-a-energetika/skoda-auto-od-vtipu-k-vlajkove-lodi (accessed May 7, 2014).

[56] See David Sadler, Adam Swain and Ray Hudson, "The automobile industry and Eastern Europe: new production strategies or old solutions?," 345.

Czechoslovakia cut off the rest of Slovak automotive companies that had survived the recession period of 1990-1994 (see Table 2.3-A) from the Czech automotive supplier chains and networks. This was mainly because they were not protected by the privatization contract closed between the CR's government and VW, considering only preservation of Czech jobs and suppliers. By the subsequent introduction of new Škoda models, Slovak companies were not able to follow the rapid technological changes and were (with or without the intention of VW) forced out from the Czech automobile industry and its supplier network. The free places in Škoda's supplier network were filled by foreign, mostly German and Czech companies.

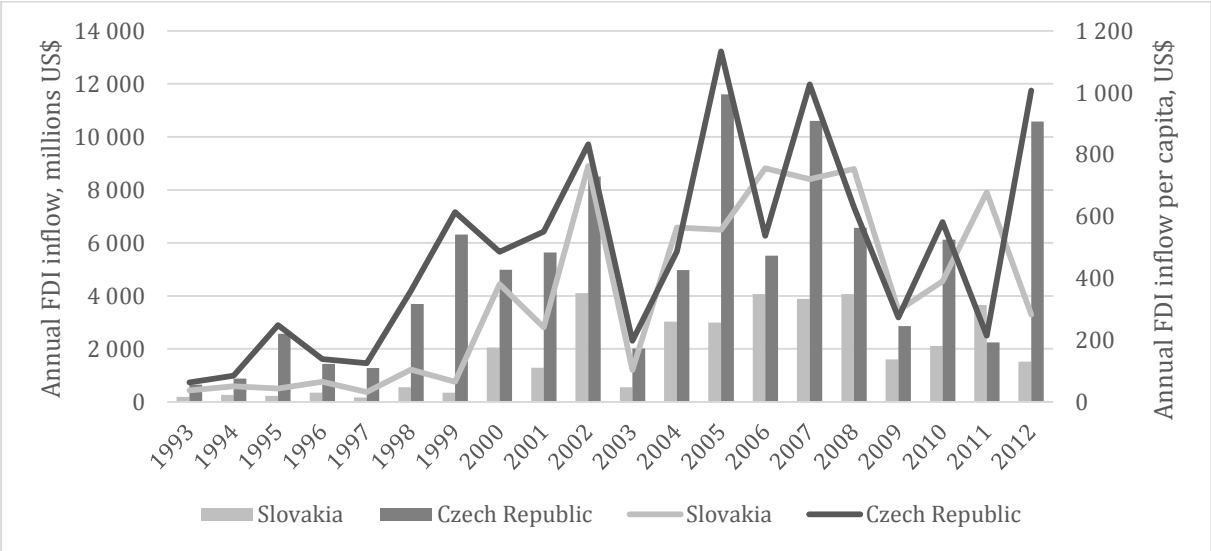

Figure 2.3-A: Annual FDI inflows (non-cummulative) and annual FDI inflows per capita in the Czech and Slovak republics, 1993-2012 (BoP, current US$, millions/units).
Source: World Bank (except for FDI inflow to Slovakia in 2001), author's calculations based on the data of Národná banka Slovenska (FDI inflow to Slovakia in 2001) and International Bank for Reconstruction and Development (FDI per capita data).

Secondly, the position of the Czech Republic as the gate to the CEE remained untouched. Therefore, the new suppliers' companies and factories for VW Slovakia were built in the Czech Republic, considering the investment projects being much more secure there than directly in Slovakia.[57]

Thirdly, an undisputable contribution to lower levels of FDI attraction by Slovakia had had the specific form of embedded neo-liberal transformation model used by Prime Minister

[57] Interview with Petra Stretavská, Ministry of Economy of the Slovak Republic.

Mečiar's party Movement for Democratic Slovakia and whole Slovak government.[58] Mečiar preferred domestic companies and businessmen in the processes of privatization.[59] However, the amount of capital held by domestic subjects was insufficient, as well as the managerial skills of many of local business representatives.

Having analyzed the data regarding the percentage of GDP change, productivity change and FDI inflow of Czech Republic and Slovakia, one has to observe one dissonance of the results of the outcomes of the analysis with Gerschenkron's theory of economic backwardness under the conditions of Czech Republic and Slovakia in transition period of 1989-2000(2001).

Gerschenkron suggests that the more backward the country, the more enthusiastic about and hungry for FDI it is in order to fill the technological gap that exists among the backward country and advanced abroad. This theoretical model thus suggests that since Slovakia had been back in 1980s and 1990s more backward country than the Czech Republic, after 1989 it has attracted more FDI and therefore managed to reach higher growth rates of labor productivity and GDP which were sources of its catching up with the Czech Republic. Furthermore, by tracing clearly filling of technological gap to the FDI inflow, Gerschenkron's model implicitly assumes that the FDI realized in a backward country would be embedded, so as the new technologies would spread into local production facilities and local businesses.

As one can see, this was not the case. In1989-2000, Slovakia had not reached the levels of Czech FDI inflow p.c. In spite of this fact, this period of time had been a period of economic convergence – the growth of Slovak labor productivity had been higher and similarly overcast Slovakia the Czech Republic with regard to the GDP growth rates. One could even speculate that if there were not the nationalist ambitions of Slovak PM Mečiar, and if Slovakia reached the level of Czech FDI inflow p.c., the pace of economic convergence of the Czech and Slovak republics would be higher than it really had been.

[58] See Jakubiak, Kolesar, Izvorski and Kurekova, "The Automotive Industry in the Slovak Republic: Recent Developments and Impact on Growth," 15.
[59] Mečiar's "nationalist" embedded neo-liberal transition model. See Appel and Gould, "Identity Politics and Economic Reform: Examining Industry-State Relations in the Czech and Slovak Republics."

This study thus demonstrates that there must be a specific factor that under the conditions of embedded neo-liberal transformation model contributes to economic catching up of the backward countries with smaller inflow of the FDI p.c. with the more advanced countries experiencing greater FDI inflow p.c. The factor has been identified as 'industrial tradition', or tradition in production of cars and automobile components (leading to the embeddedness of the automotive industry in local economy).

Different path dependencies of the Czech and Slovak republics rest upon the fact that industrial tradition in car production has been almost completely absent in Slovakia (SR) and at the same time present in the Czech Republic (CR). This led to attracting different types of FDI into the automotive industry with different resulting impact on local economies (though the investor, VW, was identical, as well as the instruments and policies aimed at attracting the FDI). Substitution and even deeper disembeddedness of new VW's production in Bratislava, Slovakia, was coupled by the protection of Czech domestic suppliers and the level of embeddedness of Škoda's production in the Czech economy. However, "the original Czech component suppliers were unable to meet quickly (if at all) the high quality standards required by VW-Škoda."[60] What followed was the long-lasting transformation of the Škoda's supplier network in the Czech Republic. The Czech suppliers were forced by the circumstances to create 49 joint ventures with the suppliers from the West.[61] Despite the protective provisions of the privatization contract, the ownership structure of the suppliers had changed for the benefit of the foreign, especially German, suppliers of VW. The relatively slower pace of the labor productivity growth in the Czech Republic can thus be explained by the relative delay in the applying the newest production technologies and progressive methods of HR management (caused by the conditions anchored in the privatization treaty by the Czech government). On the other hand, the less committing conditions of the Slovak privatization contract with VW and absence of the industrial tradition (and the consequential need to build a completely new supplier network

[60] Pavlínek and Smith, "Internationalization and Embeddedness in East-Central European Transition," 627.
[61] See ibid.

consisting mostly of VW's suppliers with a production placed in Germany and the Czech Republic[62]) resulted in the lead of the Slovak automotive industry in terms of the labor productivity growth.[63] The higher rates of the latter in Slovakia contributed to the faster growth of the Slovak GDP and thus caused Slovakia's caching up with the Czech Republic.

The result is that the factor of industrial tradition has been a negative source of Slovakia's catching up with the Czech Republic, but, on the other hand, it has had different effects with regard to the ownership structure and degree of embeddedness of the automotive industry in the Czech and Slovak economies. While in Slovakia the factor of absence of tradition in car production led also to the continuation of disembedded car production by VW, resulting in the bankruptcy of few Slovak automobile component producers (coupled by the growth of unemployment)[64] and growth of the share of foreign owned companies in the ownership structure of businesses located in Slovakia[65], in the Czech Republic, the factor of presence of tradition in automobile industry (reflected in the high level of its embeddedness in Czech economy in early 1990s) became a source of lower pace of labor productivity growth, resulting in the slow but indispensable change in ownership structure of the originally Czech suppliers (the foreign owners reaching, however, lower share than in the Slovak case due to the form of joint-venture and due to the privatization contract protective provisions in force). At the same time, the growth of unemployment was relatively low.

[62] Based on interview with Petra Stretavská, Ministry of Economy of the Slovak Republic.
[63] According to the IMF reports, the labor productivity in the Slovak automotive industry was ahead of the labor productivity in the Czech automotive industry already in 2000. See Tirpak and Kariozen, "The Automobile Industry in Central Europe," 6.
[64] See Appendix 6.
[65] In 1989, 100% of the car plants and automobile industry suppliers in Czechoslovakia were owned by state. In 2004, the share of the foreign-owned companies in the number of all the car producers and their suppliers in Slovakia reached 41.76% and 22.92% in the Czech Republic. See Appendix 3.

Chapter 3 – The Role of Industrial Tradition in the Transformation Path Dependency after 1998

The feasibility of the explanation of the economic convergence of the Czech and Slovak republics by the absence of the tradition in car production in Slovakia (as explained in the second chapter) seems to be significantly reduced after the change of Mečiar's government for those two led by Mikuláš Dzurinda (first one in 1998-2002, and second in 2002-2006). Especially Dzurinda's second term in office resulted in the growth of the FDI inflow per capita and partial or complete reduction of the gap between the FDI inflows per capita in the Czech and Slovak republics[66] generated by the implementation of revised mixture of tools aimed at attracting the investment projects and by the decision made to privatize the ill-conditioned financial and banking sector and natural monopolies. This chapter aims to analyze the sources of the economic convergence of the Czech and Slovak republics and find out the role of tradition in car production and embeddednes of the automotive industry in the local economies in Slovakia's further catching up with the Czech Republic.

3.1 The transition period of 1998-2006

Two governments represented by the Prime Minister Mikuláš Dzurinda managed to carry out in less than a decade the substantial revision of the economic policies and implemented important economic reforms aimed at stopping the economic regress and stabilization of the economy, creating conditions for the growth of people's living standard, building a competitive market economy, ensuring protection of life, health and property of citizens, sustainable development and improving the environment.[67] In order to build competitive market economy, the first Dzurinda's government initiated privatization of most of the financial and insurance institutions owned by the Slovak Republic[68] and some of its natural monopolies.[69] This

[66] See Figure 2.3-A, time period of 1998-2010.
[67] Slovak Government Program Declaration, 1998, http://www.vlada.gov.sk/data/files/981_programove-vyhlasenie-vlady-slovenskej-republiky-od-30-10-1998-do-15-10-2002.pdf (accessed May 20, 2014).
[68] "The three largest state-owned banks, whose share in assets of all banks at that time was almost 50%, were in 1998-99 on the brink of collapse. Their recovery through the allocation of irrecoverable debts to

contributed to the rapid growth of Slovak per capita FDI inflows and lowering the gap between the Czech and Slovak republics. However, the result was a small share of the FDI inflow into automotive industry of Slovakia in the overall FDI inflow into all branches of the Slovak economy.

A mix of more proactive tools aimed at attracting a non-privatization FDIs were introduced by the second Dzurinda's government in 2002-2006. The only privatized company in this period of time was *Slovenské elektrárne* [Slovak Power Plants]. This resulted in the growth of the share of FDI in Slovak automotive industry in the overall FDI in Slovak economy, while the share of FDI in Czech automotive industry in the overall FDI in the Czech Republic stayed relatively stable (see Table 3.1-A). The main objectives of the re-elected Dzurinda's government were Slovakia's membership in the EU and "promotion of such macroeconomic policies which would contribute to sustainable economic growth based on the growth of labor productivity, FDI inflows, creation of favorable development of business environment for the development of business community, promotion of stable exchange rate, reasonable interest rates and a transparent tax law."[70]

Table 3.1-A: Share (%) of the FDI into car and other vehicles production in the inward FDI positions.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Slovakia	3.6	5.6	8.1	8.8	8.1	8.4	6.2	6.2	5.3	5.8
Czech Republic	9.5	8.0	9.2	9.4	9.5	8.8	8.5	7.8	8.7	10.0

Source: Author according to Národná banka Slovenska and Česká národní banka

Prioritizing labor market flexibility, reduction of production costs by reforming several areas, including the taxation system and a mix of the tools used in the process of attracting the

the State agency cost … nearly 12% of GDP. The control over the recovered banks was subsequently taken by foreign investors (Austrian, German and Italian banks) winning the international tenders." See Ivan Mikloš, "Slovakia: A Story of Reforms," in *Growth versus Security*, ed. W. Bienkowski, J. C. Brada, and M. J. Radlo (NY: Palgrave Macmillan, 2008), 54-88. Cited from the Slovak version Ivan Mikloš, "Slovensko: príbeh reforiem (zmena sociálno ekonomického modelu s ručením obmedzeným)," Univerzita pre moderné Slovensko, 2008, http://www.upms.sk/media/Slovensko_Prbeh_reforiem.pdf (accessed May 20, 2014).

[69] Telecommunications, electricity and gas distribution companies. See Mikloš, "Slovensko: príbeh reforiem," http://www.upms.sk/media/Slovensko_Prbeh_reforiem.pdf (accessed May 20, 2014).

[70] Slovak Government Program Declaration, 2002, http://www.vlada.gov.sk/data/files/980_programove-vyhlasenie-vlady-slovenskej-republiky--od-16-10-2002-do-04-07-2006-.pdf (accessed May 20, 2014).

FDI, over the elimination of the negative externalities of the economic and social transition resulted, according to some scholars, in the change of the Slovak transformation model which began to share a number of similar features with the Baltic (pure neoliberal) model.

3.2 Observable changes of the Slovak and Czech automobile industries in 1998-2006

Slovak and Czech automotive industries experienced considerable changes in 1998-2006. One can speculate to which extend it was result of the continuation or change of transformation models in the Czech Republic and Slovakia and to which extend it was evoked by the economic upturn and boom of automotive industry.

In Slovakia, the influence of the transformation mode change on automotive industry had been undisputedly strong. Unlike Mečiar's government preference of national capital and managers in privatization process (except for the case of BAZ, privatized by VW), Dzurinda's governments prioritized FDI as a source of capital, new technologies and know-how suitable for filling the technological and developmental gap. The FDI preference thus had to be coupled by the proper tools for FDI attraction. The set of reforms, e.g. tax, social and labor market reforms, as well as the reform aimed at business environment improvement, contributed not only to the to the unit labor cost in automotive industry, so that Slovakia became the most competitive CE country with respect to the costs of labor (see Table 3.2-A).

Table 3.2-A: Unit Labor Cost (ULC) in automobile industry (in % of German ULC).

	2000	2004
Czech Republic	42.3	44.5
Slovakia	29.0	21.5
Hungary	25.6	35.9
Poland	61.0[i]	48.8

Source: Tirpak and Kariozen, "The Automobile Industry in Central Europe," 6.

In the Czech Republic, the transition model remained more or less the same during this period of time. The factor distinct transformation modes in the Czech Republic and Slovakia in the years 1998-2006 had several consequences on the future continuation of economic

convergence of the Czech and Slovak republics and the catching-up effects, as well as on the development of their automotive industries.

First of all, despite significant FDI inflow per capita growth in 1998-2006, Czech economy did not manage to sustain its edge over Slovakia: during some years, Slovakia even managed to receive more FDI per capita than the Czech Republic (see Table 2.3-A).

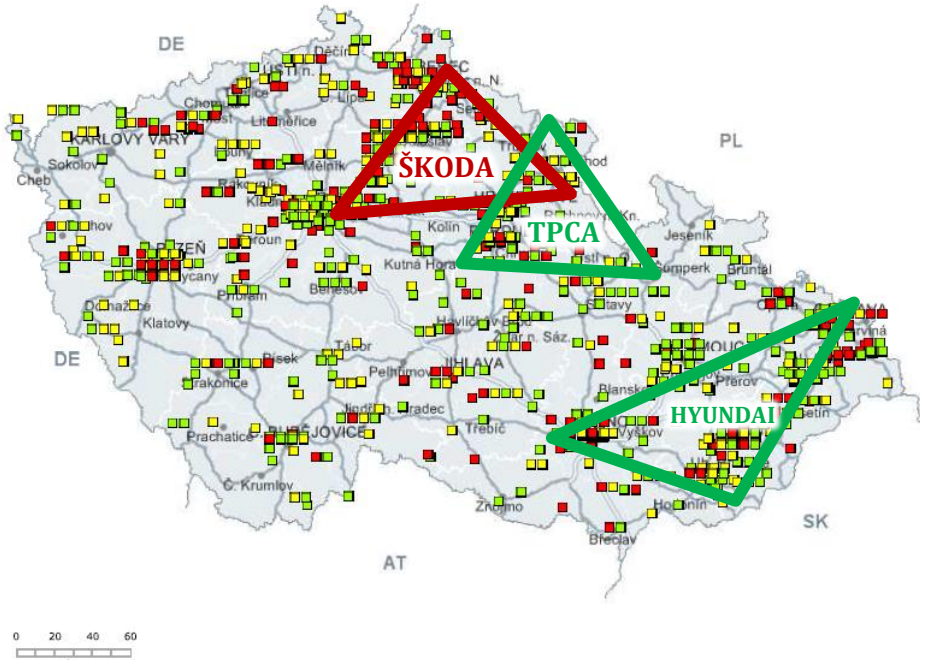

Figure 3.2-A: Concentration of the brown- and green-field FDI projects in automobile industry of the Czech Republic after 1989.
Source: author, Czech Invest.

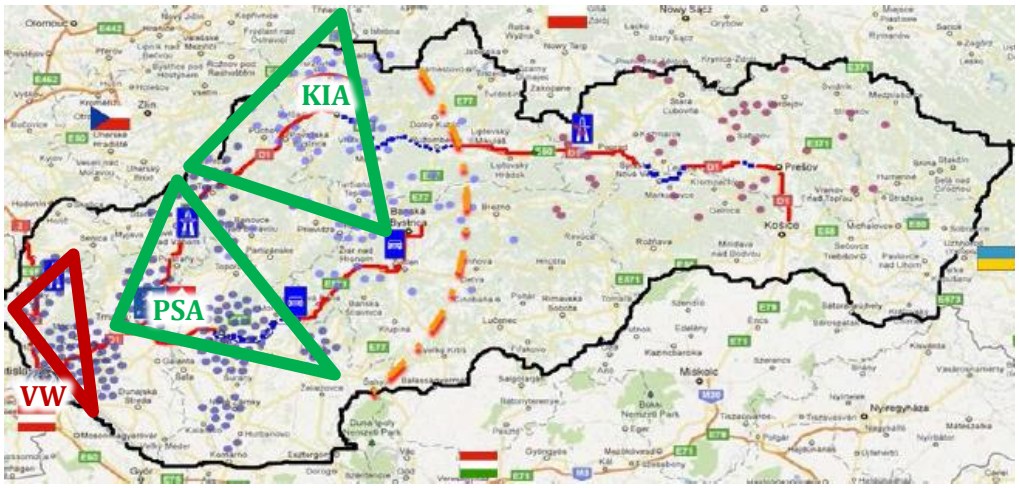

Figure 3.2-B: Concentration of the brown- and green-field FDI projects in automobile industry of Slovakia after 1989.
Source: author, SARIO, Združenie automobilového priemyslu.

Secondly, it had not been only the volume of FDI inflows per capita what changed in the years 1998-2006. Other changes were observed with regard to the type of the investment projects. While the FDI inflow into the Czech and Slovak automobile industries in 1989-98 had been realized mostly as brown-field projects (Škoda, BAZ and some of their local suppliers), the FDI inflow induced by the decisions to broaden production capacities (VW and Škoda) and build new car plants by KIA and Peugeot-Citroën (PSA) in Slovakia and Hyundai and Toyota-Peugeot-Citroën (TPCA) in the Czech Republic after the year 2000 resulted in the great amount and relative dominance of the green-field projects (see Figures 3.2-A and 3.2-B) which were the main source of catching up of Slovakia with the Czech Republic in terms of the FDI inflows per capita. Interestingly enough, the big green-field investment projects into the Czech and Slovak automotive industries have been realized in twains. Building of the TPCA car plant in Kolín, Czech Republic, was coupled by the start of realization of the PSA factory construction in Trnava, Slovakia. KIA's decision to invest in Žilina, Slovakia, was accompanied by the decision of KIA's home company Hyundai to place its future car production to Nošovice, Czech Republic.

Thirdly, Czech Republic and Slovakia started to use divergent tool in order to assist to investors and attract the FDIs into their automobile industries (see Appendix 7).

The identification of the changes in the transition modes and automotive industries of the Czech and Slovak republics generated the data needed for a complex analysis of the impact of industrial tradition on the FDI attraction potential, labor productivity and GDP growth and economic catching up which is presented in the next subchapter.

3.3 Complex analysis of the impact of industrial tradition on the catching-up process in 1998-2006

The analysis is based on the outcomes and principles of the analysis of the impact of industrial tradition on the economic convergence of the Czech and Slovak republics in 1989-1998. The method of path dependence is considered as the main framework and results of the analysis carried out in the second chapter serve as the starting point.

As mentioned above, the absence of tradition in the car production in Slovakia became the main source of difference between the path dependences of the automotive industries in Slovakia and the Czech Republic. Higher paces of labor productivity and GDP growth in Slovakia were the ultimate precondition for economic convergence or catching up of two former federal parts of Czechoslovakia. However, two path dependencies resulted in two different phenomena co-existing with the phenomenon of the catching up in particular states: the embeddedness of the automotive industry in the Czech economy but its disembeddedness from the local economy in Slovakia. This seems to be inconsistent with the above declared linkage between the industrial tradition and embeddedness which should be the inevitable result of the former. However, the explanation is simple: by allowing for the substitution of the original forms of production, labor organization and supplier network by the new ones, the factor of absence of the tradition in car production facilitated the rapid incorporation of the Slovak automotive industry (or, more specifically, the domestic production capacities of VW and its suppliers producing components in Slovakia) into the global networks of transnational conglomerates (VW) and thus caused the embeddedness of the Slovak automotive industry (in 1990s represented exclusively by VW and its suppliers) in those transnational networks. What one can observe is thus not the complete absence of embeddedness of the Slovak automotive industry as such. It is its embeddedness in other than national networks (which was the case of the Czech automotive industry in 1990s). Therefore, already in 2000 one can claim that both Czech and Slovak automotive industries could be connected with the phenomenon of tradition on the car production, having however resulted in distinctive forms of embeddedness of it in the two republics.

According to available data, during the period of 1998-2006, the Czech automotive industry had been clearly more embedded in Czech economy than the Slovak automotive industry in Slovak economy. If measured by the production multipliers[71], the numbers of the

[71] Production multiplier shows how many other jobs appear after creating one additional job in automobile industry. According to research carried out in Slovakia, the value of the multiplier is 3.82 for the car production and 3.49 for production of the modules and systems for vehicles (if one considers the

jobs induced by one additional working position in the automotive industry in the Czech Republic (2.12) and Slovakia (1.96)[72] clearly prove the previous statement about the different degrees of embeddedness of the Czech and Slovak automotive industries in the respective economies. Furthermore, the share of the Czech-owned companies in the overall number of automotive companies in the Czech Republic and in the value they produced is much higher than in the Slovak case (see Appendices 2 and 3).

What is, however, observable in the period of 1998-2006 is the slow shift in the ownership structure of domestic automotive producers in the Czech Republic towards higher share of the foreign-owned companies in the overall number of the automotive companies and decreasing of the share of the Czech-owned companies' production value in the production value of the whole Czech automotive industry. This meant that the Czech automotive industry experienced slow gradual shift from the integration into the vertical networks of the transnational companies. Similar processes took place in Slovakia in 1998-2006, however, because of the low initial embeddedness of the Slovak automotive industry in the local economy they were slower and much less significant (see Appendices 2 and 3).

In the end of the period of 1998-2006, the process of further integration of the Czech car and components producers into the vertical transnational networks picked up steam. At the same time, the Slovakia's catching up with the Czech Republic continued without major sway. This is explainable by realization of two large green-field investments into automobile industries of each of the two countries. These two couples of "mirrored" investment projects stood for integral parts of the global networks of three companies (PSA Peugeot Citroën, Toyota and Hyundai-KIA) and significantly changed character of (especially) the Czech automotive industry.

jobs induced in, as well as outside Slovakia). See Mikuláš Luptáčik, Michal Habrman, Martin Lábaj and Štefan Rehák, *Záverečná správa k projektu Národohospodársky význam automobilového priemyslu na Slovensku: Empirické výsledky* (Bratislava: Department of Economic Policy of the University of Economics, 2013), 18.

[72] Marek Rojíček, "Strukturální analýza české ekonomiky," *Working Paper CES VŠEM 1,* 2006 (Praha: CES, 2006), 24.

3.4 The source of convergence of the Czech and Slovak automotive industries after 2006: green-field investment of PSA, Toyota and Hyundai-KIA

The significance of the above mentioned investment projects which were fully completed and put into operation in 2005[73], 2006[74] and 2008[75] consist in their great impact on the next development of the automobile industries of the Czech Republic and Slovakia, in the inevitability of restructuration or change of the transition models in order to successfully attract and realize the investment projects, and in the effects they have had on the process of convergence of the Czech and Slovak automotive industries.

In case of the Czech Republic, the puzzle was related to the fact that Škoda planned (after the end of the protective period of the domestic suppliers anchored in the privatization contract) to drastically cut down the number of suppliers in order to speed up the production process and cut the production costs.[76] The motivation to protect domestic suppliers and workers and thus eliminate the negative effects of Škoda's restructuring on the traditional automobile industry made Czech government to attract new investors who would allow for the survival of the endangered Czech car components producers.

Slovak representatives had to deal with different problem. The only car producer, Volkswagen, induced only weak FDI inflow and stayed completely disembedded from the Slovak economy. Such kind of investment is always susceptible to the recalculating of the production costs and can be easily transferred and relocated to other countries. A good strategy to bind such kind of investment to particular territory is to combine its interests with the interests of other investments incorporated into global network of other transnational companies. This can happen through sharing the old[77] suppliers' production capacity by the old and new car

[73] TPCA Kolín, Czech Republic
[74] KIA Žilina and PSA Trnava, Slovakia
[75] Hyundai Nošovice, Czech Republic
[76] See ČTK, "Škoda sníží počet dodavatelů o dvě třetiny, chce zrychlit výrobu," *Novinky.cz*, June 4, 2008, http://www.novinky.cz/ekonomika/141664-skoda-snizi-pocet-dodavatelu-o-dve-tretiny-chce-zrychlit-vyrobu.html (accessed March12, 2014); and Jan Baltus, and Jan Kučera, "Logistika - krevní oběh automobilky Škoda Auto," *Technický Týdeník*, July 14, 2004, http://www.czechdesign.cz/index.php?status=c&clanek=484 (accessed March 12, 2014).
[77] Old suppliers as suppliers of the first car producer (VW).

producers, advantages of economies of scale and the rise of productivity (including labor productivity). However, in order to be able to attract such FDIs in really competitive environment of CEE while recognizing that there was no need for protecting the domestic suppliers (since there was only tiny group of domestic suppliers who were competitive enough to survive the arrival of new suppliers),[78] Slovak government facilitated the change of the transformation/capitalism mode and thanks to the new instruments for attraction of FDI, labor code liberalization and fostering the business-friendly environment, the transformation model started to show the signs of the pure neoliberal capitalism existing till that moment only in three Baltic republics.

By changing the model of capitalism, Slovak government managed to attract investment of two car producers with a great amount of induced FDI inflow. This contributed to incorporation of other car plants and suppliers into two different global networks. As the document of the Slovak Investment and Trade Development Agency presents, the three car producers in Slovakia share some of the suppliers which placed their production plants in Slovakia thanks to the KIA and PSA investment.[79] By this intertwining of the realized green-field FDI projects embedded in different global networks, Slovak government stabilized the automotive industry with regard to the elimination of the VW's motives to leave the country and creating an environment which enabled all the car producers to use the advantage of concentrated automotive industry.

The realization of the TPCA[80] and Hyundai investment in the Czech Republic helped to incorporate the Czech automotive suppliers to be partially incorporated into the global networks of transnational corporations. However, the Appendices 2, 3 and 4 manifest that despite the 2005 and 2008 realized FDI projects of TPCA and Hyundai resulted in growing share of the Czech-owned domestic companies in the number of all domestic car producers/suppliers (up to 81%, which is the highest value since 2004), their share in the overall production value of

[78] Based on the interview with Petra Stretavská, Ministry of Economy of the Slovak Republic.
[79] SARIO, *Automobilový priemysel* (Bratislava: SARIO, 2012), 7.
[80] TPCA is a joint venture of Toyota and PSA.

the automotive industry boiled down to 59%[81] of the value produced by all the domestic companies. This means that most of the Czech-owned domestic companies could be characterized as suppliers of lower ranks (Tier-2 and Tier-3). Considering this knowledge, one can conclude that the Czech industry has become in the years 1998-2014 more similar to the Slovak one than it used to be before. Obviously, the ownership structure of the high-rank Czech-owned suppliers has been changed during the transformation period of Czech automobile industry and even the period of 1998-2014 did not help to stop this process of ownership change. A lot of important Czech suppliers thus have been incorporated into the global production networks and have become embedded in them rather than in the local economy.

Interestingly enough, even though the share of the Slovak-owned domestic automotive companies has remained more or less the same during 2004-2014 (see Appendix 3) and their share on the value produced by all domestic automotive companies has decreased, the production value index of domestic Slovak-owned companies has since 2009 been higher than the Czech one (see Appendix 4). This phenomenon has been result of higher labor productivity in Slovakia, as well as better spillover effect of the FDI in Slovakia. Higher labor productivity (and higher rates of its growth) in the Slovak automotive industry in 1998-2014 can be considered as a natural result of the continuation of the transformation process of the Czech automotive industry and the protective tendencies of the Czech governments, as well as the less restrictive policies of the Slovak government in 1998-2006. Even if one admits that the model of capitalism in Slovakia has changed soon after the 2006 elections, it brought nothing substantively new into our analysis, since despite the socially and tripartity-protective policies of the new Fico's government, the automobile industry has been treated as carefully and using the same principles as in the years 1998-2006.[82]

[81] Author's calculations based on the data from Appendix 2 and 3.
[82] See Vojtech Ferencz, "Podpora automobilového priemyslu v období krízy," *Transfer inovácií*, no. 13 (2009): 3-8, http://www.sjf.tuke.sk/transferinovacii/pages/archiv/transfer/13-2009/pdf/003-008.pdf (accessed May 20, 2014).

Conclusion

Slovakia and the Czech Republic serve as an outstanding and most relevant example of the ongoing process of economic catching up of the former socialist Central and Eastern European countries not only with the advanced West European economies, but also with each other. This thesis focused on the role of industrial tradition and its real impact on the automotive industry and the process of Slovakia's catching up with the Czech Republic.

The primary analysis of the economic convergence of 1989-1998 was carried out in the framework of the path dependency method, a specific sector of economy (automotive industry) and the transition models of the Czech and Slovak republics. The thesis demonstrated that when the two elements of the path dependency model – the legacies and policies/decisions made – were analyzed, the presence or absence of the tradition in the car production appeared to be the most significant factor in which the element of legacies had been embodied. Findings indicate that these policies and decisions were aimed at overcoming the technological and developmental lacuna in the automotive industry. The Czech and Slovak republics, like many other countries, decided to deal with this problem by attracting as much FDI as possible. Since the automotive industry has possessed priority position within the Czech economy, mainly because of its tradition and impact on the economy, and the Slovak government prioritized it as the main source of innovations, economic growth and development, the thesis analyzed two FDI projects realized in the Czech and Slovak republics by Volkswagen in 1991. The results of the analysis were surprising. The absence of the tradition in car production in Slovakia strongly influenced and reduced the ability of the Slovak government to define requirements aimed at protecting the loose domestic supplier network. The Czech government, on the other hand, used its better bargaining position and used privatization contract conditionality as the tool for protecting its domestic suppliers. The results of this difference between the abilities of the Czech and Slovak governments in the negotiations and privatization process were therefore visibly rooted in the presence/absence of industrial tradition.

The second stage of the analysis of the economic convergence of the Czech and Slovak republic in the years 1989-1998 consisted in tracing the economic consequences of the different conditions anchored in the privatization contracts signed between the Czech/Slovak government and Volkswagen. In the privatization of BAZ (Slovak Republic), Volkswagen was free to implement the strategy of **substituting** the existing suppliers' network for foreign one, unlike in the case of Škoda (Czech Republic), where the privatization was carried out under certain conditions inscribed in the privatization contract that were aimed at protecting the domestic suppliers. Volkswagen, therefore, implemented the strategy of **transformation** in the Czech automobile industry and its suppliers' network. Such a dissonance between the development of the Czech and Slovak automotive industries resulted in a higher degree of embeddedness of the Czech automotive industry in the Czech economy and the almost full disembeddedness of the Slovak automotive industry from the local economy. The substitution of the local suppliers by foreign (mostly German) ones contributed significantly, on the one hand, to the rapid growth of labor productivity, since new technologies and methods of organization of labor had been applied, and, on the other hand, to the complete integration of the Slovak automotive industry into the global production networks. In the Czech Republic, the transformation resulted in a lower labor productivity growth and the protective measures delayed the process of privatization of the suppliers and thus of the integration of the Czech automobile industry (especially the suppliers' chain) into the global production networks. The observable results were the more rapid growth of labor productivity and GDP (not only within the automotive industry) and higher unemployment rates in Slovakia. The analysis thus confirmed the first hypothesis that the presence of industrial tradition had in 1989-1998 significantly contributed to the slower labor productivity growth and, subsequently, to the worse economic performance and thus became the source of economic convergence in a negative sense.

The third phase of the analysis was dedicated to the period of 1998-2013. Since this period was excessively long, for practical and also systemic reasons it was divided into two

subperiods. In the first subperiod, tradition in car production in Slovakia was already present. Therefore, the continuation of the economic convergence of Slovakia and the Czech Republic in 1998-2014 could not be explained by the factor of presence/absence of industrial tradition. What was identified as important was the form or context. These were pre-defined by the type of embeddedness through which the tradition in car production had been observed. In the late 1990s and at the beginning of the twenty first century, the tradition in the Czech automobile production was reflected in the continuous embeddednes of the latter in the local economy, whereas this industrial tradition in Slovakia was generated by the production plants of Volkswagen, fully incorporated into the global production networks. Both countries, the Czech Republic and Slovakia, were interested in facilitating further development of their automotive industries. However, the actions they could undertake deferred according to the diverging character and features of tradition in car production. While the Czech representatives were interested in the gradual integration of domestic suppliers into the global production networks – because until then they had been integrated only into the domestic structure of the Škoda suppliers' network – the Slovak government had to stabilize and fixate the already realized FDIs – VW and some of its suppliers which had been fully integrated into the global production networks – on the Slovak territory. To reach these aims, both the Czech Republic and Slovakia had to attract big FDI projects into their automotive industries: the Czech Republic with an aim to integrate its suppliers, Slovakia in order to create the space for conjunction of the interests of more global production networks in the field of automotive industry on its territory. The historical legacies, such as better developed infrastructure, as well as the edge over Slovakia in the integration process into the European Union, favored the Czech Republic in the process of attracting FDI. This contributed to the decision of the Slovak representatives to implement substantial reforms in many areas of the economy and societal life and through them change the embedded neoliberal transformation model for the pure neoliberal one. This choice proved to be right one and Slovakia, as well as the Czech Republic, managed to attract two "mirrored" investments (KIA and PSA in Slovakia and TPCA and Hyundai in the Czech Republic). The

realized projects exercised an undeniable influence on the next development phase of the Czech and Slovak automotive industries. Rather than incorporated into the transnational production networks, the Czech suppliers had been privatized and transformed further. This factor contributed to the continuation of the relatively weaker growth of labor productivity and GDP in the Czech Republic and, at the same time, transformed the structure of the Czech automotive industry, with regard to the ownership structure of suppliers' and incorporation of the industry into the global production networks, closely resembling the Slovak one. However, the negative externalities of the development of the automotive industry in the Czech Republic were much more modest – the induced unemployment had been low, the social impacts had been moderated and the traditional car production continued.

After 2006, a shift back towards the embedded neoliberal model of capitalism had been observed. The catching up of Slovakia with the Czech Republic had continued also in the years 2006-2013. The most probable source of this was the fortunate palette of models of cars produced in Slovakia, as well as the special status of the automotive industry. Thanks to the latter, the automotive industry had been placed under the conditions of the pure rather than the embedded neo liberal model of capitalism.

Having carried out the comparative analysis of the automotive industries of the Czech and Slovak Republic with the aforementioned results, this thesis contributed to the interconnection of the theories of economic backwardness and FDI embeddedness and proved that the development of the Slovak and Czech automotive industries based on path dependency had been considerably (if nor decisively) influenced by the factor of industrial tradition. The thesis demonstrates that, in contrast to the conventional explanation of its role, the presence of industrial tradition in the Czech and Slovak automotive industries of 1989-1998 had in reality been the source of slower labor productivity and GDP growth and therefore the source of the catching up in a negative sense. The industrial tradition together with the transition models constitute the main source of further economic convergence of the Czech and Slovak republics in 1998-2014.

The contribution of this thesis consists also in its practical implications and applicability on the transition countries of East and South-East Europe. The paradox of the industrial tradition can help to understand the processes of economic convergence ongoing in the former socialist counties and find the right strategies and sources of development. The results of the research offer the opportunity for further inquiry into the types of FDIs and their consequences on the post-socialist economies.

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Appendices

Appendix 1: Four selected growth indicators of CEE countries in 1989-2007

	1989-1994				1994-2000				2000-2007			
	GDP	Employment	Productivity	Real wage	GDP	Employment	Productivity	Real wage	GDP	Employment	Productivity	Real wage
Czech Republic	-2,3	-2	4.9[i]	-3	2,2	-0,8	3,2	3,2	4,5	0,8	3,8	4,7
Hungary	-3,2	-4,2	3,7	-1,9	3,3	0,5	2,1	-1,9	3,7	1,1	2	4,3
Poland	-1,6	-3,6	2	-3,5	5,7	-0,2	5	4,8	4,1	0,6	2,6	1,1
Slovenia	-2,3	-4,6	3,8	-6	4,3	-0,3	4,7	2,9	4,4	0,9	3,3	3
Slovakia	-2,4	n/a	12,6	-5,6	3,8	-0,6	4,8	5,3	6,2	1	5,9	3,3
Estonia	-1,6	-4,3	2,7	-17,3	6	-2,7	8,9	8	8,1	1,7	6,4	8,6
Latvia	-11,2	-5,1	19	8,2	4,3	-2,3	2,7	3,4	9	2,4	5,7	9,9
Lithuania	-11,5	-2	0	-19,8	4,5	-1,2	8,3	6,9	8,1	1,3	5,6	8,5
Bulgaria	-5,7	-5,8	8,5	-13,4	-0,2	0	0	-4,4	5,6	2	3,2	4
Romania	-4,6	-1,8	1,6	-6,7	0,1	-2,4	5	6,5	6,1	-0,8	5,5	9,3

Source: Özlem Onaran, "From the crisis of distribution to the distribution of the costs of the crisis: The case of Europe," in *Social Costs Today: Institutional Analyses of the Present Crises*, ed. Wolfram Elsner, Pietro Frigato and Paolo Ramazotti (London: Routledge, 2012), 134-135. [i]Data from EBRD's *Transition report 1999: Ten years of transition* (London: European Bank for Reconstruction and Development, 1999), 74, http://www.ebrd.com/downloads/research/transition/TR99.pdf (accessed May 7, 2014).

Appendix 2: Share of foreign-owned companies in manufacturing of motor vehicles, trailers and semi-trailers, % of production value

		2004		2006 (2007)		2009		2011	
		Value	Share	Value	Share	Value	Share	Value	Share
CZ	Total	11,667.30	100.00	21,672.10	100.00	21,474.50	100.00	31,569.20	100.00
	Domestic	808.80	6.93	1,209.70	5.58	1,047.80	4.88	1,292.80	4.10
	Foreign-owned	10,858.50	93.07	20,462.40	94.42	20,426.70	95.12	30,276.40	95.90
SK	Total	5,558.80	100.00	7,399.10	100.00	9,620.70	100.00	16,437.10	100.00
	Domestic	140.80	2.53	262.50	3.55	108.80	1.13	220.70	1.34
	Foreign-owned	5,418.00	97.47	7,136.60	96.45	9,511.90	98.87	16,216.40	98.66

Source: Eurostat, author's calculations based on the data from Eurostat.

Appendix 3: Share of foreign-owned companies in manufacturing of motor vehicles, trailers and semi-trailers, % of overall number of companies

		2004		2006 (2007)		2009		2011	
		Number	Share	Number	Share	Number	Share	Number	Share
CZ	Total	576	100.00	491	100.00	1,205	100.00	1,254	100.00
	Domestic	444	77.08	335	68.23	951	78.92	1,026	81.82
	Foreign-owned	132	22.92	156	31.77	254	21.08	228	18.18
SK	Total	91	100.00	136	100.00	156	100.00	240	100.00
	Domestic	53	58.24	89	65.44	61	39.10	134	55.83
	Foreign-owned	38	41.76	47	34.56	95	60.90	106	44.17

Source: Eurostat, author's calculations based on the data from Eurostat.

Appendix 4: Production value index of domestic Czech-/Slovak-owned companies, % (foreign-owned companies = 100)

	2004	2006 (2007)	2009	2011
CZ	2.21	2.75	1.37	0.95
SK	1.86	1.94	1.78	1.08

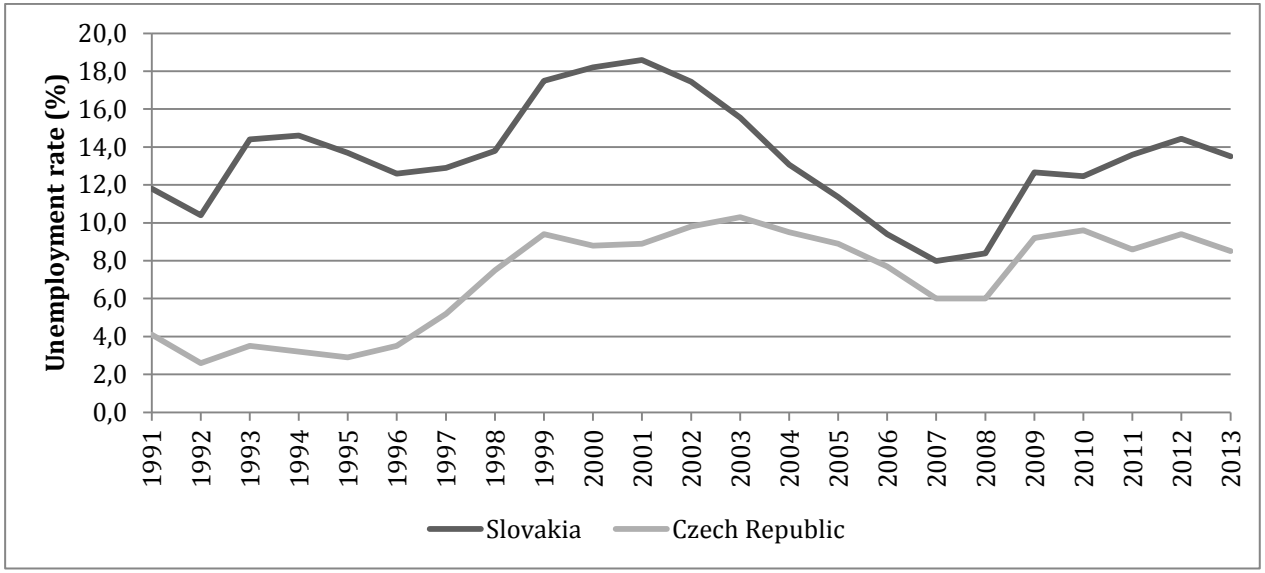
Source: author's calculations based on the data from Eurostat.
Note: Production Value Index stands for a comparison of the value produced (on average) by one domestic company and by one foreign company.

Appendix 5: Weight of automotive industry in ECE economies, 2005-2010

	Share of industry, as % of			
	Export	Production	Investment	Employment
CZ	21.4	18.3	18.2	9.6
HU	17.9	16.2	19.5	7.7
PL	18.0	10.3	8.0	n/a
SK	24.0	22.8	22.7	8.9
CEE	20.3	16.9	17.1	7.8
Germany	16.7	18.0	19.4	11.9
EU9	9.8	11.0	11.1	6.5

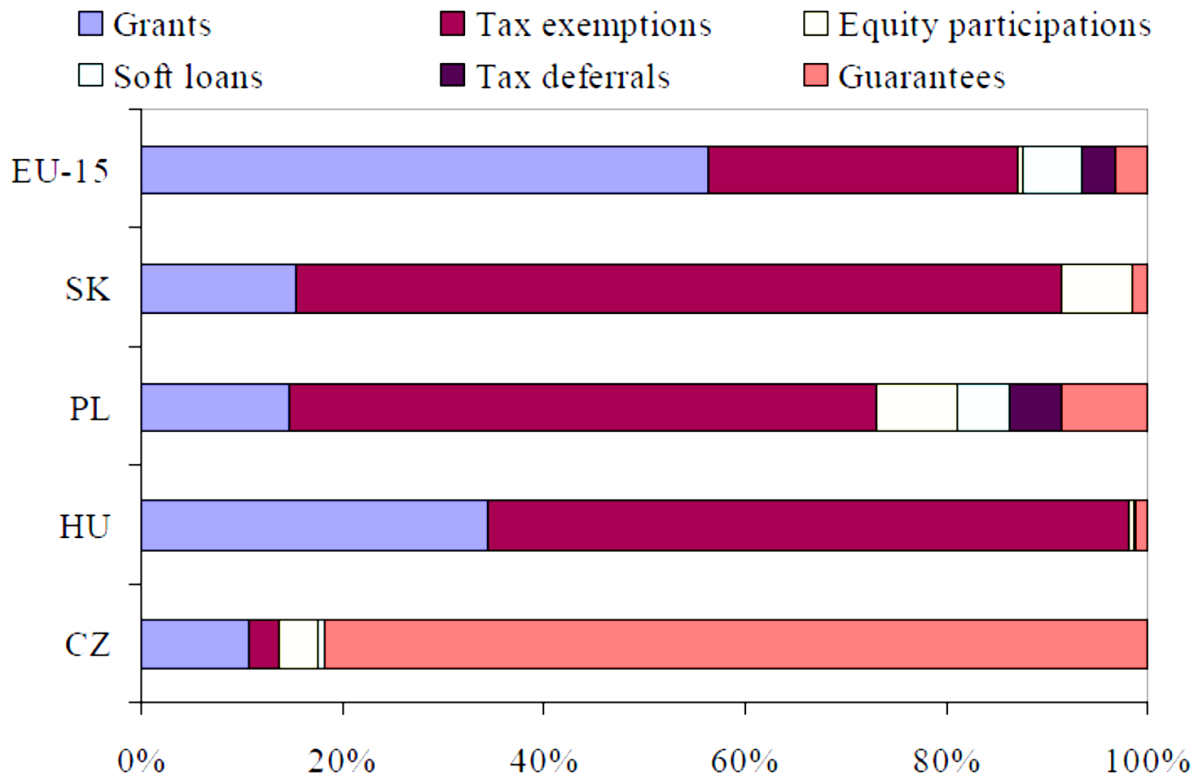
Source: Vera Šćepanović, *FDI as a solution to the challenges of late development: catch-up without convergence?* (Budapest: Central European University, 2013), 17.

Appendix 6: Unemployment rate in Slovakia and the Czech Republic, 1993-2013, %



Source: Statistical Office of the Slovak Republic; Czech Statistical Office; Národná banka Slovenska, *Ekonomický vývoj v Slovenskej republike* (Bratislava: NBS, 1993), 29, http://www.nbs.sk/_img/Documents/_Publikacie%5CVyrocnaSprava%5CSVK1993%5CVS1993_kap05.pdf (accessed May 26, 2014).

Appendix 7: Public aid in manufacturing by instruments in 2000-2004



Source: Marcel Tirpak and Agata Kriozen, "The Automobile Industry in Central Europe," *IMF Note* (November, 2006): 12, http://www.imf.org/external/cee/2006/1106.pdf (accessed May 7, 2014).

Appendix 8: Investment rate in the SSR/SR in 1950-1989

Years	1951-55	1956-60	1961-65	1966-70	1971-75	1976-80	1981-86	1987	1988	1989
Investment (% of reinvested NI) in CSR/CR	20.9	24.3	24.8	26.7	29.6	30.4	27.4	28.4	28.4	30.1
Investment (% of reinvested NI) in SSR/SR	34.8	36.1	38.1	36.2	39.3	39	35.2	34.3	36.3	35.3
Applied coefficient	0.614	0.741	0.741	0.863	0.863	0.844	0.844	0.859	0.859	0.859
Real investment in SSR/SR (if NI p.c. of CR=SR)	21.37	26.76	28.24	31.23	33.91	32.93	29.73	29.47	31.19	30.33
Real investment per capita in SR (CR=100)	102.2	110.1	113.9	117.0	114.6	108.3	108.5	103.8	109.8	100.8

Source: author's calculations.