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EFFECTS OF SOCIO-POLITICAL SYSTEMS AND ECONOMIC DEVELOPMENT

ON STATUS ATTAINMENT: FORMER SOCIALIST CENTRAL AND EASTERN

EUROPEAN COUNTRIES IN COMPARISON TO WESTERN CAPITALIST COUNTRIES

A Thesis in

Sociology

by

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Abstract

Using ISSP data, this study estimates and compares links among social origins and social status characteristics (education, occupation and earnings) across a range of societies and across time. The research topic is fueled by the idea that capitalism, free market economy and industrialization produce a specific logic of stratification, while state socialist societies, under the influence of socialist ideology and adopted state policies, produce a radically different stratification system, following a different logic from that existing in Western capitalist countries. In order to test this hypothesis, the present research is organized around differences and similarities in patterns of status attainment among countries characterized by different types of socio-political organization and different degrees of economic development. In particular, the study focuses on characteristics of state socialist stratification and the question of existence of socialist effects on social stratification and characteristics of postsocialist stratification – its departures from the 'logic' of socialist stratification and that of capitalist stratification. In order to follow this line of research, the question of homogeneity of status attainment patterns within regions of countries characterized by similar socio-political systems and similar levels of development is also examined. The results suggest that there is no single model of capitalist stratification, or a single type of socialist stratification and a common process that describes transformations of the stratification system during the postcommunist transition in all former state socialist societies. The empirical analyses also suggest that while socialism might have had some isolated effects on status attainment processes, the effects are weak and it is not clear whether they are indeed attributable to the influence of socialist ideology and policy rather than other processes like economic development and industrialization. At the same time, the status attainment patterns characterizing statue socialist societies are not radically different from those

characterizing western capitalist societies. Postcommunist effects on social stratification are also observed only in isolated cases, and stability rather than change describes the over-time trends in status attainment in the Central and Eastern European former socialist countries.

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1 Introduction

The balance between ascription and achievement in the status attainment process characterizing a society can be influenced by an array of factors which can be roughly grouped into four categories: factors related to the economic and political system, factors related to economic development, factors related to institutional arrangements[1], and factors related to historical and cultural characteristics of societies. The 'experiments in destratification' and subsequent transformations in Central and Eastern Europe offer the ideal research ground for studying the impact of political and economic factors on status attainment parameters. The first part of this study will focus on this particular dimension affecting status attainment by comparing postcommunist patterns (in the Czech Republic, East Germany, Hungary, Latvia, Poland, Russia, Slovakia, and Slovenia) soon after the transformation (1992) and almost ten years after the transformation (1999) with patterns present in liberal market societies (Australia, Canada, New Zealand, and USA), Continental Europe (France and West Germany), social democratic countries (Norway and Sweden), and Mediterranean countries (Cyprus, Portugal, and Spain). The impact of political and economic systems will be explored by comparing each of the status attainment parameters, and the balance between ascription and achievement across time, countries, and regions.

The status attainment model explores the links among an individual's social origins, education, occupation, and earnings. The model conceptualizes individuals' social status trajectories as progressions from a set of initial social status resources (determined by social

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[1] The term 'institutional arrangements' refers here to the structure of the educational and training systems (existence of ability grouping, degree of vocational specificity, presence of apprenticeship systems, degree of selectivity, of centralization, and degree of specificity of educational credentials) and that of the labor market (degree of skill specialization and of regulation of employment contracts), and the links that structure the flow of persons between these two systems (cooperation between schools and employers).

origins – parent's educational and occupational status) through educational careers leading to certain levels of educational attainment and occupational careers leading to certain occupational outcomes (Blau, Duncan & Tyree, 1978). The status attainment model employed in this paper also explores earnings as a final variable in the causal chain of status attainment. Although the model proposed here includes a set of controls (gender, age, and marital status), the discussion will focus on the relationships between the four main social status resources and outcomes (parental social status, and respondent's education, occupation and earnings). Six direct relationships (sometimes labeled here 'status attainment parameters' or 'main status attainment relationships') result from the links between these four variables. These relationships can be categorized into those measuring processes of status ascription and those measuring processes of status achievement. The former are denoted by the impact of parental status on respondent's education, occupation and earnings (labeled here 'educational ascription', 'occupational ascription', and 'earnings ascription'), while the latter are measured by the links between respondent's education and occupation ('occupational achievement'), education and earnings ('earnings achievement') and occupation and earnings ('income returns to occupational status').

       Respondent's education and occupation act as intermediary variables in the status attainment process. In the framework of the model, education has a dual role: it can be seen both as a mechanism of achieving a certain occupational status and earnings level, and as a mechanism of transmission of parental advantages. Because of this, occupational attainment can be conceptualized as consisting of three components: a part due to ascription (total effects of parental status on occupation, including the effect of education in transmitting parental advantages), a part due to achievement (the effect of education that has nothing to do with the

transmission of parental advantages, or, in other words, the effect of education net of parental status), and a part due to other variables in the model (controls and unmeasured influences).

Occupation has a similarly dual role in the explanation of earnings levels[2]. For example, earnings attainment can be conceptualized as consisting of three components: a part due to ascription (total effects of parental status on earnings, including indirect effects through education and occupation), a part due to achievement (the effects of education and occupation that have nothing to do with the transmission of parental advantages), and a part due to other variables in the model (controls and unmeasured influences).

The prevalence of either ascription or achievement in the determination of occupational status will be calculated by decomposing the total variance in occupational attainment into variance explained by parental status (through direct and indirect effects) and variance explained by education independent of the role of social origins (Blau, Duncan & Tyree, 1978, p. 202). While the first component can be considered an indicator of the amount of ascription in occupational attainment, the second indicates the amount of achievement in occupational attainment. A similar procedure will be applied in the description of the amount of ascription and achievement in earning levels.[3]

In addition, the second part of the empirical analysis will explore the impact of economic development on status attainment patterns. Several indicators of industrialization will be employed as predictors of the main status attainment parameters, in an attempt to test several hypotheses advanced by two alternative theories linking industrialization processes to changes in status attainment patterns: the industrialization thesis and the status maintenance thesis.

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[2] It is likely, however, that its importance in the transmission of parental advantages will be extremely small, once respondent's education is controlled for.
[3] For this calculation, the impact of occupation and education combined, independent of the impact of social origins will measure the amount of achievement in earning levels.

The last two groups of factors that can influence status attainment patterns – institutional arrangements and historical and cultural factors – are less amenable to operationalization than the first two categories. While a brief theoretical discussion of expected influences of these factors is undertaken here, the empirical analysis does not account for their influences. An indicator of enrollments in tertiary education that is sometimes considered as a measure of institutional arrangements (see Shavit & Müller, 1998) is used here as a predictor of status attainment patterns, but it is considered rather as an indicator of mass educational expansion and industrialization. Accounting for the influence of historical and cultural factors might inform discussions concerning comparisons of status attainment across countries at a single point in time, and future research might benefit from taking them into account. The stability of these factors over time makes them less useful however in the discussion of over time trends in processes of status attainment. However, even if these two categories of factors are not directly accounted for in the present empirical analysis, whenever it is possible, they are used as interpretative variables in order to explain observed similarities or differences in status attainment patterns.

When undertaking the task of comparing status attainment across a variety of countries, the first question that arises is whether one expects to find patterns of effects that would help reduce the comparative task to a smaller number of regions of countries, or will each country have its own peculiarities and its own developments over time, creating an image of trendless fluctuation that resists any attempts at categorizing? If one expects predictable patterns, then the next question is which criteria should be used when designing the categories of countries?

This study is structured as follows: the introductory chapter discusses these issues and proposes a categorization of countries that attempts to combine several different criteria

identified in previous research and theorizing as important predictors of stratification patterns. Chapter two undertakes a more detailed discussion of the influences of economic development, and the shape of economic and political systems on the status attainment process. The discussion revolves around the existence of "communist", "postcommunist", and "capitalist" patterns of status attainment, focusing on theories about the impact of communism and postcommunist transformations on status attainment. The direction of effects of industrialization on status attainment parameters (direct effects in the status attainment model) and on the balance between ascription and achievement (e.g. the role of education in transmitting parental advantages or as purely a mechanism of status attainment) is also discussed here. Chapter three describes the status attainment model, the procedures undertaken in order to harmonize the measurement of variables across societies, and the empirical models used in order to estimate and compare status attainment parameters. Chapter four presents and discusses results of the empirical analysis and chapter five summarizes the most important findings of the paper.

1.1   Predictable Patterns or Trendless Fluctuation in Status Attainment?

Previous studies have discussed whether common social structures and status attainment processes arise as a consequence of common history, culture, development, economic and political systems. One of the central topics around which this research revolves is the existence of a stratification model characterizing all advanced or settled capitalist societies and of a different model that is appropriate in the description of all state socialist societies and later in the description of Central and Eastern European societies after the fall of state socialism (Lipset, Bendix & Zetterberg, 1959; Meyer, Tuma & Zagorski, 1979; Simkus, 1982; Grusky & Hauser, 1984; Haller, Kolosi & Robert, 1990; Domanski, 1994).

Ranging between two extreme positions – that each country has a unique stratification model or that a single model can be used to describe all countries (at least in terms of mobility regimes) – various grouping criteria have been suggested in order to account for similarities and differences in social structures. Groupings based on the level of industrialization, the shape of the occupational structure, the economic and political system, the welfare state dimension, the shape of institutional arrangements in education and labor markets have been assumed as being able to capture within group similarities and across group differences.

The next introductory sections contain a brief review of the theories that link some of these criteria to social mobility and social stratification processes, and theories attempting to construct typologies of varieties of capitalism. After reviewing these theories, several criteria will be proposed for grouping countries into regions that are expected to display an amount of homogeneity in patterns of status attainment.

1.2 Predictable Effects of Industrialization on Social Stratification and Mobility?

Social stratification and mobility have often been discussed in relation to industrialization processes. While some theories describe industrialization as a process with predictable effects for social stratification, alternative hypotheses have been advanced according to which industrialization is not among the relevant predictors of stratification patterns. On one hand, the "logic of industrialization" tradition predicts the emergence of common social stratification and social mobility patterns in countries characterized by similar industrialization levels, and a convergence of stratification patterns of industrialized countries over time (Treiman, 1970). On the other hand, either the direction of effects of industrialization is contested among researchers - e.g. the thesis of industrialism versus the status maintenance thesis (Grusky, 1983), or industrialization levels per se are considered to only affect stratification at the beginning of the

industrializing process (Lipset, Bendix & Zetterberg, 1959; Featherman, Lancaster Jones & Hauser, 1975), or they are completely discounted as relevant predictors for social mobility (Grusky & Hauser, 1984).

The industrialism thesis links economic development to changes in occupational structures which in turn affect social mobility. The process of industrialization causes an expansion in the number of occupations requiring higher educational and technical qualifications and also bringing higher material rewards and a compression of occupations at the bottom of the occupational distribution.

Grusky and Hauser (1984) label this theory "the liberal theory" of social stratification and characterize it as an optimistic view of the effects of industrialization on social mobility. The theory assumes that increasing economic development will lead to increasing rates of mobility in industrialized society. As a result of this relationship, societies with similar levels of development should have similar mobility regimes and a similar balance between ascription and achievement processes: "the more industrialized a society, the greater the direct influence of educational attainment on occupational status" and "the more industrialized a society, the smaller the direct influence of a father's occupational status on son's occupational status" (Treiman, 1970, p. 221). Implicit in this theory is a unilinear evolutionary assumption: all societies follow the same developmental path, and their position on this path can be used to determine the shape of their social stratification.

Later empirical studies disconfirmed the predictions of liberal theory, and tried to modify it in order to account for the observed similarities in patterns of social mobility across countries at different industrialization levels. Lipset, Bendix and Zetterberg (1959) introduced the hypothesis that mobility regimes are similar in all Western industrialized societies. The theory

does not assume a correlation between economic development and rates of social mobility, but rather a threshold effect: once industrialized societies reach a certain point of development, their mobility regimes crystallize around a single pattern. This view allows for an initial positive effect of industrialization on mobility rates, but after the threshold level is reached, absolute mobility regimes should be similar across industrialized societies.

In any of the above formulations, this research tradition argues that industrialization triggers a shift in the balance between achieved and ascribed allocation of statuses, marking a transition towards an increased prevalence of achievement in the status attainment processes.

The FJH revision of the Lipset-Zetterberg hypothesis (Featherman, Lancaster Jones & Hauser, 1975) attempts to account for the empirical observation that absolute mobility rates are actually not equal among industrialized countries. The different shapes of occupational structures in these countries make it unlikely that absolute mobility regimes are similar. However, controlling for the different shapes of the occupational structures, relative mobility rates should be similar across industrialized societies. This theory assumes that while the sizes of occupational strata differ across societies, the pattern of exchanges between occupational strata is similar.

Grusky and Hauser (1984) further revise the FJH hypothesis, by observing that relative mobility rates are not only similar across Western, highly industrialized societies, but across a wider range of societies, including less industrialized and socialist societies. In light of this finding, the similarity in mobility regimes cannot be derived from economic development but rather from the way basic institutions function in all societies, the way people perceive the occupational structure, and their efforts to achieve for them or for their children a desirable occupation.

The latter two points of view no longer attribute increased mobility rates to economic development, but assume that all industrialized societies (in the FJH formulation) or all societies (in the Grusky and Hauser formulation) are characterized by a common mobility regime, once differences in the occupational structure are accounted for.

While an initial positive effect of industrialization on mobility rates has been confirmed empirically, evidence of increasing trends for absolute or relative mobility rates, or of convergence of mobility regimes across countries, has been conflicting (Erikson & Goldthorpe, 1992).

In contrast with the industrialism thesis which predicts an increase in occupational achievement coupled with a decrease in educational and occupational ascription as industrialization progresses, the status maintenance thesis argues that decreases in educational ascription (which are assumed here, as in the industrialization thesis, to be the consequence of industrialization) do not necessarily lead to decreases in occupational ascription (Grusky, 1983). In fact, the opposite might be true. The equalization of educational chances that accompanies industrialization might force the socio-economic elites to rely more on ascriptive processes to keep their children from downward mobility, since education is no longer a mechanism of status transmission. Furthermore, the inability of occupational structures to continue upgrading at the rate of educational expansion might cause diminished occupational returns to education and might force employers to rely on non-educational criteria when making employment decisions (Grusky, 1983).

Although some researchers have argued that it is possible that occupational structures are flexible and can adjust according to the supply of educated people, while at the same time persons make informed decisions about staying in school based on labor market conditions

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(Hauser, 1976; Treiman, 1977b), others view occupational structures as determined by influences exogenous to the status attainment process – technological and organizational processes (Boudon, 1974). The choice between these two points of view affects the answer to the question of whether occupational structure upgrading is able to keep pace with educational expansion or not. The fist assumption implies that occupational structures will adjust (after a certain time lag) to the increased rates of inflow of educated persons, while increases in rates of educated persons will level off. The second assumption describes occupational structures as more rigid, forcing the surplus of highly educated persons to seek employment in lower occupational status positions.

If occupational structures are indeed able to adjust to changes in the educational structure, it is likely that the balance between ascription and achievement remains the same. Also, mass educational expansion might not be sufficient for equalizing status achievement if the new educational opportunities are utilized by all social classes or if the most advantaged social classes do not reach 100% enrollment rates in higher levels of education (Jonsson & Mills, 1993; Raftery & Hout, 1993).

1.3 Predictable Effects of Institutional Arrangements on Social Stratification and Mobility

While the status maintenance thesis takes into account the shapes of educational and occupational structures in order to account for the effect of industrialization on the status attainment model parameters, a different line of research focuses on the role of institutional arrangements in the stratification process. In this view, the balance between ascription and attainment is determined by the organization of educational systems and labor markets, and the pattern of transitions from school to work. The structures of opportunities within schools and within labor markets affect educational and occupational outcomes (Kerckhoff, 1996).

Different societies have different educational institutional arrangements and this will have an impact on the degree of ascription versus achievement in that society. While ability grouping and filtering out high proportions of students at each educational transition point increase the educational ascription path, decentralization and awarding highly differentiated credentials decrease it (Kerckhoff, 1995). Societies with educational systems characterized by higher stratification (early separation of students into different tracks characterized by different expected occupational outcomes and low mobility between tracks), higher vocational specificity and the presence of apprenticeship systems tend to produce more orderly and predictable transitions from school to work, increasing the effect of education on occupation in the status attainment process (Shavit & Müller, 1998; Gangl, 2000; Kerckhoff, 2001).

The relative sizes of enrollments in different educational levels can also have an effect on ascription and achievement: Gerber and Hout (1995) document an increase in educational ascription in the Soviet period Russia caused by the failure of higher education to expand at the same pace as secondary education. The level of enrollment in tertiary education alone could be considered as an institutional arrangement type variable with a negative effect on the link between respondent's education and occupation (Shavit & Müller, 1998). The negative direction of this relationship is inferred from a theory of credential inflation: as higher percentages of people begin to acquire high educational credentials, the value of these credentials on the market declines, producing decreased occupational outcomes. As mentioned previously, the increased supply of highly educated persons might also have a positive effect on occupational ascription (according to the status maintenance thesis).

Labor markets in turn are characterized by different institutional arrangements across countries, differences which are expected to have an impact on the process of occupational

attainment. The nature of formal employment regulations, of wage bargaining systems, and labor market segmentation are several dimensions which distinguish between different types of labor markets with different occupational trajectories and outcomes (Gangl, 2000). Based on these dimensions, Gangl (2000) distinguished between two ideal types of labor market arrangements among European countries: strong occupational labor markets (Northern European countries: Austria, Denmark, Germany, Netherlands), rigid labor markets (Southern European countries: Greece, Italy and Portugal) and a third residual category with less specific institutional arrangements and effects of these arrangements on status attainment (Britain, Ireland, France, Belgium, and Spain). While the first group of countries opted for high skill specialization combined with a medium to high degree of regulation of wages and employment contracts (resulting in a more favorable occupational allocation at market entry than that present in the other groups), the second group of countries is characterized by low skill specialization and low wage and employment contracts flexibility (resulting in higher unemployment risks at labor market entry).

The nature of the relationship between educational systems and labor markets also comes into play as a factor influencing the education-occupation relationship in the status attainment model. The existence of institutional linkages between the educational system and the labor market (e.g. schools recommending students to employers or employers recommending curricula and testing standards that suit their needs to schools) tends to increase the effect of education on occupation (Shavit & Müller, 1998).

1.4   Communist, Postcommunist and Capitalist Patterns of Status Attainment

The experiments in destratification in Eastern Europe are believed to have produced a common type of social structure in these societies, with notable divergences from the social stratification type in Western capitalist societies (Haller, Kolosi & Robert, 1990, p. 191). Some theories have described communism, capitalism and transition to postcommunism as systems characterized by different criteria of stratification. According to this view, while economic capital is the most important criterion of stratification in capitalist systems, communist systems are stratified based on political capital, and the transition to postcommunism is hypothesized to bring to the forefront human capital as the main criterion of stratification (Eyal, Szeleny & Townsley, 1998).

Previous empirical studies have revealed a series of particularities of Central and Eastern European social structures during communism in comparison with other Western capitalist countries: the effect of social origins on occupational attainment was weaker, the effects of education and occupation on income were also weaker, and the effect of education on occupational attainment was stronger in socialist countries (Meyer, Tuma & Zagorski, 1979; Simkus, 1982; Slomczynski, 1986).

With the fall of communism and the removal of the rules of the command economy, some constraints on the social structure have been lifted. In this context, supporters of convergence theories believe that social structures in former communist countries in Central and Eastern Europe will begin to resemble the western capitalist social structures more and more. During the transformation period, a 'recomposition of social status' might bring the correlations between different social status components closer to the model in Western capitalist countries (Domanski, 1994).

The evidence of a specific status attainment pattern in socialist societies is mixed, and even if some particularities are found, it is not clear whether these stem from the impact of socialist ideologies and policies, or from other factors characterizing these countries. Some researchers suggest that state socialism "came … as part of a greater package, including not only socialism but also war losses, postwar reconstruction, and postwar migration, so the effects of different factors are rather difficult to isolate" (Mach & Peschar, 1990, p. 98). The lower levels of economic development in the Central and Eastern European societies at the beginning of the communist period might also be responsible for the differences between social structures in this region and Western capitalist countries. According to this view, it is impossible to attribute any of the effects that emerged during socialism to the regime itself.

1.5 Considerable Variability of Stratification Patterns and Social Mobility across Countries with Similar Industrialization Levels, Economic and Political Systems

While the last argument presented above still allows for the existence of a 'socialist pattern of stratification', and just challenges the role of socialism in actually creating this pattern, the next argument could be described as a "one country – one stratification pattern" type of argument. Within this framework, it is believed that the uniqueness of cultural and historical legacies creates an array of types of social stratification and status attainment, with little similarities among countries with common economic and political systems (Haller, Kolosi & Robert, 1990). Within each group of countries characterized by similar political and economic systems, there is a considerable variation of stratification patterns, class structures and social mobility.

Holtmann and Strasser (1990) find several different subtypes of class structures when they examine a number of Western societies (West Germany, Great Britain, Sweden, Norway, Finland, United States, Canada, Australia, New Zeeland). The authors designate historical

connections, common culture, industrial development and welfare state as the main criteria determining the typology of class structures in these societies (Holtmann & Strasser, 1990, p. 20).

Similarly, researchers have found that there is no single common model of socialist stratification. Commentators point out that the Central and Eastern European countries were characterized by different levels of development and different social structures at the beginning of the socialist period (Haller, 1990, p. xviii). Furthermore, at the end of the socialist period, each of the Central and Eastern European countries had unique characteristics, and thus started the transformation process with different resources. The transformation process might then be introducing even more variation in already dissimilar societies. It is unlikely that a single logic of stratification will emerge under these conditions, when it could not emerge during state socialism (Stark, 1996).

1.6   Varieties of Capitalism

'Settled capitalist' countries are likewise thought to be a heterogeneous group, with differences in their economic and political institutions, which in turn are likely to give rise to different stratification patterns. The "varieties of capitalism" literature has offered a number of different typologies (see for instance Boyer, 1997; Ebbinghaus, 1999; Soskice, 1999; Hall & Soskice, 2001; see for instance Amable, 2003).

Hall and Soskice (2001) group countries into two major groups, plus a third residual category (countries in this category seem to have common characteristics to a certain degree nonetheless): liberal market economies – LMEs – (USA, Britain, Australia, Canada, New Zealand, Ireland), coordinated market economies – CMEs – (Germany, Japan, Switzerland, Netherlands, Belgium, Sweden, Norway, Denmark, Finland, Austria), and Mediterranean

capitalisms (France, Italy, Spain, Portugal, Greece, Turkey). The former two categories are considered ideal types at opposite ends of a scale on which countries can be arranged: while in LMEs the market is the principal mechanism affecting the behavior of economic actors, interactions are governed by competition principles, and exchanges are determined by supply and demand, in CME's non-market relationships prevail, cooperation takes the place of competition, and strategic interaction guides actors' behavior (Hall & Soskice, 2001, p. 8). The institutions, organizations and culture present in a society might facilitate the preponderance of one type of relationships or the other.

Although both types of capitalism produce similar levels of economic growth, their different political and economic organization is likely to produce different patterns of employment and income inequality: "… In liberal market economies, the adult population tends to be engaged more extensively in paid employment and levels of income inequality are high. In coordinated market economies, working hours tend to be shorter for more of the population and incomes more equal" (Hall & Soskice, 2001, p. 21).

Amable (2003) argues that while a binary classification (LMEs vs. CMEs) simplifies the task of international comparisons, it does not capture all the defining characteristics of the different types of capitalism. By considering a wider variety of institutional areas (including the welfare state dimension), he arrives at a five-category classification of capitalisms: the market based model (Anglo-Saxon countries), the social democratic model (Sweden, Finland, Denmark), the Continental European model (France, Germany, Austria, Belgium, Ireland, Norway, Switzerland, Netherlands), the Mediterranean model (Italy, Spain, Portugal, Greece), and the Asian model (Japan, Korea). The market based economies and the Mediterranean countries are considered opposing poles on a market flexibility dimension; the social democratic

countries and the Asian countries are opposing poles on the welfare state dimension, with Continental Europe in an intermediate position on this axis.

Focusing on the welfare dimension, Esping-Andersen (1990) defines three major types of welfare states: liberal (USA, Canada, Switzerland, Australia, Japan), conservative (Italy, France, Austria, Germany, Belgium), and social democratic (Norway, Sweden, Denmark, Finland, Netherlands). Another typology based on the welfare state dimension (Ebbinghaus, 1999) proposes the following categories: Nordic countries, Central European countries, Southern European countries, and Anglo-Saxon countries.

Even though different authors propose somewhat different typologies, "there is a significant overlap in the various classifications. Most authors consider Nordic countries to belong to a specific type of economy [...] Anglo-Saxon countries are often classified in a group [...] There are distinctive elements in the South European countries, with France being sometimes attached to this group" (Amable, 2003, pp. 83-84).

1.7   Bringing Classification Criteria Together

The classification of countries used in this study combines several different criteria: geographical, cultural and linguistic, labor markets and political systems, and the welfare state. Based on the varieties of capitalism literature, the countries included here in the empirical analysis are grouped into four regions: liberal market (Australia, Canada, New Zealand, and USA), Continental Europe (France and Germany), social democratic (Norway and Sweden), and Mediterranean (Cyprus, Portugal, and Spain). To these four groups common to both Amable and Ebbinghaus, a fifth group is added, containing Central and Eastern European postcommunist countries (Czech Republic, E. Germany, Hungary, Latvia, Poland, Russia, Slovakia, and Slovenia).

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The proposed categorization is also generally a consistent categorization based on indicators of industrialization. Figure 1-1 through Figure 1-3 explore levels of industrialization (measured as electricity consumption per capita, enrollment in tertiary education, and employment in the services sector) within and across these regions in 1977 and 1999.

Figure 1-1 Electricity Consumption (in Thousands of kwh) per Capita
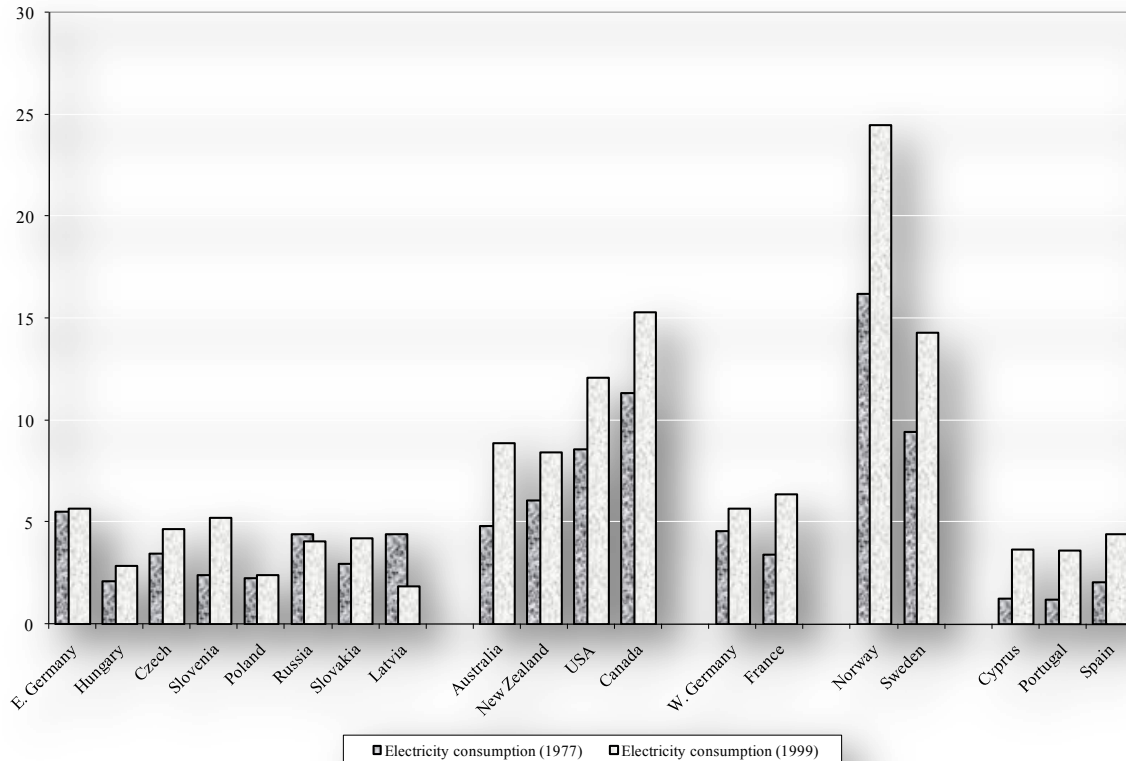
Sources: World Development Indicators 2003 CD-ROM; International Energy Annual 200; Energy Balances of Non-OECD Countries, 2001-2003

The liberal market economies tend to be characterized in general by higher levels on all three indicators than the other four regions (with the exception of electricity consumption, where levels in the liberal market economies are equaled or even surpassed by levels in social democratic countries). The Continental European countries are characterized by similar levels on all three indicators. Indicator levels within this region are somewhere between the high levels characterizing the liberal market economies and the low levels characterizing Mediterranean

countries (the differences are more pronounced for electricity consumption levels than for the other two indicators). Norway and Sweden constitute a highly homogenous region, with similar or slightly higher levels of tertiary enrollment and employment in services than the Continental European countries, and with similar or slightly higher levels of electricity consumption than liberal market economies. Mediterranean countries generally have the lowest indicator levels and they are the least homogenous region in terms of tertiary enrollment. Central and Eastern European countries constitute a rather homogenous region too with similar levels on each of the industrialization indicators. Levels of industrialization indicators within this region are generally close to Continental European levels. In sum, there is some degree of overlap between the categorization produced by the varieties of capitalism approach and indicators of industrialization.

Figure 1-2 Gross Tertiary Enrollment Rate
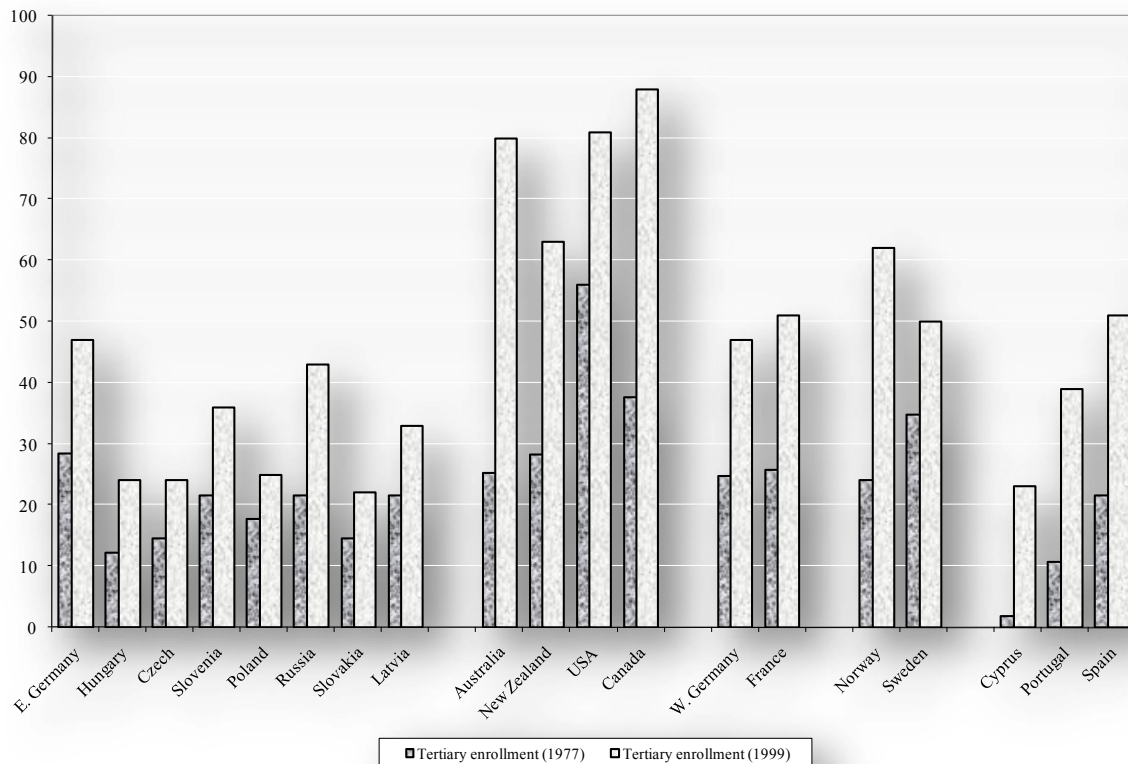
Sources: UNESCO Statistical Yearbook; Cross National Time Series Data Archive, Arthur Banks, 2005

The similarities in the organization of economic and political institutions, economic development levels, and educational and occupational structures within these regions should produce a reasonable degree of similarity in patterns of stratification. Although the dimensions used in constructing this categorization should be directly linked to patterns of stratification, it is possible that other dimensions, not included here, might be relevant for the shape of stratification across societies. The effectiveness of these regions in discriminating between different patterns of status attainment will be explored in the empirical analysis. However, this is not the focus of this study, and the regions should be regarded as a tool for simplifying cross-national comparisons, rather than a categorization with clear-cut implications for the pattern of status attainment.

Figure 1-3 Percent of Labor Force Employed in Services
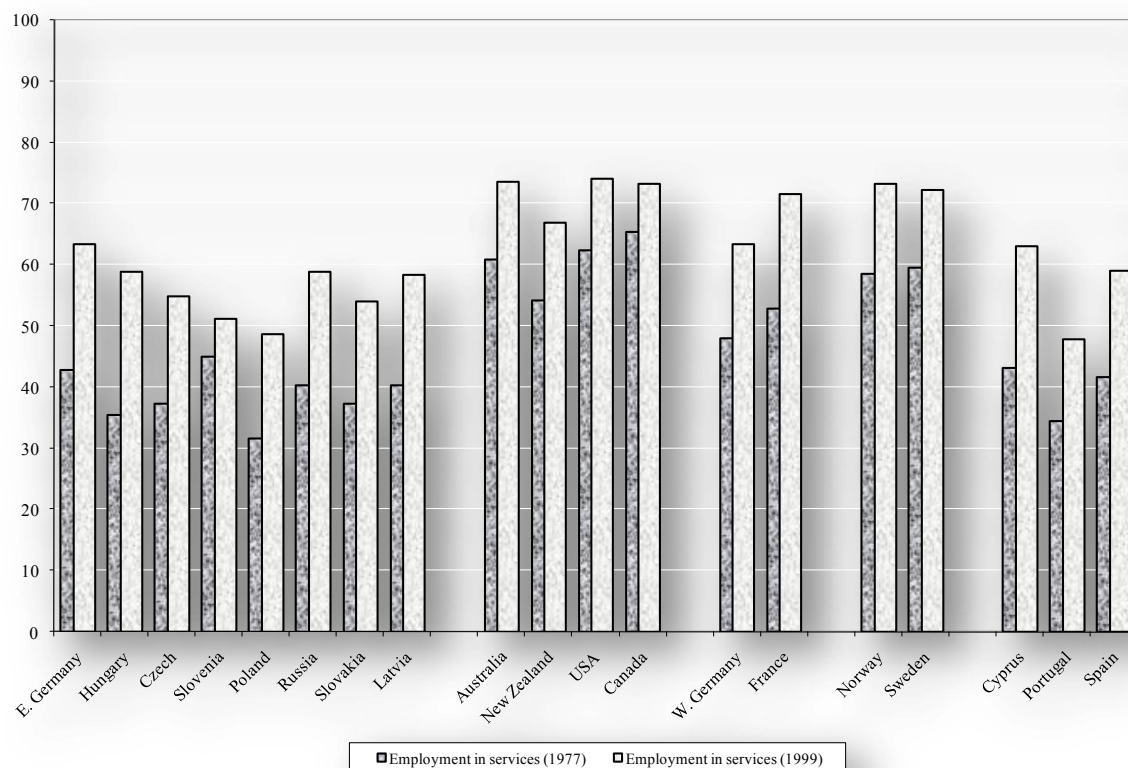
Sources: Yearbook of Labor Statistics; Labor Force Statistics 1983-2003, OECD, 2004

2   Effects of Socio-Political Systems and Economic Development on Status Attainment

The following discussion in this chapter focuses on two of the categories of factors listed at the beginning of this paper as having important influences on the status attainment process: factors related to the socio-political system and factors related to economic development. The characteristics of state socialism and of the subsequent postcommunist transformation constitute the background for the theoretical discussion on the impact of socio-political systems on status attainment.

The main mechanisms through which socio-political systems are hypothesized to influence patterns of status attainment are adopted policies and ideologies that constitute the basis of these adopted policies. Therefore, the discussion in the first sections of this chapter focuses on policies adopted by state socialist regimes (and later modified during the postcommunist transformation) in several areas (education, employment, and income distribution) that are thought to have an important impact on social stratification.

While the policy changes in education, employment, and income distribution domains introduced during the postcommunist transformation have important consequences for the emerging patterns of status attainment, the answer to the question regarding the type of institutions that are being constructed during the transition period is also strongly related to the answer to the question regarding the shape of postcommunist social stratification. The sections discussing the impact of the postcommunist transformation therefore focus on theories of institutional building during the transition period and consequences of each type of institutional construction on social stratification.

Since socialist and postcommunist effects on status attainment operate concomitantly with economic development effects and are often impossible to separate, part of the discussion in this chapter is devoted to theories describing the latter type of effects. The discussion revolves around mechanisms through which economic development is hypothesized to influence change in several status attainment parameters. The chapter concludes with a list of research questions developed on the basis of the earlier theoretical discussion.

2.1 The Impact of Communism on Status Attainment

State socialist societies have been described by Lenski (1978) as experiments in destratification. The very process of following one of their most important goals – increasing equality – has generated certain expected and certain unexpected consequences for these societies. Even though, depending on their histories and cultures, the socialist experience might have been different in each of the Central and Eastern European societies, the common ideology and common economic and political systems they shared produced a degree of similarity in the experiences of these countries. All of these societies sought to introduce policies regarding education, employment, income differentials and the transmission of large scale property that were intended to create a more egalitarian distribution of social rewards.

However, there is an important distinction between the goals of the communist ideology regarding social stratification and the actual achieved transformations in the social structure during the communist period. Previous studies noted that these societies were more successful in some areas than in others in implementing their destratification goals (Connor, 1979; Lane, 1982). This section describes these policies and their emerging consequences on social stratification. The theories discussed in this section tend to dismiss cultural, historical, and

institutional peculiarities of societies and focus on the commonalities that capitalism, communism and postcommunism create in social stratification systems.

2.1.1 Education policies

In the educational area, socialist societies introduced policies aimed at reducing inequality by facilitating the access of underprivileged groups to education. Educational reforms at the beginning of the communist regime stipulated enrolment quotas for children of farmers and workers in order to encourage them to get more education, comparable to children coming from different family backgrounds. "Using the educational system as a tool to induce changes in the social structure has been the declared goal of complex, state coordinated social policies undertaken after switching to state socialism" (Mach & Peschar, 1990, p. 93). Socialist societies also provided higher education free of charge and built subsidized student dorms that allowed easier access to higher education for children coming from modest social origins. Not only were the chances of pursuing education increased for children from underprivileged families, but also the opportunities for children coming from families in high position were decreased: bourgeois social origins could constitute an obstacle to being admitted to higher education (Ganzeboom & Nieuwbeerta, 1999, pp. 340-341).

Socialist regimes also sought to reduce gender inequalities in educational attainment, as part of a greater effort to achieve gender equality in labor market outcomes and wages. A study examining educational levels during communism for men and women in Bulgaria, the Czech part of Czechoslovakia, Hungary, Poland and Russia, finds that "women have increased their educational attainment more than men" and that "by 1975, none of the countries displayed much difference between men and women in terms of years of schooling" (Ganzeboom & Nieuwbeerta, 1999, p. 347).

The intention of policy makers was to reduce the role of education in the process of transmission of parental advantages. Low occupational and educational social origins status was supposed to no longer constitute a disadvantage in socialist societies. "It was one of the central aims of the socialist revolutions to remove, or at least weaken, ascriptive factors in the process of social reproduction on all their levels" (Haller, 1990, p. xvi).

However, the policies aimed at reducing inequality by facilitating the access of underprivileged groups to education are thought to have been less effective than intended. There are several explanations for the apparent failure of socialist educational policies. One explanation stresses the limitations of state policies in influencing individuals' behavior and the ingenuity of people when faced with the prospect of a drop in their or their children's status: "it is probably an illusion to believe that the life chances of children from various backgrounds can easily be regulated by centrally governed policies. Even in situations calling for extreme measures, people will always try to find a way to provide their children with a good education" (Ganzeboom & Nieuwbeerta, 1999, p. 342). Szelenyi and Aschaffenburg (1993) hypothesize that at least in Hungary, the quota system, while still in place, was circumvented by parents through the use of bribes and misrepresentation of their class origins. It is probable that these behaviors were also present in the other state socialist societies.

There is also evidence that the policies were not strictly followed, especially after the early 'orthodox' period of communism during the 1950s (Hanley & McKeever, 1997), effectively undermining the intended consequence of equalizing educational opportunities. While the regimes might have been committed to the goal of increased equality of educational opportunity and decreased importance of ascription, other goals such as rapid economic development were dependent upon the existence of educated personnel and skilled workers. It

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seems that under these conditions, communist regimes chose to relax practices related to the former goal and enhance practices related to the latter goal (Hanley & McKeever, 1997).

The failure of educational policies has also been explained as an unintended effect of socialist stratification. It is generally accepted that while socialist societies were successful at reducing economic inequality, they replaced one type of stratification based on economic criteria with another type of stratification based on political criteria (party membership and bureaucratic position) (Hanley & McKeever, 1997; Eyal, Szelenyi & Townsley, 1998; Lenski, 2001). The advantaged class under these regimes was a small political elite which had access to opportunities and lifestyles inaccessible to the masses. Although at the beginning of the communist period the political elite tended to be proletarianized, later its composition included mainly intellectuals (Konrád & Szelényi, 1979; Lane, 1982; Hanley & McKeever, 1997). This class possessed both high educational resources and the political power and social networks necessary to influence educational outcomes for their children. Furthermore, once the new socialist elites consolidated their power, the initial negative discrimination against pre-socialist elites in access to education was relaxed (therefore allowing once again the professional class to reproduce their advantages) and replaced with practices benefiting the educated socialist elites (further reinforcing the status maintenance aspect of the educational system) (Hanley & McKeever, 1997). This is a possible explanation for the reason education continued to function as a mechanism of transmission of status in socialist societies, at comparable levels with Western industrial societies. Connor (1979) notes that paradoxically, elite sons enjoyed better guaranteed status maintenance in Eastern Europe compared to Western industrialized societies. From this point of view, the emergence of a new principle of social stratification, an unintended

consequence of state socialism, poses an unforeseen obstacle to the goals of reducing educational ascription and increasing equality of educational opportunities.

Empirical evidence on trends in educational ascription and equality of educational opportunity in socialist societies is however mixed. While some studies suggest that the level of educational ascription in Eastern Europe under communism has been stable and comparable to educational ascription in Western industrialized countries (Connor, 1979; Heyns & Bialecki, 1993; Mateju, 1993; S. Szelenyi & Aschaffenburg, 1993; Hanley & McKeever, 1997), other studies show that there is a trend of decline in the importance of social origins in socialist societies, bringing levels under Western industrialized levels (Meyer, Tuma & Zagorski, 1979; Slomczynski, 1986; Mach & Peschar, 1990; Ganzeboom & Nieuwbeerta, 1999).

The explanation of over-time trends and the comparison with Western industrialized countries are further complicated by the existence of the process of educational expansion, both in socialist societies and in Western industrialized societies. Under these conditions, it is hard to disentangle the effects of socialist ideology and policy on educational ascription. Hanley and McKeever (1997) document a decrease of educational ascription in Hungary in the early socialist period, concomitant with a process of educational expansion, and a later increase in educational ascription following a process of educational contraction. They therefore link trends in educational ascription to the process of educational expansion, rather than socialist policies of increasing equality of educational opportunities.

The conflicting conclusions in previous studies might be related to several factors: employed data sources[4], measurement of the social origins variable, sample and time period

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[4] Reliance on official statistics provided by socialist governments might lead more readily to the conclusion of decreasing educational ascription.

under study[5], and type of model employed[6]. The empirical analysis in this paper will utilize a common methodological framework for the estimation of effects of social origins on education both across time and across countries, allowing the computation of comparable estimates of educational ascription within the framework of the status attainment model[7].

2.1.2 Employment and Income Equality Policies

As part of the effort to achieve a more equalitarian distribution of rewards, socialist societies also introduced policies regarding employment and income distribution. Enough jobs were created to virtually eliminate unemployment, and wages were determined through the central plan. The low occurrence of unemployment and the imposed equality of wages determined more similar material returns for persons with different educational and occupational levels compared to the situation in Western capitalist countries (Domanski, 2000). During communism, "it was assumed, for individuals as units of analysis, the relationship among basic status characteristics such as education, authority, income, and prestige would weaken over time, as a consequence of state policies" (Slomczynski & Krauze, 1986, p. 5).

These decreased associations are indicative of a phenomenon of decomposition of social status in socialist societies (Domanski, 1994).According to convergence theories, the logic of

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[5] Social origins are operationalized containing a different combination of indicators (mother's education and occupation, father's education and occupation, parental socio-economic statuses). Samples vary across studies – some estimate effects only for men, some for both sexes. Different processes during the early and late period of socialism also make comparisons based on different time spans difficult.

[6] While status attainment models and OLS regressions compute linear effects that combine the influence of mass educational expansion and the effect of social selection of students, educational transitions models pioneered by Mare (1981) remove the first component and provide more clear-cut estimates of the second component. Also, the influence of social origins on educational attainment has been studied either in a cross-sectional, over-time framework, or using cohort comparisons based on cross sectional data.

[7] Mare (1981) argues that linearly modeled effects in status attainment models tend to show more over time or inter-cohort stability in the educational attainment process than educational transitions models (at least for the U.S. case) because the linear effect captures two offsetting trends: decreased variance in the distribution of completed years of education which acts to diminish linear effects of social origins on education and increased effects of social origins on grade progression which increase the linear effect. Unfortunately, effects computed under the framework of the status attainment model do not make the distinction between the two components.

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social stratification determines high correlations among educational achievement, occupational status and income, as well as high correlations among social status, attitudes, and values. By imposing rules of income distribution, and by promoting ideological principles of social selection, the communist regimes loosened the links between occupation and income and education and income. Thus, the overall consequence for social stratification was a blurring of differences in social status (Domanski, 1994; Mateju & Kreidl, 2001).

Although there is some evidence that state socialist societies were characterized by diminished social distances between different occupational groups and that the manual – nonmanual divide was less pronounced than in Western capitalist countries, the ordering of different groups (peasants, workers, intelligentsia) and the hierarchy of occupational prestige was not much different from that existing in the West (Connor, 1979). However, the distance between rewards for different occupational levels was compressed[8]. During communism, "top managers typically earned at most five times as much as the average manual worker, whereas the same ratio reaches 20:1 or more in the United States" (Brainerd, 2000, p. 140).Wages of professionals were reduced and those of skilled workers increased. In fact, industrial branch rather than occupational categories became a more important factor in predicting wages, because wages were planned according to industrial branch. For example, doctors working in mines were paid more than those working in academia and research (Domanski, 2000, p. 122). This

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[8] The compression of wage scales during the communist period in Central and Eastern European countries has some methodological implications in the comparison of status attainment parameters involving income between these countries and other countries. For example, while the link between occupation and income may be stronger in communist countries compared to other countries (in terms of the standardized regression coefficient and the percent of explained variance in income by occupation), the unstandardized coefficient in the regression of income on occupation in communist countries may be smaller than in other countries, due to the compression in wage scales. The compression in wage scales in state socialist countries translates into decreased income variances in these countries compared to other countries which will tend to diminish unstandardized regression coefficients for relationships involving income in the former set of countries. In order to circumvent this problem, income is measured in this study in terms of the relative position of individuals on a societal income scale (income deciles), thereby removing any effects that the decreased income variances might have on regression coefficients.

differentiation of wages according to industrial branch contributed to a certain degree to the diminished distance between manual and non-manual occupations (Connor, 1979).

Despite this, socialist systems never encouraged a reflexively equalitarian wage distribution. Differences in pay were preserved for different occupational achievement levels and bonus rewards for overtime hours were incorporated as an incentive system (Connor, 1979). Although the stated goal was that of increasing equality, these societies were first faced with the main task of economic development, since the inherited economic structures were underdeveloped. As it was the case with equality of educational opportunity, early socialism's focus on economic development pushed the requirement of equality of wages to the background. While the regimes subsequently achieved higher levels of income equality than in Western capitalisms, the planners realized that some differentials in income were necessary in order to promote economic development (Connor, 1979). Thus, while definite efforts were made towards equalizing the income distribution, differences in pay were maintained, and trends towards more income equality and income inequality alternated over time.

The socialist regimes ensured, but at the same time made it mandatory for virtually every adult to be employed. Jobs were distributed among the population according to educational levels and once in an occupation, alternative occupational avenues were closed off (Meyer, Tuma & Zagorski, 1979; Haller, Kolosi & Robert, 1990). This tended to increase the education – occupation relationship in socialist states. Most research found empirical trends that confirm this relationship (Connor, 1979; Meyer, Tuma & Zagorski, 1979; Simkus, 1982; Slomczynski, 1986; Domanski, 1994).

In comparing data for Poland and the US from 1972-1976, Meyer, Tuma and Zagorski find that "the effect of son's education level on occupational attainment is much higher in

Poland" and attribute this finding to the fact that "rules of recruitment to occupational positions which emphasize education, are strictly observed" and the fact that "the Polish educational system is much more selective, so that each of the more advanced levels of education consists of a more thoroughly screened group (with correspondingly greater occupational advantages) than in the United States" (Meyer, Tuma & Zagorski, 1979, p. 983).

However, Mach and Peschar (1990) note that although Poland is indeed characterized by a larger association between education and occupation than Netherlands, this has been true for the pre-communist period as well, and furthermore while the relationship tended to decrease over time in Poland, it tended to increase in Netherlands. It is possible that while socialism contributed to this increased association, other factors, present before the instauration of communist regimes also operated in this direction. Some authors noted that socialist societies might have in fact produced a decrease in the association between education and occupation since political loyalty rather than the amount of skill determined occupational placement (Mateju & Kreidl, 2001).

As a result of the policies oriented toward increased equality, state socialist societies were expected to display increased intergenerational social mobility (and consequently decreased occupational and income ascription). While there is evidence that intergenerational social mobility chances were increased after the adoption of state socialism in comparison to pre-socialist levels (Simkus, 1982; Slomczynski, 1986; Mach & Peschar, 1990; Domanski, 1994), researchers attribute much of this increase to economic development and changes in the occupational structure, rather than to a socialist effect (Connor, 1979; Haller, Kolosi & Robert, 1990).

The closing of the gender gap in educational attainment was not paralleled by similar successes in the labor market and wages. Although some equalization of labor market outcomes and wages for men and women has taken place, evidence suggests that the gains for women relative to men were not much higher in socialist countries compared to Western capitalist countries (Brainerd, 2000). Under state socialism, women tended to be concentrated in underprivileged positions: in routine nonmanual positions, with lower political capital than men and more obstacles in climbing social hierarchies (Lenski, 1978; Emigh & Szelenyi, 2001). Also, the ratio of average female to male weekly wages in Central and Eastern Europe during communism was not much higher than in the United States (Brainerd, 2000, p. 140).

2.2 The Impact of the Postcommunist Transformation on Status Attainment

With the fall of communist regime, countries in the region entered a transformation process that had consequences at the political, economic and social levels. If there ever was a socialist effect on stratification, with the rules of the command economy removed, the relationships in the status attainment model are expected to begin to change both at the ascribed and at the achieved level.

Assuming the existence of a socialist effect on stratification, the transformation process after the fall of communism is expected to either lead to a convergence of Eastern and Western status attainment patterns, or to give rise to a unique (or several unique) postcommunist pattern(s) of status attainment. The expectations regarding the shape of social stratification during postcommunism are strongly related to the question of what types of institutions are being constructed during the transition process.

Theories that assume that the fall of communism has resulted in an institutional vacuum at the beginning of the transition period usually assume that this vacuum will be filled by relying mainly on imitation of Western capitalist and free market institutions. If this is true, a process of

convergence of social structures is hypothesized to bring postcommunist patterns of status attainment closer to the model in Western capitalist countries. On the other hand, it is possible that the crumbling of communism has not resulted in an institutional vacuum at all, and postcommunist societies might preserve a large part of the socialist institutional structures (in this case socialist patterns of social stratification and differences from Western capitalist stratification will also be largely preserved). Still another hypothesized process of institutional construction is described as a mix between the first two processes: Western capitalist institutions are transplanted over the remnants of socialist institutions, resulting in new institutional forms, different from those existing in settled capitalist countries, and consequently a different social stratification system.

2.2.1 Building Capitalist Institutions in Postcommunist Societies– Imitation

Even before the fall of communism in the region, supporters of convergence theories predicted a future trend of growing similarity between social structures in Central and Eastern Europe and social structures in Western capitalist countries. "Convergence theories of the 1960s and the 1970s predicted that the two rival political and economic systems would inevitably move towards and assimilate one another. The communist East was to be enriched with market elements, while the economic order of Western capitalism had already adopted elements of state intervention" (Domanski, 2000, p. 2). From a convergence perspective, the fall of communism, equated with the elimination of an alien logic of stratification, is expected to remove the last obstacles to convergence in social structures between Central and Eastern Europe and Western capitalisms.

The convergence in social structures is seen from this perspective as a consequence of convergence in economic and political systems. The fall of communism in Central and Eastern

Europe entails a transformation of these societies' political and economic systems. These transformations have well specified goals – democracy and market economy, and within the convergence framework, the new institutions emerging during the transformation process will resemble Western capitalist ones. "Economically and politically, [postcommunist] countries have no choice but to copy the institutional framework of the capitalist world. They are dependent on it mostly in the economic sphere – progress depends on assistance and support from the West – and all postcommunist regimes have become the object of paternalistic Western strategies in the political, economic and military domains" (Domanski, 2000, pp. 2-3). This "imitation" of Western capitalist institutions is assumed to produce similar economic and political institutional contexts in the two regions, which in turn is assumed to produce a convergence of social stratification patterns.

If we accept the existence of a socialist effect on status attainment processes, and the assumption of convergence in social structures between postcommunist and settled capitalist countries, the fall of communism and the transition to a market economy mark an increase in the role of social origins in status attainment processes. In the absence of state control over job and income distribution, parents' resources should start gaining in importance in the process of children's status attainment. These changes might lead to a growing similarity with Western social structures. A study comparing postcommunist trends in Bulgaria, the Czech Republic, Hungary, Poland, Russia, and Slovakia, finds that "the structure of the intergenerational movements in East Central Europe strongly resembles the general shape of basic distances and rigidities in the West which we know from previous studies" (Domanski, 2000, p. 62).

Another type of ascribed inequality – gender inequality – is also theorized as a rising new form of inequality in transitional societies, although communism seems to have been less

effective in diminishing gender inequalities in the labor market and in wages in comparison to its effects on equality of educational opportunities. While in the first stages of the transition to postcommunism women find themselves in advantaged positions (the tertiary sector was growing, and political capital was being replaced by human capital as a criterion of stratification), their advantage "may be eroded" in time (Emigh & Szelenyi, 2001, p. 10).

However, only ten years after the transition has begun, gender inequalities are not expected to play an important role in the process of social stratification in Central and Eastern Europe. At the beginning of the transition process the gender gap in economic activity was small in all Central and Eastern European countries, and there is a general trend revealed by data till 1999 of a reduction in gender differences in economic activity across the region (Paci, 2002). While unemployment rates increased for both men and women after the fall of communism, generally male unemployment rates are higher than female unemployment rates (Paci, 2002, p. 20). "Overall the gender gaps in earnings in the region are comparable to, or smaller than, those prevailing in Western Europe, and are shrinking" (Paci, 2002, p. 25). In a review of studies on gender wage inequality in transition economies, Brainerd concludes that "all of these studies of the East European countries show a narrowing of the gender wage differential after the introduction of market reforms" (Brainerd, 2000, p. 145), a finding consistent with her own findings for the situation two years after the fall of communism. She attributes the improvement in female relative wages in Eastern Europe to several factors, including higher educational levels of the female population, increases in the returns to education for women relative to men, improvements in female observed and unobserved skills related to male skills, less discrimination on the labor market due to increased competitiveness, and female absence from

the heavy industry sector – whose restructuring disfavored men working in that sector (Brainerd, 2000).

The rules of the market economy remove the control over wage equality, and the principle of 'jobs for everybody' is replaced by the emergence of the unemployment phenomenon. The variation in incomes is likely to increase as income distribution starts being influenced by market mechanisms. As competition on the labor market also increases, education and occupational attainment are likely to become more important determinants of income levels. Under these conditions, occupational attainment becomes more the result of individual efforts and resources than of strict rules of job distribution according to educational level and track. Consequently, the association between education and occupation might decrease somewhat.

While the command economy played an important role in 'blurring' social differences, social status is expected to become more crystallized during the postcommunist transformation. Convergence theories postulate that during the transition period we are witnessing a process of recomposition of social stratification, with a growing correlation between education and income and occupation and income (Domanski, 1994; Mateju & Kreidl, 2001).

2.2.2   Building Capitalist Institutions on the Ruins of Communist Institutions

Path dependence and involutionary theories about social stratification in Central and Eastern Europe use the idea of institutional inertia to predict that elements in the stratification systems during communism are likely to continue to exist after the fall of communism (Nee, 1996; Nee & Cao, 1999). Depending on the amount of assumed stability and continuity of communist institutions during the transition period, these theories predict either a survival of communist stratification or a new, distinctive and unpredictable stratification system resulting from the mix of old and new institutions. These theories lie in direct contrast to evolutionary and convergence

theories that assume that capitalism can be built by design (capitalism will develop as a natural consequence of the existence of capitalist institutions because once the institutions are in place, actors will fall into their expected roles and capitalism will emerge). Path dependence theories posit that the process of building capitalism is not as simple and as natural as the "capitalism by design" framework assumes. New institutions are not built in a vacuum, but on the ruins of old institutions. Thus, development is path dependent.

The assumption within this framework is that communist institutions survive through the transition process not only because of a process of institutional inertia, but also because a large part of the communist elite maintains its elite status and has a vested interest in the continuity of institutional structures (Nee & Cao, 1999).

An example that there are communist institutional practices being conserved at least in the beginning of the transition process is the high level of pay in the mining industry. "The fact that in 1994 the wages in the mining industry were still unusually high in Poland suggests that the post-communist structure retained some of the characteristics of the communist social structure" (Domanski, 2000, p. 119). It is likely that postcommunist governments preferred to continue "over-paying" mining industry wages in order to reduce the possibility of protest or revolt on the part of this group. However, it is possible that while communist institutional practices survive in some sectors (public ownership forms and quasi-markets), in others they do not (sectors where the influences of markets and private property forms are more pervasive) (Nee & Cao, 1999).

The hypothesis that old communist elites continue to hold elite status during the transition period has been advanced by political capitalism theories. These theories assume that the old communist elites encountered little or no resistance to converting their former valuable

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political capital into economic advantages after the collapse of state socialism (Staniszkis, 1991; Rona-Tas, 1994). As a result, these theories predict that the stratification order will be maintained, at least at the elite level.

However, it seems that political capital per se was not enough, and only former cadres with entrepreneurship spirit and human capital were able to convert their political capital and maintain their position in the stratification order (I. Szelenyi & Szelenyi, 1995; Nee, 1996). Furthermore, the assumption of little or no obstacles to converting political capital has been criticized as untenable. Elite circulation theories assume greater obstacles to the convertibility of political capital and maintain that while some members of the old elites were able to hold on to their elite status, a large part of the new elites recruited members outside the old elite group (I. Szelenyi & Szelenyi, 1995). In fact, studies comparing the composition of old and new elites suggest that, to some extent, both processes of reproduction and circulation have taken place, in varying amounts depending on the society we are looking at, and the segment of the elite we are looking at (I. Szelenyi & Szelenyi, 1995; S. Szelenyi, Szelenyi & Kovach, 1995). Also, it is likely that the segment of the former political elite that was able to maintain a high position in social stratification was less successful in preventing other categories of people from gaining access to the elite. This suggests that while some elements of communist stratification might survive during the postcommunist period, numerous others are likely not to.

A slightly different view adopts this middle ground type of argument, and focuses on the assumption that there are remnants of communist institutions that survive the transition to postcommunism, but at the same time new institutions are being built on the ruins of old ones. This is still a case of path dependent change, but in this framework the focus is more on discontinuities created by the adoption of new institutions. The theory assumes that during the

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postcommunist transition, individuals react to the uncertainty in their environments by making the most of what they have at their disposal, combining and recombining resources as efficiently as they can. Transformations after the fall of communism are rather rearranging and recombining practices routines, institutions and organization (Stark, 1996). Furthermore, path dependence also implies a different pace and a different trajectory of change in each of the Eastern European societies, and the end result is dependent on initial situations in each of these societies at the beginning of the transition period (Stark, 1992). In this framework, the end result is hard to predict, and the capitalism(s)[9] being built in Eastern Europe will probably look very different from Western capitalisms.

One prediction that has been advanced is that human capital will increase its importance as a criterion of stratification, possibly becoming the main stratifying force in postcommunist societies. The theory of "capitalism without capitalists" (Eyal, Szelenyi & Townsley, 1998)[10] argues that capitalism, communism and postcommunism are systems characterized by different stratification criteria. While economic capital is the most important criterion of stratification in capitalist systems, communist systems are stratified based on political capital, and the transition to postcommunism is hypothesized to trigger a devaluing of political capital and bring to the forefront human capital as a criterion of stratification.

While the different theories presented above predict different outcomes for social structures in former communist countries, they are not necessarily opposed, and may be combined to analyze the dynamism of the relationships that make up the social stratification

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[9] Insofar as the various Central and Eastern European societies were characterized by different starting points at the beginning of the transition period, under the path dependent transformation framework the end result is likely to consist of a variety of capitalisms.

[10] The theory can be characterized as a path dependent transformation theory insofar as it departs from the framework assuming that capitalism can be built by design and actors will conform to their expected tasks once capitalist institutions are in place. The theory argues that while capitalist institutions are being built in Central and Eastern Europe, a class of capitalists has not emerged yet. Conversely, in the Russian case, the emergence of capitalist institutions is lagging behind the emergence of a capitalist class.

process. Since convergence and continuity trends in social stratification systems in Central and Eastern Europe might coexist, a theoretical frame including elements of both convergence theory and path dependent transformations theory might be better suited to explain trends in social stratification after the fall of communism.

2.3   The Impact of Industrialization on Status Attainment

As mentioned previously, industrialization is often identified as a factor that can explain trends in status attainment patterns. In Central and Eastern European countries during socialism, the effect of socialist ideology and policy is often impossible to separate from effects that the concomitant industrialization had on status attainment. Similarly, in the postcommunist transition period it is likely that the removal of socialist policy and ideology, path dependent effects, and effects of industrialization are intermingled. Convergence theories described previously rely heavily on the assumption that a growing similarity between postcommunist and Western capitalist social structures will be brought on by the impact of industrialization effects.

This section briefly reviews the mechanisms through which industrialization is assumed to affect social structures. The two theories described in this section – the industrialization thesis and the status maintenance thesis – assume that industrialization has predictable effects on patterns of status attainment but disagree on the direction of these effects. While the thesis of industrialism suggests that economic development triggers a transition from ascribed to achieved allocation of occupational status, the status maintenance thesis posits that processes related to industrialization might actually increase the degree of ascription in occupational status (Grusky, 1983).

The thesis of industrialism invokes the separation of the economic sphere from family life to explain the effect of industrialization on decreasing ascription, the growth of mass

education to explain the increased ease of mobility from social origins, and profit motives to explain increasing associations between education and occupation. Treiman (1970) argues that it is not necessary to assume that different societies follow the same processes as they industrialize in order to infer effects of industrialization on stratification. The path taken is not so much important as certain characteristics of all industrialized societies, such as the expansion of educational opportunities, and changes in the distribution of the labor force.

Since industrialization tends to produce a proliferation of occupations, and tends to shift the ratio between manual and nonmanual occupations in favor of the latter (in terms of percentages employed in these occupations), the requirement for skilled and educated personnel increases as well, and it is matched in industrializing societies through an expansion of the educational system and the provision of generally free access to education (Treiman, 1970). Within the industrialism thesis framework, this, together with the transfer of the task of educating children from the family to the school determines a decreasing importance of social origins in the status attainment process. Since industrialization is accompanied by an increased specialization of labor and an increase in the number of skilled and highly skilled occupations, the necessity of training for particular skills also increases, and occupational attainment becomes more dependent on education (Treiman, 1970).

The status maintenance thesis argues that while it is true that industrialization causes decreases in educational ascription, it is precisely this reduced educational ascription that generates increases in occupational status ascription. The equalization of educational chances forces socio-economic elites to rely more on ascriptive processes in order to keep their children from downward mobility, since education is no longer a mechanism of status transmission. Furthermore, the inability of occupational structures to continue upgrading at the rate of

educational expansion causes diminished occupational returns to education and increases the need to rely on ascriptive processes for status maintenance (Grusky, 1983).

Treiman (1970) observed that the gross effect of father's occupation on son's occupation decomposes into three net effects that might operate in different directions and might cancel each other out (the net effect of father's occupation on son's occupation which tends to decrease with industrialization, the net effect of father's occupation on son's education, also decreasing with industrialization, and the net effect of son's education on son's occupation, increasing with industrialization), and allowed for the possibility that gross occupational ascription might increase with industrialization. However, net occupational ascription is unfailingly considered to decrease with industrialization under the assumptions of the industrialism thesis.

2.4   Research Questions

The different theories presented in the previous sections might sometimes be hard to reconcile, especially in terms of their predictions regarding patterns of status attainment. Theories that focus on characteristics of socio-political systems predict that capitalism, communism and postcommunism will each be characterized by a different status attainment pattern, with countries within the same socio-political system being characterized by similar status attainment patterns. On the other hand theories focusing on the logic of industrialization predict that countries at the same economic development level will be characterized by similar status attainment patterns and differences in economic development will predict differences in status attainment patterns. Still another possibility is that neither socio-political systems nor economic development are strongly related to status attainment, and stratification patterns are more dependent on cultural and historical factors that introduce variation within groups of countries characterized by the same socio-political system and/or the same industrialization level.

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This paper first addresses the question of the impact of socio-political systems on status attainment by examining the main status attainment parameters in 1992 and 1999 for a group of Eastern European countries compared to several groups of settled capitalist countries. Next, a test of the hypothesis of industrialization effects on status attainment is presented by examining the impact of several indicators of industrialization (electricity consumption per capita, enrollments in tertiary education, and employment in services) on the main status attainment parameters for a pooled sample of countries in 1999.

The existence of a socialist effect is explored using 1992 data. Although the survey data comes from several years after the fall of communism in most of the Central and Eastern Europe countries analyzed here, the survey period is close enough to the point of communist regimes breakdown and relationships characterizing the communist period are assumed to still be apparent at this time point. The investigation of socialist effects will first focus on the question whether socialist regimes resulted in common status attainment patterns in Central and Eastern Europe at the beginning of the 1990s, and if so, whether they produced notable differences from patterns present in Western capitalist countries (taken as a group or categorized into several varieties of capitalism groups). Table 2-1 summarizes the commonly held assumptions about the differences between Central and Eastern Europe and Western capitalist countries emerging as a consequence of socialist ideologies and policies (decreased ascription parameters, and loosened links between education and income and occupation and income, and an increased association between education and occupation). As the theoretical discussion and presentation of previous empirical results has tried to show, the existence of these socialist effects is often controversial, and the direction of effects has been contested. Therefore, the socialist effects listed in Table 2-1 should be taken rather as a guide for interpreting the validity of mechanisms linked to these

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Table 2-1 Trends in the Main Status Attainment Relationships under Various Assumptions

	Fath. Occup → Resp. Educ	Fath. Occup → Resp. Occup.	Resp. Educ → Resp. Occup.	Fath. Occup → Resp. Earn.	Resp. Educ → Resp. Earn.	Resp. Occup → Resp. Earn.
Socialist effects	Decreased effect in socialist societies compared to capitalist societies	Decreased effect in socialist societies compared to capitalist societies	Increased effect in socialist societies compared to capitalist societies	Decreased effect in socialist societies compared to capitalist societies	Decreased effect in socialist societies compared to capitalist societies	Decreased effect in socialist societies compared to capitalist societies
Postcommunist effects (assuming existence of socialist effects during communism and industrialization effects according to **industrialism thesis** during postcommunism)	Slightly increasing trend in former socialist societies Decreasing trend in settled capitalist societies Negative effects of industrialization	Slightly increasing trend in former socialist societies Decreasing trend in settled capitalist societies Negative effects of industrialization	Stability or slightly decreasing trend in former socialist societies Increasing trend in settled capitalist societies Positive effects of industrialization	Slightly increasing trend in former socialist societies Decreasing trend in settled capitalist societies Negative effects of industrialization	Increasing trend in former socialist societies Increasing trend in settled capitalist societies Positive effects of industrialization	Increasing trend in former socialist societies Increasing trend in settled capitalist societies Positive effects of industrialization
Postcommunist effects (assuming existence of socialist effects during communism and industrialization effects according to **status maintenance thesis** during postcommunism)	Slightly increasing trend in former socialist societies Decreasing trend in settled capitalist societies Negative effects of industrialization	Increasing trend in former socialist societies Increasing trend in settled capitalist societies Positive effects of industrialization	Decreasing trend in former socialist societies Decreasing trend in settled capitalist societies Negative effects of industrialization	Slightly increasing trend in former socialist societies Decreasing trend in settled capitalist societies Negative effects of industrialization	Stability or slightly increasing trend in former socialist societies Decreasing trend in settled capitalist societies Negative effects of industrialization	Stability or slightly increasing trend in former socialist societies Decreasing trend in settled capitalist societies Negative effects of industrialization
Postcommunist effects (assuming **path dependent transformations**)	Largely unpredictable.					

effects rather than expectations to be confirmed by the empirical analysis. In sum, the main research questions regarding the existence of socialist effects are:

Q1. Has socialism produced similar status attainment processes in Central and Eastern European societies?

Q2. If so has it produced a radically different pattern from that observable in Western capitalist countries (if a Western capitalist pattern exists at all)?

The impact of the postcommunist transition on status attainment will be explored by comparing results from 1992 and 1999. Although the time span is short, the extensive transformations taking place within these societies are expected to trigger some changes in status attainment processes, at least for a subset of the main status attainment parameters. While the changes might be less visible when examining patterns of status attainment at the national level, they might be more apparent for the younger segment of populations.

Older people in 1999 are less likely to be affected by any changes in the importance of social origins in the status attainment model, since their educational and occupational levels and their career tracks are already largely determined by the meaning of social origins during communism. The changes in the effects of social origins are instead more likely to affect the younger generations, people still pursuing their education and starting their first jobs after the fall of communism. The full impact of the new meaning of social origins is thus likely to be seen around 2055, when the actively employed population will contain mostly individuals born after the fall of communism.

The changes in the relationships between education, occupation and income are likely to start affecting individual life courses more rapidly. Both older people and younger people might begin experiencing these changes, immediately after the fall of communism. For younger people,

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however, the full extent of the changes in the effects between education, occupation and income might be felt later on since after finishing school, an individual's social status is still undergoing changes, as people advance in their careers and get more work experience.

The commonly expected changes in status attainment parameters triggered by the fall of communism involve an increase in the importance of social origins in status attainment, and in the relationships between education and occupation and education and income. The relationship between education and occupation, usually assumed to have been kept at artificially high levels during communism by policies of occupational placement, is assumed to remain at high levels or slightly decrease (under the industrialization thesis) or to display a more marked decrease (under the status maintenance thesis) (see Table 2-1). If there was a socialist effect on status attainment, the relationships that are expected to display the highest amount of change are the relationships on which socialism had the greatest effect. The empirical analysis will explore over-time trends for each of these relationships in Central and Eastern European countries. Additionally, a summary index of the relationship between education, occupation, and income will help determine if status consistency has been increasing during the transition period.

It is possible that while the economic and political transformations in Central and Eastern Europe affect to a certain degree relationships in the status attainment model, some characteristics of socialist social stratification might persist through the transition period, determining more stability than change in attainment processes over time. Conversely, if trends indicate pervasive changes in status attainment during the postcommunist transformation, are these changes better described by convergence theories or by path dependent transformations theories? While a growing similarity between postcommunist and Western capitalist status attainment might provide support for the hypothesis of effects of the logic of industrialization,

divergence between patterns in the two regions and increasing heterogeneity among postcommunist societies might indicate that theories of path dependent transformations are better suited to explaining postcommunist stratification trends. Since path dependence theories do not generally advance clear-cut expectations on the direction and the amount of change in the status attainment model, a rejection of convergence theory automatically qualifies the former as the appropriate theory for describing emerging postcommunist status attainment patterns. In sum, postcommunist transformations in status attainment will be explored by focusing on the following research questions:

> *Q3. Is there a postcommunist effect on status attainment? What changes are observable at the national level? Are different age groups differently affected by possible postcommunist changes in status attainment processes? Is there evidence of a recomposition of social status taking place during the postcommunist transition? And is there evidence that status attainment patterns characterizing the communist period persist during the postcommunist transition?*

> *Q4. Are there trends of convergence between status attainment patterns in former communist countries and Western capitalist countries? In this case, do trends in the status attainment model conform to predictions of "logic of industrialization theories" or "status maintenance theories"? Conversely, is there a different status attainment pattern characterizing postcommunist countries in comparison to Western capitalist countries?*

While impacts of industrialization can be assessed to a certain degree by comparing status attainment coefficients estimated separately for each country and each time point, a more formal analysis will estimate statistical effects of several industrialization indicators on status attainment parameters for the 1999 data. For the purposes of the analysis, all countries are pooled

together and effects of industrialization are estimated ignoring the different socio-political contexts characterizing these countries. The purpose of the analysis is on one hand to determine the intensity of effects of industrialization on status attainment and on the other hand to explore the direction of these effects. While the two competing theories discussed previously both predict that industrialization has a negative effect on educational ascription, they disagree on the direction of the industrialization effect on occupational ascription and occupational attainment. Whatever the direction of industrialization effects, strong effects would suggest that industrialization should be taken into account by theories of change in status attainment relationships. The existence of strong industrialization effects would also inform the discussion of convergence trends in status attainment patterns between Central and Eastern Europe and Western capitalist countries. The time span between the two surveys used here is rather short and it is possible that sufficient time has not passed for convergence effects to be apparent. Strong industrialization effects coupled with possible threshold effects of economic development are likely to lead to status attainment convergence in time. The main research question regarding effects of industrialization on status attainment is thus:

Q5. What are the intensity and the direction of effects of industrialization on status attainment parameters?

3 Methodology

3.1 Data and Model

The data for this study come from an international comparative research on social inequality - The International Social Survey Programme, the 1992 and 1999 Social Inequality modules (ISSP, 1992, 2002). Several countries included in the ISSP surveys are not used in this study due to the unavailability of variables measuring father's occupation or respondent's employment. The 1992 subsample of countries used here contains seven Eastern European countries (East Germany, Hungary, Czech Republic, Slovenia, Poland, Russia, and Slovakia), three liberal market economies (Australia, New Zealand, and USA), a Continental European country (Germany), and a Social Democratic country (Norway). In 1999, data is available for all of these countries and a number of additional countries: Latvia is added to the first group of countries, Canada to the second, France to the third, and Sweden to the fourth. In 1999, data on a fifth group of countries is also available – Cyprus, Portugal and Spain (Mediterranean countries).

The status attainment model employed here estimates the links between social origins (operationalized by father's occupation), respondent's education, occupation and income. The model also controls for age, marital status, gender and residential area (see Figure 3-1) and for employment, through sample selection (see section 3.4). Except for education, which was modeled as a latent variable with two indicators, all other variables in the model are introduced as observed variables.

Figure 3-1 Status Attainment Model
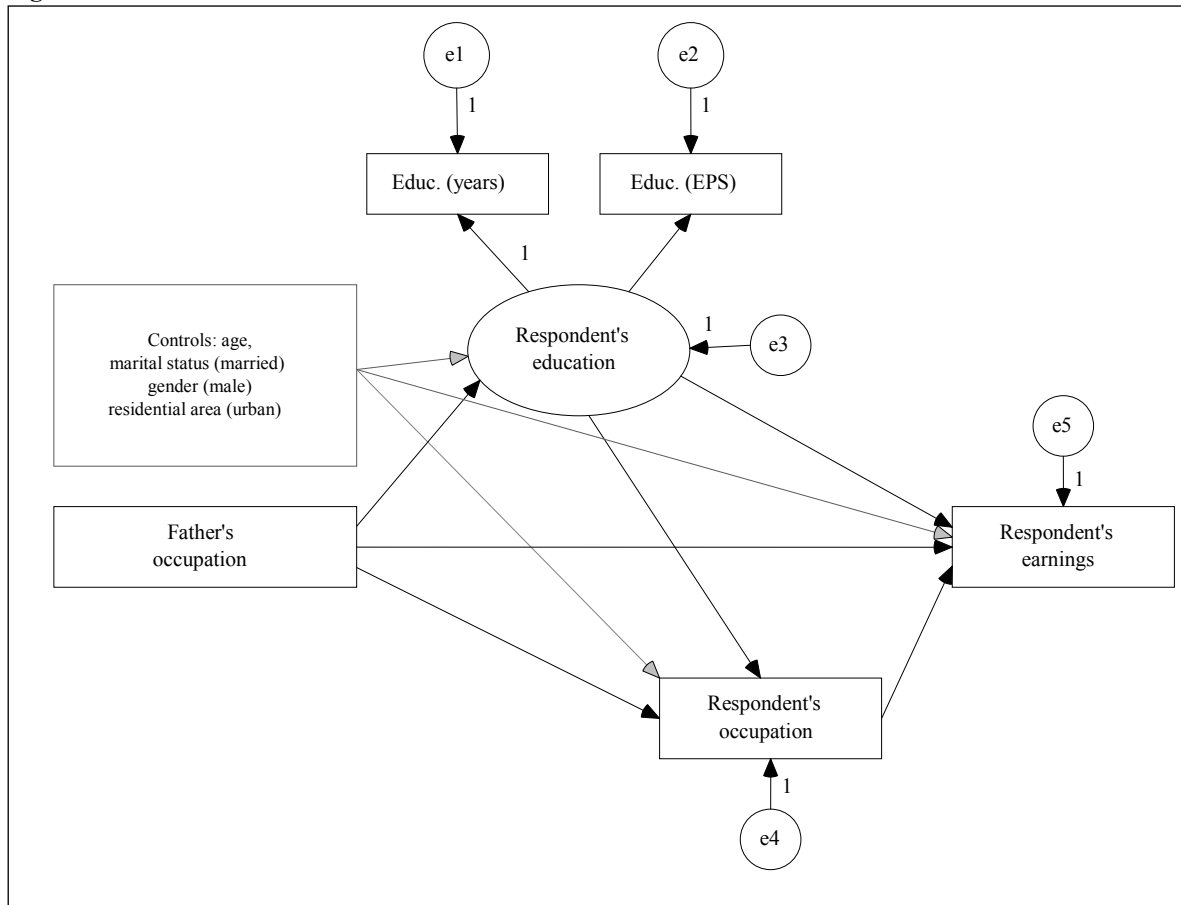
3.2   Variables

The comparison of regression results across countries raises some problems regarding the comparability of variables. While some of the variables used in the study have similar meaning and measurement across countries, i.e. employment, marital status, gender, and age, others might raise serious comparability problems. The divide between urban and rural residential areas is based on different population limits, urbanization levels and administrative regulations across the countries under analysis. This study disregards these differences in the way each country defines its urban and rural areas, and assumes that the administrative label 'urban' creates a common living experience across countries, thus making the comparison possible.

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3.2.1 Education

The problem of comparability is even more complicated in the case of variables such as education, occupation and income. Not only are educational systems different across countries, but often the education variable is measured differently in different societies. The ISSP provides information on respondent's educational levels measured in two ways: years of education and country specific educational levels. While years of education provide a comparable cross-country metric for education, this variable might be a better indicator of the educational process for some countries than for others (Kerckhoff, 1984; Krymkowski, 1991; Braun & Muller, 1997). The variable is better suited in countries where the length of education is of primary importance and there is little differentiation between types of schooling received. In countries with multi-tiered educational tracks, a variable measuring the type of schooling received might be more appropriate. Furthermore, years of education might not be linearly related to occupational attainment and earnings in all countries (Treiman & Terrell, 1975).

In order to address the shortcomings of the years of education variable, an additional indicator using information on country-specific educational categories is included in the construction of a latent variable measuring education. The variable, in its original form, contains partially ordered categories, it is not internationally comparable, and it is not always linearly related to occupation and income. All of these difficulties are addressed through the construction of effect proportional scales of education that translate the incomparable educational metric into an internationally comparable metric based on occupation. Furthermore, effect proportional scales contain ordered categories and linearize and maximize the relationship between education on one hand and the criterion variable(s) (occupation and income in this case) (Krymkowski, 1988, 1991).

The scales were initially developed by Boyle (1970) and Lyons (1971) and used in the estimation of status attainment models by Treiman and Terrell (1975) and Krymkowski (1988; 1991). Traditionally, effect proportional scales (EPS) of education have been computed in relation to occupation (each educational category is assigned the mean level of occupational attainment achieved by respondents in that educational category). The procedure regresses occupation on a set of dummy variables for educational categories and then each educational category is assigned its corresponding regression coefficient (Lyons, 1971; Treiman & Terrell, 1975; Krymkowski, 1988, 1991). As long as occupational attainment is scaled in internationally comparable units, the resulting education EPS will also be internationally comparable.

Occupational attainment in this study has been scaled using an internationally comparable standardized scale (SIOPS – see details in section 3.2.2). In addition, since the status attainment model employed here also includes earnings as the final dependent variable, the EPS construction incorporates earnings information along occupational information (education is scaled here proportional to a social status latent factor measured by occupation and earnings – see Figure 3-2). The resulting education EPS will therefore contain country-specific information on the value of education for respondent's future social status (as defined by occupation and earnings).

The model is estimated[11] as a simultaneous group path analysis[12] with each country representing a group. Parameters are computed separately once for the 1992 set of countries and another time for the 1999 set of countries. The number of educational categories varies

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[11] Path models are estimated using AMOS 7.0 (Arbuckle, 2006b). Additional statistical analyses (except HLM analyses) are estimated using SPSS 14.0. HLM analyses are estimated using HLM 6.02a (Raudenbush, Bryk & Congdon, 2005).

[12] The simultaneous analysis of several groups is a single analysis that estimates a different set of parameters for each group and tests hypotheses about all of the groups at once. The advantages of running the analysis simultaneously instead of doing the analysis separately for each group lie in its more efficient parameter estimates and in the fact that it provides a test for the significance of any differences found between groups (Arbuckle, 2006b).

depending on country and year (see Table A-1 and Table A-2 for country specific educational categories). The social status latent factor is scaled using the occupation variable, and the loading of the earnings variable on the social status factor is allowed to vary across countries and over time[13].

Figure 3-2 Model for the Construction of Education EPS

e1   e2

1   1

R Occup (SIOPS)   R Earnings (Deciles)

Educ. Cat. 1

Educ. Cat. 2
                                    1
Educ. Cat. 3   Social Status   1   e3

Educ. Cat. 4

Educ. Cat. 5
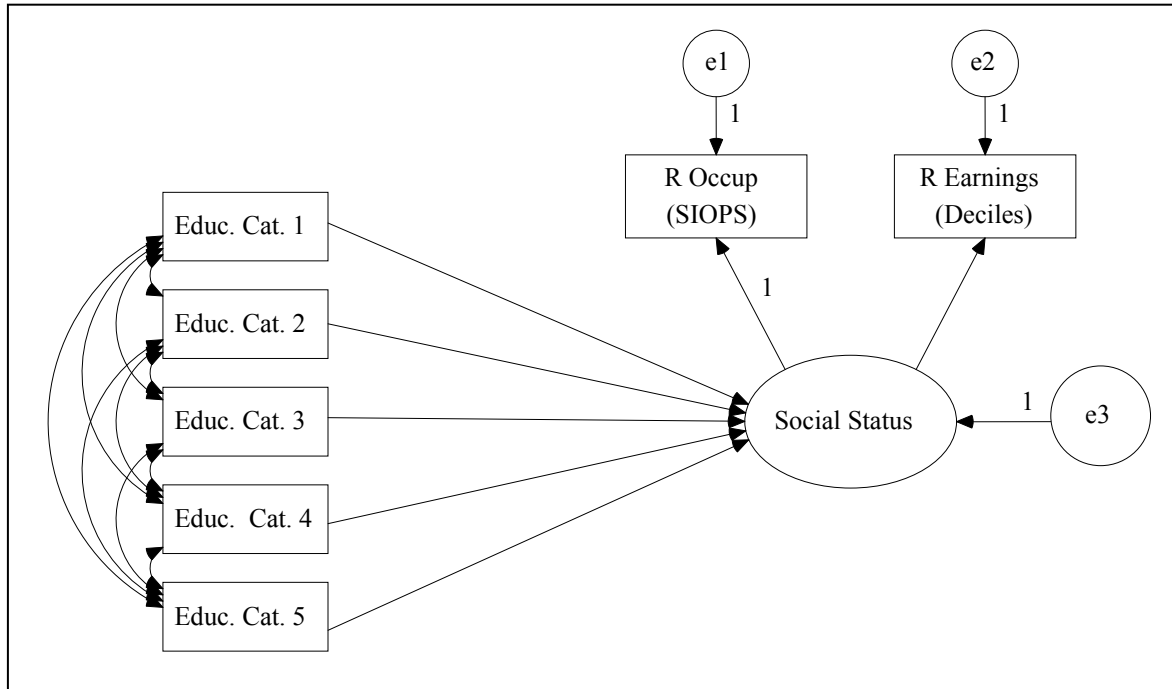
The results of the models for the construction of educational EPS scales are presented in Table A-3 and Table A-4. Since the reference category among the educational dummies represents the highest educational level in each country (equivalent to university or higher), the coefficients resulting from these models are all negative. Generally, coefficients decrease in absolute value moving from the first educational category towards the last. However, in some cases educational categories are only partially ordered or the relationship between education and social status is nonlinear, producing series of coefficients that constitute an exception to this rule.

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[13] The model employed here allows factor loadings to vary over countries and across time in an attempt to produce a country and time specific social status measurement. The implication of this modeling decision is that occupation and earnings will take on different weights in their determination of social status depending on country and time.

All resulting coefficients are statistically significant at the .05 level, with a few exceptions (in several countries the differences between the social status standing of the highest educational category and the next highest educational category are not statistically significant – e.g. in Czech Republic in 1992 there are no statistically significant social status differences between those with incomplete university and those with complete university). The educational categories explain between 20% and 100% of the variance in the social status factor. Australia, New Zealand, Canada and France are characterized by the lowest percentages of explained variance in social status (between 20% and 32%). For the remaining countries, percentages exceed 40%. Although the chi-square goodness of fit statistic suggests a rejection of the null hypothesis of perfect fit in both the 1992 and the 1999 case, the RMSEA (root mean square error of approximation) relative fit measure suggests that the models are a close fit in relation to degrees of freedom14.

The coefficients resulting from these models are used in the construction of the educational EPS scale. In the final status attainment model, education is introduced as a latent factor measured by years of education and education EPS[15]. Although both of these indicators are internationally comparable, the scale of the education latent factor is given by the years of

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14 Since the chi-square goodness of fit measure tests an implausible hypothesis of perfect fit and is sensitive to sample size (Cochran, 1952; Jöreskog, 1969; Arbuckle, 2005), the RMSEA alternative fit measure is also provided to help assess model fit. Browne and Cudeck (1993) suggest that a value of the RMSEA of .05 or less indicates a close fit of the model in relation to the degrees of freedom.

[15] The construction of the latent educational factor parallels the strategy employed by Krymkowski (1988; 1991). The decision to model education as a latent variable with two indicators is motivated by the fact that each indicator by itself, introduced as a single observed measurement of education suffers from certain drawbacks. While education measured in years might be a poor indicator in countries where type of education is more important than length of education, education EPS introduced as an observed variable in the status attainment model will prevent the comparison of unstandardized coefficients across countries. When education is rescaled to be effect proportional to occupation, the unstandardized regression coefficient of occupation on education EPS will be 1 in each country, as a result of the strategy adopted in the EPS construction (Krymkowski, 1991). This relationship persists when rescaling education to be effect proportional to a social status latent factor (scaled by occupation), as in this study: the unstandardized effect of education EPS on social status will be 1, and since the unstandardized loading of occupation on social status is also 1, the unstandardized effect of education EPS on occupation will also be 1 in each country. There are several solutions to this problem: the use of semi-metric coefficients (Treiman & Terrell, 1975), the interpretation of R2 instead of unstandardized coefficients (Krymkowski, 1991), or the use of multiple indicators of education, with years of education giving the metric of the latent education variable (Krymkowski, 1991). The latter solution is the solution adopted in this study.

education variable. The inclusion of both indicators results in an educational factor determined by the length of educational experience and additional country-specific information on the type of education received and the value of education for respondent's future social status standing. The loading of the education EPS indicator is allowed to vary across countries and time, resulting in a country specific determination of educational attainment, with different weights associated with the length and type of education.

3.2.2 Occupation

The ISSP provides information on father's and respondent's occupational status measured in ISCO-68 and ISCO-88 (International Standard Classification of Occupations) categories. The ISCO scale is an internationally comparable categorization of occupations according to skill level and skill specialization associated with jobs (ILO, 1987). While ISCO itself is comparable across nations, it is often used as a basis for constructing other types of internationally comparable occupational scales that use different sorting criteria of occupations (e.g. employment relations, socio-economic standing, or prestige). The choice of scale depends on the research questions being asked.

For the status attainment model estimated in a path analysis framework, a hierarchical classification of occupations is necessary, and there are two traditional choices of occupational scales available: socio-economic categorizations (ISEI – International Socio-Economic Index), and prestige categorizations (SIOPS – Standard International Occupational Prestige Scale) (Ganzeboom & Treiman, 2003). Although there is some debate over which of these types of occupational scale should be used in social stratification research, Ganzeboom and Treiman (2003) note that the choice of occupational scale will not produce dramatically different results. This is due to the fact that prestige ratings are highly correlated with socio-economic standing.

Blau, Duncan & Tyree (1978), in developing a socio-economic index of occupations, found that over 90% of the variation in prestige ratings of occupations is explained by the education and income level of occupations.

Theoretically, the choice between using prestige scales of occupations versus socio-economic scales reflects a choice between representing the symbolic rewards (approval, admiration, deference) versus the objective rewards (expertise and income) associated with occupations (Goldthorpe & Hope, 1972; Ganzeboom & Treiman, 2003). However, both types of scales have been criticized for conceptual or empirical reasons. Prestige scales are considered to reflect popular evaluations of the desirability of occupations rather than the prestige hierarchy of occupations in the classical sense of deference or derogation accorded to occupations (Goldthorpe & Hope, 1972; Featherman & Hauser, 1976). Socio-economic indexes of occupations have been criticized for combining information on education and income while occupational differentiation has been shown to be better captured by educational differentiation only (Hauser & Warren, 1997).

Even though socio-economic indexes of occupations have been shown to perform better in status attainment analyses in terms of explanative power (Featherman & Hauser, 1976), prestige ratings are sometimes preferred based on their better conceptual definition of occupational stratification (Hodge, 1981). A prestige scale is also chosen to operationalize occupation in this study, with the caveat that the scale might in fact be an imperfect indicator of prestige and a better indicator of occupation desirability. The choice is also determined by the choice of modeling education as an index of education, occupation and income. Since the education latent variable already contains information on socio-economic standing indexed by the years of education indicator and the income information incorporated in the education effect

proportional scale, it would be redundant to use a socio-economic index of occupations. Since educational stratification is considered the main determinant of the stratification process (Hauser & Warren, 1997), this study chose to employ the most detail in indexing education (educational levels are indexed by socio-economic standing and prestige) and to index occupations by their prestige standing only.

The prestige scale used here is Treiman's (1977a) Standard International Occupational Prestige Scale (SIOPS). The scale was constructed by averaging national prestige scores that were scaled in a common metric in 60 industrialized and nonindustrialized countries (15 Western European and Anglo-Saxon countries, 4 Eastern European countries, 11 African countries, 17 Asian and Oceanian countries, and 13 Latin American and Caribbean countries) (Treiman, 1977a). Treiman's study (1977a) documents a remarkably high degree of intrasocietal, intersocietal and over-time consensus on occupational prestige ratings, and high correlations between SIOPS and various national prestige scales, justifying the use of the scale for international and cross-time analyses. Because it is a standardized scale, some reservations have been expressed that SIOPS may, in some cases, mask differences between countries (Krymkowski, 1988) and multiple indicator models of occupation that include country-specific measurements of occupation in addition to SIOPS have been recommended (Kerckhoff, 1984; Krymkowski, 1988). However, this solution is not possible here due to data constraints, and SIOPS is used as a single observed indicator of occupational status.

The original SIOPS scale used the ISCO-68 categorization of occupations as a basis for assigning prestige scores. Ganzeboom and Treiman (2003) updated the scale and provided a correspondence scheme between ISCO-88 and SIOPS. The conversions of ISCO-68 and ISCO-

88 occupational categories to SIOPS scores were achieved using syntaxes provided by Ganzeboom and Treiman (home.fsw.vu.nl/HBG.Ganzeboom/ISMF/).

3.2.3   Earnings

In comparing earnings across countries, the problems that arise are that of differing monetary units and that of differing values of equivalent monetary units. A simple conversion to a common currency for all of the countries in the analysis does not ensure the comparability of income variables across countries. Because of differing spending habits, item prices, and buying power in different societies, 10 dollars might be more valuable in the Czech Republic than in the U.S, for example. Furthermore, in the ISSP data, in some countries income is recorded before deductions and taxes while in others it is recorded after deductions (Braun & Uher, 2003), and while in some countries the exact earnings amount is recorded, in others respondents are provided with earnings brackets (ISSP, 1992, 2002).

In order to achieve comparability between earnings over time, and among the countries in the study, the original variables (coded in national currency units) were recoded into deciles within each country and each year, in the complete samples. In countries that provided earnings brackets, the midpoints of the intervals were used before recoding into deciles. The procedure results in internationally comparable earning scales that rank respondents in ascending order of their earnings and are a measure of the relative position of individuals in the earnings hierarchy (Warner & Hoffmeyer-Zlotnik, 2003).

The decision to employ deciles in the measurement of earnings implies that regression coefficients in the regression of earnings on other variables in the model should be interpreted as changes in an individual's relative position in a society's earnings hierarchy, rather than changes in absolute income returns to education or occupation. Given the fact that wage scales in Central

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and Eastern European countries during the socialist period were compressed in comparison to wage scales in other countries, a jump from one earnings decile to the next in the former countries is translated into smaller gains in absolute earnings than a comparable jump in the latter countries.

The measurement of earnings using deciles is thus more appropriate in a framework that emphasizes the process of social comparison and the gains derived from favorable comparisons with groups of people situated lower in the earnings hierarchy or with one's own previous lower position in the earnings hierarchy (Easterlin, 2001). Also, the objective earnings ceiling in a society and the average level of living in that society are thought to influence respondents' judgments about their own personal well being (Easterlin, 1995). Under these assumptions, the discrepancy in the absolute gains in earnings when moving from one earnings decile to the next between socialist countries and capitalist countries disappears when gains are measured in terms of subjective well being.

3.2.4 Macro Level Variables

The hierarchical linear models examine the impact of the occupational and educational structure and of industrialization on the parameters of the status attainment model. The indicators chosen in order to measure these dimensions are: employment in the services sector, enrollment in tertiary education, and electricity consumption. Each of these indicators was used in the models as a "level" indicator, lagged several years before the survey year (levels are measured in 1977) and as a "change" indicator (change in levels between 1977 and 1999).

The level indicators are lagged 22 years before the survey year in order to capture effects at the beginning of respondent's occupational careers. The industrialization and occupational structure indicators probably have the largest impact at the beginning of a person's occupational

career, while educational structure indicators probably have the largest impact at transition points in a person's educational career. The span of the time lag was chosen based on the status attainment trajectory of the median age group. In 1999, the median age for the sample of employed respondents was approximately 40 years. Assuming that the transition between secondary and tertiary education takes place at age 18, and that entry into the labor market takes place around age 18 too, median age respondents in 1999 completed these transitions during 1977.

Electricity consumption was measured in thousands of kwh per capita, tertiary enrollment is a gross enrollment rate (% of the relevant age group enrolled in tertiary education), and employment in services is measured by the percent of the labor force employed in services. The change indicators were computed as [(value in 1999 / value in 1977) *100 -100]. An additional macro level variable is used to predict slopes in the status attainment model: educational ascription. The variable is constructed based on results from the structural equations models in 1999 (the variable contains country slopes from the regression of respondent's education on father's occupation, controlling for other variables included in the status attainment model).

3.3   Data Imputation

Incomplete data was handled using a multiple imputation strategy (Allison, 2002). The data was imputed using the sequential regression multivariate imputation method (SRMI)[16], resulting in 5 multiply imputed data sets[17]. The procedure computes imputed values for each individual, that are fully conditional on observed values of other variables for that individual, and introduces

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[16] Missing values were imputed using the IVEware software (Raghunathan, Solenberger & Van Hoewyk, 2002).
[17] A relatively small number of imputations is sufficient even in cases in which the data is characterized by rather high percentages of missing data. With 41% missing (which is the maximum amount of missing data in any of the variables used here) and 5 imputations, the relative efficiency of an estimate based on the 5 imputations is approximately 0.96 in standard error units compared to an estimate based on infinite imputations (Von Hippel, 2005).

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variation among imputed values by randomly drawing imputed values from the posterior predictive distribution specified by the regression model[18] (Raghunathan et al., 2001).

The type of regression model used to impute values varies according to the type of variable that is imputed. Categorical variables (employment, gender, residential area, marital status, nonfarm origins) are imputed using a logistic or polytomous regression model, while ordinal and continuous variables (age, occupation, earnings) are imputed using a linear regression model (Raghunathan, Solenberger & Van Hoewyk, 2002). The country specific education categories variables were imputed using a polytomous regression model. Education variables measured in years of completed education were imputed using a linear regression model.

Data sets for each country and each year were imputed separately, and the imputation models were estimated on complete national samples, including all variables used in the status attainment models. In addition, a set of auxiliary variables was used to help impute the status attainment model variables. These auxiliary predictors (farm origins, mother's education, and father's education) are absent from the status attainment model due to their unavailability in several countries in 1992 (Norway, Russia, USA, New Zeeland, Czech Republic, and Slovakia). In the countries where these variables are available, they have been used to improve the prediction of missing values and provide additional controls for missing data mechanisms (Collins, Schafer & Kam, 2001; Raghunathan et al., 2001; Allison, 2002; Acock, 2005).

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[18] The SMRI method assumes that the missing data mechanism is ignorable (Raghunathan et al., 2001). While the assumption that the data are missing at random (MAR) (Allison, 2002) might be tenable for most of the variables used here, earnings might be characterized by nonignorable missingness patterns. In order to achieve a situation closer to MAR, Collins et al (2001) recommend the inclusion of variables that might be correlates of missingness in the imputation process. Given the set of controls and auxiliary variables employed in this model, a MAR situation is plausible in most variables' case, with the possible exception of earnings. However, simulations presented by Collins et al (2001) suggest that in most cases, an erroneous MAR assumption will have little impact on estimates in the substantive model.

Additionally, the employment variable used later for sample selection is used as an auxiliary predictor in the imputation models[19].

Endogenous variables in the status attainment model (respondent's education, occupation and earnings) were used as predictors in the imputation of other variables since this procedure produces unbiased estimates of the regression coefficients (Allison, 2002). Furthermore, endogenous variables were themselves imputed, and used in this form in the estimation of the status attainment model. Allison (2002) recommends imputing the endogenous variables and using these imputed variables in substantive models when cases with missing data on these variables also have missing data on the independent variables, which is the case in the ISSP data.

In order to combine results from the multiply imputed data sets, means, standard deviations and regression coefficients are averaged across imputations, and standard errors are computed using formulae provided by Schafer (1997) that take into account the uncertainty introduced by imputation. R squared and RMSEA values are averaged across imputations (Allison, 2003) and chi-square values are combined using the %combchi SAS macro[20], based on formulae provided by Allison (2002, pp. 67-68).

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[19] Although employment is used as a predictor in the imputation process, sample selection is made using the unimputed employment variable in order to avoid including in the sample individuals with missing data on employment that might be unemployed but have imputed values that characterize them as employed.
[20] Allison (2002; 2003) describes three alternative methods for combining chi-squares across imputations: Wald tests, likelihood ratio tests and %combchi. Since Wald tests are based on the assumption that the percentage of missing is the same for all parameter estimates which is untenable for this analysis, the choice is limited to the latter two methods. While likelihood ratio tests are considered as a more accurate method than %combchi, they are computationally intensive and considerably more time consuming to implement. A comparison of results obtained using these two methods for one of the models in this study (diagnostic tests of the differences between urban and rural populations in each country) suggested that there are minor differences between the two sets of results and substantive conclusions do not change across the methods employed for combining chi-squares. Therefore, the %combchi method was used in the presentation of results.

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3.4   Weighting and Sample Selection

Several of the national samples in ISSP need weighting either because of oversampling,
sampling errors, or to adjust for nonresponse rates in panel surveys. For these countries weights
are applied for all of the analyses presented[21]. In the status attainment models the original
weights provided by ISSP are applied. In the hierarchical linear models the original weights are
adjusted so that each country has an equal number of cases, while keeping the total N equal to
the original N (13,171)[22].

While the imputation and the construction of effect proportional scales were applied to
entire samples in order to take advantage of a wider array of information, the status attainment
model estimation is restricted to employed subsamples. The decision to restrict attention to this
subsample was made based on results from diagnostic tests comparing the process of status
attainment across several groups (employed/ unemployed, urban/ rural, farm/ nonfarm origins,
men/ women – see section 3.4). The diagnostic tests were also estimated using entire samples.

3.5   Empirical Analyses

3.5.1   Diagnostic Tests for Sample Selection

In order to test for the equivalence of the status attainment process across subsamples, a reduced
status attainment model (including only the main status attainment parameters) was estimated
within each country in each year, simultaneously on (a) farm and non-farm origins subsamples,
(b) urban and rural subsamples, (c) males and females subsamples, and (d) employed and

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[21] In 1992, ISSP provides weights for Hungary, Poland, Russia, US, and Norway. In 1999, ISSP provides weights
for Hungary, Poland, Russia, Canada, France, Portugal and Spain.
[22] The adjusted weights are computed using the original ISSP country normalized design weights (design
weights/country design weights means) and a country sample size weight (=693/$N_{country}$), where $N_{country}$ are the
country sample sizes. The final adjusted weight is the product of the normalized design weight and the sample size
weight.

unemployed. Hypotheses regarding the equivalence of the status attainment process across these subsamples were examined by comparing model goodness of fit for 3 nested models: an unconstrained model that allows all parameters to vary across subsamples (e.g. urban and rural), a measurement weights model that constrains the loading of the education EPS on the education latent factor to be equal across subsamples, and a structural weights model that imposes equality constraints across subsamples for all paths in the model (measurement weights and structural weights) (see Figure 3-3).

Figure 3-3 Reduced Status Attainment Model for Diagnostic Tests
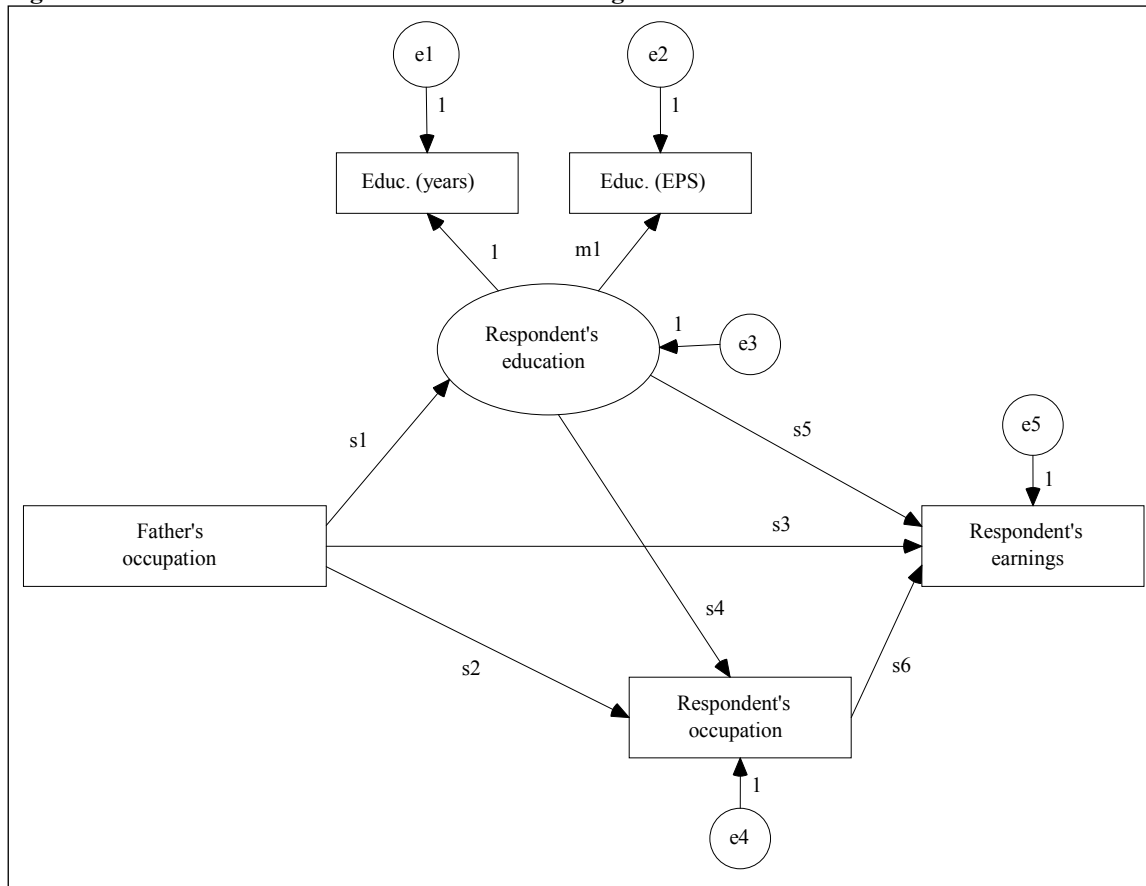
Notes: Entire sample, weighted, imputed. Simultaneous group analysis; groups: urban and rural/ farm and nonfarm origin/ employed and unemployed/ men and women. Separate analysis for each country and year. Unconstrained model: all parameters unequal across groups. Measurement weights model: m1 equal across groups. Structural weights model: m1, s1, s2, s3, s4, s5, s6 equal across groups.

The chi square difference tests (see Table A-5 through Table A-8) test the hypothesis that these constraints are supported by the data. While the diagnostic tests suggest that in general the

status attainment process is the same for respondents with farm and nonfarm origins (see Table A-5), the case is different for urban and rural, male and female and employed and unemployed subsamples. In the comparison of urban and rural samples (see Table A-6), a number of Eastern European countries (Hungary, Slovenia, Poland and Russia) and several other countries (France, Norway, Portugal, and Spain) are characterized by measurement weight differences, suggesting the education EPS has different weights in the definition of the education latent factor in urban and rural samples within these countries. Assuming that one ignores these differences in measurement weights, the status attainment process (as captured by model structural weights) is in general similar across urban and rural subsamples within countries, with a few exceptions (Hungary, Slovenia, Poland, and New Zealand in 1992 and Slovenia, Cyprus, Portugal and Spain in 1999). Male and female samples are also characterized by similar status attainment processes with a few exceptions (West Germany and Norway in 1992, and Czech Republic, Australia, and France in 1999) (see Table A-7).

Most of the differences are apparent when comparing the status attainment model across employed and unemployed subsamples. In this case, most of the countries are characterized by differences between the two subsamples, either in 1992 or 1999, and either at the measurement weights or the structural weights level (see Table A-8). Due to the fact that differences are less pervasive between urban and rural and male and female samples, I decided to analyze these groups together, and introduce residential area and gender as control variables in the status attainment model. Farm and nonfarm origins subsamples are very similar, so these groups can also be analyzed together. Due to the very small number of respondents with farm origins in several countries, this variable was also dropped from the control variables list. Since the differences between employed and unemployed samples were more common, the unemployed

respondents were dropped from the sample, and subsequent analyses apply only to the employed subsample.

3.5.2 Status Consistency

The question of status consistency is examined by inspecting correlations between three indicators of objective social status – respondent's education, occupation, and earnings – within each country at each time point. A summary index of status consistency is constructed as the percent of explained variance in these 3 variables by the first common factor resulting from a principal components analysis (Covello & Bollen, 1979). Higher percentages of variance explained indicate higher degrees of status consistency in a society.

3.5.3 Estimation of Status Attainment Models

The status attainment model is first estimated separately for each year, and within each year the countries are treated as simultaneous groups. The results from this model are used in order to describe the patterns of stratification in all countries at both time points. In this model, direct, indirect and total effects are examined[23], and R squared values from various reduced models are used in the computation of an index of the balance between ascription and achievement.

Total variance in respondent's occupation is decomposed into % variance explained by father's occupation, % variance explained by R's education net of parental status, and % variance explained by other variables (controls and unmeasured influences)[24]. Similarly, total

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[23] The statistical significance of indirect and total effects is computed using bootstrapped standard errors. Since these estimates do not have formulae for computing standard errors, bootstrapping is used to derive approximate standard errors (Stine, 1989; Arbuckle, 2006b, pp. 299-300). Since the input data for the analysis is in a variance-covariance matrix form (required by the option to analyze weighted samples) and not raw data, a Monte Carlo parametric bootstrap method is used (bootstrap samples are drawn from a multivariate population with means, variances and covariances equal to sample means, variances and covariances), with 2000 bootstrap samples (Arbuckle, 2006a, p. 504).

[24] The models estimated for this calculation are:
M1: respondent's occupation regressed on controls
M2: respondent's occupation regressed on controls and father's occupation

variance in respondent's earnings is decomposed into % variance explained by father's occupation, % variance explained by respondent's education and occupation jointly, net of parental status, and % variance explained by other variables.

The tests for the equality of structural weights within countries across time are applied on the subsample of countries that have data both in 1992 and 1999[25]. Twelve countries at two time points are considered as simultaneous groups and chi square difference tests are computed testing the hypotheses of equality of parameters within countries across years[26]. Parameter invariance over time is examined for each of the status attainment main parameters.

The equality of parameters across countries within regions is examined first in 1992 and then in 1999. Each model treats all countries present in the analysis at one time point as simultaneous groups. The hypothesis of parameter invariance in examined for each of the main status attainment parameters for all pairs of countries within a region[27]. Additionally, global hypotheses of parameter invariance across all countries within a region are examined[28].

A 'similarity' index is also computed in order to capture the degree of similarity in status attainment process in a single, easier to interpret number, in addition to the more detailed information provided by the diagnostics above. The similarity index is constructed based on a

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M3: respondent's occupation regressed on controls, father's occupation, and education, with education acting as a mediating variable between controls and father's occupation on one hand, and respondent's occupation on the other
The total variance in respondent's occupation is decomposed using the strategy provided by Blau et al. (1978, p. 202):
% variance in respondent's occupation explained by father's occupation $R^2_{FO} = R^2_{M2} - R^2_{M1}$
% variance in respondent's occupation explained by education net of parental status $R^2_{ED} = R^2_{M3} - R^2_{M2}$
% variance in respondent's occupation explained by controls and unmeasured influences $R^2_{OTH} = 100 - R^2_{FO} - R^2_{ED}$
A similar logic is applied in the decomposition of total variance in respondent's earnings.
[25] East Germany, Hungary, Czech Republic, Slovenia, Poland, Russia, Slovakia, Australia, New Zealand, USA, West Germany, and Norway.
[26] The chi square difference test is computed for two nested models: an unconstrained model in which parameters are allowed to vary within country over time, and a constrained model in which the status attainment parameter of interest is constrained to be equal within country over time.
[27] Chi square difference tests are computed for two nested models: an unconstrained model that allows parameters to vary across countries, and a constrained model in which the status attainment parameter of interest is constrained to be equal in a pair of countries.
[28] In this case the constrained model imposes equality constraints across all countries within a region.

matrix of standardized status attainment model parameters, with countries on rows and model parameters on columns. The index is computed as an average of correlations between pairs of rows in the matrix (representing correlations of model parameters between countries or within countries over time). The index varies between -1 and +1 with +1 representing identity of parameters between countries. The index construction procedure parallels the construction of a measure of agreement among individuals in their occupational status evaluations employed by Balkwell et al. (1980).

3.5.4   Status Attainment within Different Cohorts

In order to examine whether over time changes in status attainment in Central and Eastern Europe affected people differently based on their age when the transition to postcommunism occurred, the status attainment models are estimated for different birth cohorts. Since sample sizes are small to begin with, it is only possible to examine the status attainment process for a small number of cohorts. As such, three groups are constructed: those born before 1950 (age 41 or older in 1990), those born between 1950 and 1964 (ages 26 to 40 in 1990), and those born after 1964 (age 25 or younger in 1990). In 1990, at the beginning of the transition in Central and Eastern Europe, the first cohort already had extensive labor force experience under the communist system, the second cohort consisted of a mix of people with lengthy and with limited communist labor force experience, and the third cohort consisted of people with limited or no communist labor market experience. Analyses are conducted separately for each Central and Eastern European country[29], and within each country, the three cohorts at both time points are treated as simultaneous groups. The primary goal of these analyses is the comparison of status attainment parameters across cohorts and time within Central and Eastern European countries.

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[29] For these analyses, only Central and Eastern European countries that were surveyed both in 1992 and 1999 are included (East Germany, Hungary, Czech Republic, Slovenia, Poland, Russia, and Slovakia).

Statistical tests (chi-square differences) are computed in order to test the equality of parameters across cohorts within years and across time for each cohort.

3.5.5 HLM Models

The HLM models explore the impact of industrialization (measured by energy consumption per capita), educational structure (measured by tertiary enrollment rates), occupational structure (measured by % employed in the services sector), and educational ascription (measured by the path coefficient measuring the effect of father's occupation on respondent's education in the status attainment model) on the slopes of the status attainment model. The HLM models are estimated for the set of countries present in 1999, in order to take advantage of the increased sample of countries. In the framework of this analysis respondents are nested within countries. For each of the macro level indicators except educational ascription, effects are examined for level indicators, change indicators, and interactions between level and change indicators.

In the HLM framework the status attainment model translates into 3 level 1 equations: the first one predicting respondent's education, the second one predicting respondent's occupation, and the final one predicting respondent's earnings. All of the controls used in the structural equations model framework (gender, age, marital status, residential area) are also used in the HLM equations. A simplified version of the equations (ignoring the presence of controls) is presented below – see (Eq. 1) through (Eq. 3) and Figure 3-4 presents the correspondence between the status attainment model in a structural equations framework and the HLM level 1 coefficients.

(Eq. 1) $R\_ED_{ij} = \beta_{ED\_0j} + \beta_{ED\_1j} * SO_{ij} + r_{ED\_ij}$

(Eq. 2) $R\_OCC_{ij} = \beta_{OCC\_0j} + \beta_{OCC\_1j} * SO_{ij} + \beta_{OCC\_2j} * R\_ED_{ij} + r_{OCC\_ij}$

(Eq. 3) $R\_EARN_{ij} = \beta_{ERN\_0j} + \beta_{ERN\_1j} * SO_{ij} + \beta_{ERN\_2j} * R\_ED_{ij} + \beta_{ERN\_3j} * R\_OCC_{ij} + r_{ERN\_ij}$

where R_ED = respondent's education[30], R_OCC = respondent's occupation, R_EARN = respondent's earnings, SO = social origins, i = individuals, j = countries.

Figure 3-4 HLM Level 1 Coefficients
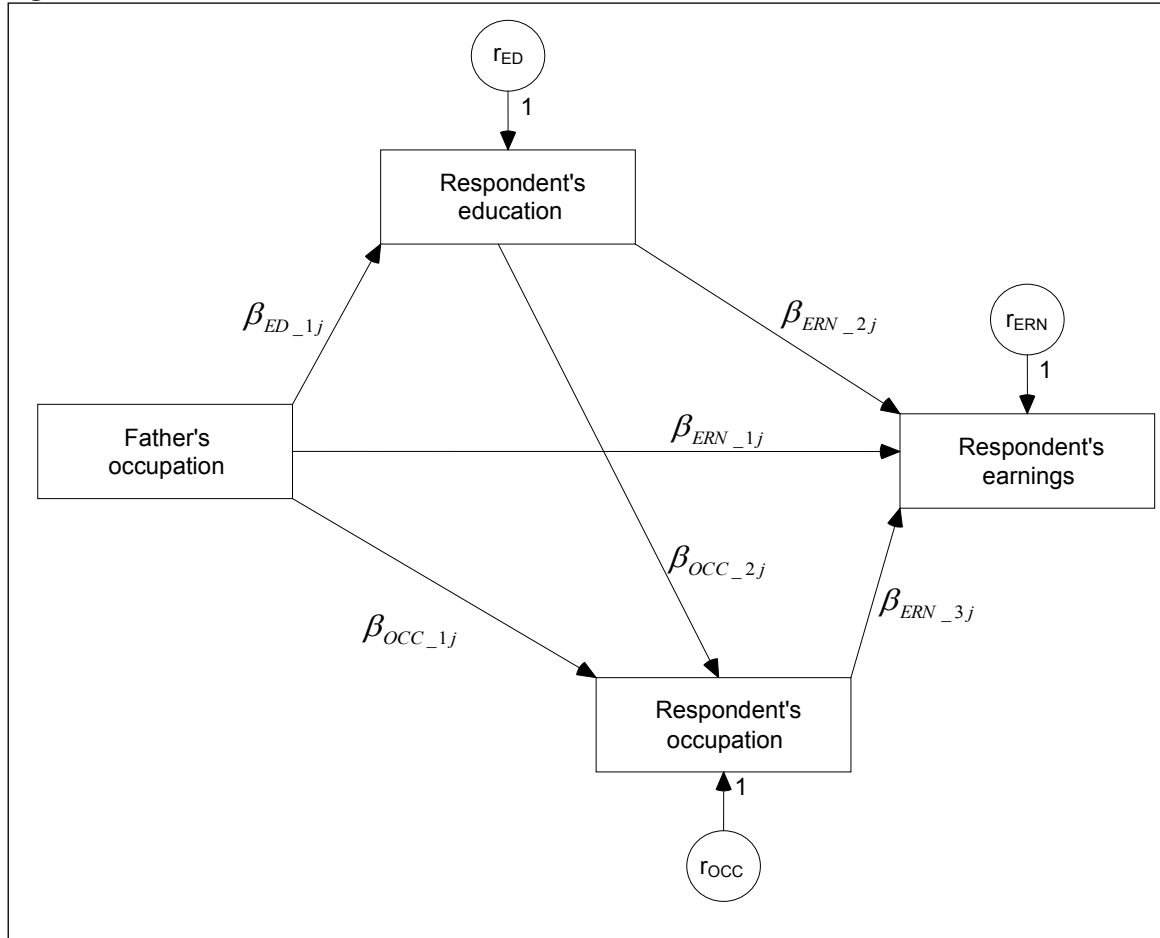
Each of the three HLM equations contains several main interest slopes (corresponding to the main status attainment parameters), and effects of macro level variables are examined only for these slopes. The first equation predicting respondent's education contains a slope measuring educational ascription (β_{ED_1j}, the effect of father's occupation on respondent's education). The second equation predicting respondent's occupation contains a slope measuring occupational

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[30] Respondent's education was measured by a latent factor in the structural equations representation of the status attainment model. In the HLM models, since the software used requires the use of observed variables, respondent's education is constructed as a factor score, using the factor score weights estimated in the structural equations models.

ascription (β_{OCC_1j}, the effect of father's occupation on respondent's occupation), and another slope measuring occupational achievement (β_{OCC_2j}, the effect of respondent's education on respondent's occupation). The third equation contains slopes measuring income ascription (β_{ERN_1j}, the effect of father's education on respondent's income), income achievement (β_{ERN_2j}, the effect of respondent's education on respondent's income), and income returns to occupation (β_{ERN_3j}, the effect of respondent's occupation on respondent's income).

For the achievement slopes (occupational achievement, income achievement, and income returns to occupation) and the first three country level indicators, two types of models are examined: a "total effects" model and a "direct effects" model. In the case of these three slopes it is assumed that the macro level indicators can have an indirect impact through other slopes in the status attainment model (see Table 3-1 for a description of the structure of the HLM models). In the case of occupational achievement, the mediating process is occupational ascription. In the case of income achievement, the intervening process is income ascription. Finally, in the case of income returns to occupation, the intervening processes are income ascription and income achievement. For the remaining three slopes (the three ascription slopes) it is assumed that there are no indirect effects of the three macro level variables.

The impact of educational ascription (the fourth macro level variable) is examined in (Eq. 2) and (Eq. 3), and effects of educational ascription are introduced all at the same time (on all possible main interest slopes). Models examining effects of educational ascription on each of the slopes were examined and did not reveal different patterns from models examining all effects at the same time.

Table 3-1 Structure of HLM Models with Level 2 (Macro Level) Effects

Equation 1 / Equation 2

	Effects on educational ascription	Effects on occupational ascription	Total effects on occupational achievement	Direct effects on occupational achievement	Effects of educational ascription
Macro effects	β_{ED_1j}	β_{OCC_1j}	β_{OCC_1j}	β_{OCC_1j}	β_{OCC_1j}
Level	✓ ✓ ✓	✓ ✓ ✓	-- -- --	✓ ✓ ✓	
Change	✓ ✓	✓ ✓	-- --	✓ ✓	
Level * Change	✓	✓	--	✓	
Ed. ascription					✓
Macro effects		β_{OCC_2j}	β_{OCC_2j}	β_{OCC_2j}	β_{OCC_2j}
Level		-- -- --	✓ ✓ ✓	✓ ✓ ✓	
Change		-- --	✓ ✓	✓ ✓	
Level * Change		--	✓	✓	
Ed. ascription					✓

Equation 3

	Effects on income ascription	Total effects on income achievement	Direct effects on income achievement	Total effects on income returns to occupation	Direct effects on income returns to occupation	Effects of educational ascription
Macro effects	β_{EARN_1j}	β_{EARN_1j}	β_{EARN_1j}	β_{EARN_1j}	β_{EARN_1j}	β_{EARN_1j}
Level	✓ ✓ ✓	-- -- --	✓ ✓ ✓	-- -- --	✓ ✓ ✓	
Change	✓ ✓	-- --	✓ ✓	-- --	✓ ✓	
Level * Change	✓	--	✓	--	✓	
Ed. ascription						✓
Macro effects	β_{EARN_2j}	β_{EARN_2j}	β_{EARN_2j}	β_{EARN_2j}	β_{EARN_2j}	β_{EARN_2j}
Level	-- -- --	✓ ✓ ✓	✓ ✓ ✓	-- -- --	✓ ✓ ✓	
Change	-- --	✓ ✓	✓ ✓	-- --	✓ ✓	
Level * Change	--	✓	✓	--	✓	
Ed. ascription						✓
Macro effects	β_{EARN_3j}	β_{EARN_3j}	β_{EARN_3j}	β_{EARN_3j}	β_{EARN_3j}	β_{EARN_3j}
Level	-- -- --	-- -- --	-- -- --	✓ ✓ ✓	✓ ✓ ✓	
Change	-- --	-- --	-- --	✓ ✓	✓ ✓	
Level * Change	--	--	--	✓	✓	
Ed. ascription						✓

Note: *-- level 1 slope is present in the model but there are no level 2 effects modeled on that level 1 slope*
    ✓ *level 1 slope is present in the model and there are level2 effects modeled on that level 1 slope*
    ✓ *macro level effect of interest in the model*

4 Results

The presentation of results is structured into three parts. The first two subchapters present results from structural equations models of status attainment, used in order to examine socialist and postsocialist effects on the main status attainment parameters, and the last subchapter presents the results from hierarchical linear models of status attainment, used in order to examine industrialization effects on the main status attainment parameters.

The first subchapter will use data from 1992 and socialist effects on status attainment will be inferred from the comparison of Central and Eastern European countries with the Western capitalist countries present in the analysis. The second subchapter will use data from 1999 and postsocialist effects on status attainment will be inferred mainly from the over time trends in effects between 1992 and 1999, but the discussion will also be informed by cross regional comparisons of effects. In both cases I will first focus on discussing and comparing direct and total effect sizes and then I will examine whether variations in effect sizes are statistically significant. Each of these subchapters concludes with a summary of the most important findings.

The third subchapter uses the 1999 data in order to take advantage of the larger number of countries with available data at that time point for the estimation of the hierarchical linear models. While in the first two subchapters the results are examined for each country, in the last subchapter the data is pooled across countries and country level effects of industrialization on individual level slopes are examined.

Descriptive statistics for the ISSP variables used in the estimation of all status attainment models are presented in Table A-9. The variables contain between 0 and 41% missing data. Most of the missing data is present in the main variables of the status attainment model (father's occupation, respondent's education, occupation and earnings). The control variables have

smaller percentages of missing data. A comparison of descriptive statistics in the unimputed sample (descriptives not shown) and the imputed sample shows that the imputation procedure resulted in variable means and standard deviations that are extremely close to the means and standard deviations in the unimputed sample, even for the variables characterized by larger percentages of missing data.

4.1 Status Attainment in 1992 – Socialist Effects

4.1.1 Direct Effects in the Status Attainment Model

The existence of socialist effects on status attainment is explored using the 1992 ISSP data. Socialist effects are inferred in comparison to patterns existent in the other settled capitalist countries studied. A status attainment model is estimated for the entire set of countries with data available in 1992. In order to explore similarities and differences between countries, and the intensity of effects, both unstandardized (see Table 4-1) and standardized coefficients (see Table A-10) are presented. A visual representation of effects is provided in Figure A-1 through Figure A-6. The model has a close fit in relation to its degrees of freedom (RMSEA=0.027), but the chi-square goodness of fit test suggests that the hypothesis of perfect fit is rejected (chi-square = 562.473, df=72, p=0.000). The model has the highest explanative power in the prediction of respondent's occupation (R^2 values range from 0.30 to 0.61, depending on the country under analysis). Percentages of explained variance in respondent's education and respondent's earnings are smaller.

Table 4-1 Status Attainment Model Estimates - 1992 (Unstandardized Estimates)

	E. Germany Estimate	R^2	Hungary Estimate	R^2	Czech Rep. Estimate	R^2	Slovenia Estimate	R^2	Poland Estimate	R^2	Russia Estimate	R^2
F. Occup. → R. Educ.	0.076 ***	0.12	0.076 **	0.23	0.065 ***	0.16	0.075 ***	0.19	0.063 ***	0.26	0.048 ***	0.13
	(0.010)		(0.014)		(0.009)		(0.008)		(0.010)		(0.007)	
F. Occup. → R. Occup.	0.104 +	0.41	0.032	0.48	0.057	0.47	0.080 *	0.50	0.089 *	0.41	0.034	0.35
	(0.055)		(0.033)		(0.040)		(0.035)		(0.036)		(0.039)	
R. Educ. → R. Occup.	2.708 ***		3.334 ***		3.305 ***		3.234 ***		2.812 ***		2.786 ***	
	(0.178)		(0.177)		(0.226)		(0.178)		(0.148)		(0.152)	
F. Occup → R. Earn.	-0.006	0.22	0.011	0.36	0.009	0.37	0.010	0.28	0.031 **	0.27	-0.005	0.15
	(0.010)		(0.007)		(0.009)		(0.008)		(0.011)		(0.005)	
R. Educ. → R. Earn.	0.156 *		0.169 ***		0.339 ***		0.360 ***		0.163 ***		0.132 ***	
	(0.060)		(0.048)		(0.064)		(0.048)		(0.045)		(0.031)	
R. Occup. → R. Earn.	0.044 ***		0.050 ***		0.001		0.016		0.015		0.010	
	(0.011)		(0.009)		(0.012)		(0.010)		(0.010)		(0.006)	

	Slovakia Estimate	R^2	Australia Estimate	R^2	New Zealand Estimate	R^2	USA Estimate	R^2	W. Germany Estimate	R^2	Norway Estimate	R^2
F. Occup. → R. Educ.	0.071 ***	0.15	0.057 ***	0.14	0.042 ***	0.08	0.043 **	0.11	0.107 ***	0.19	0.088 ***	0.20
	(0.012)		(0.005)		(0.007)		(0.012)		(0.009)		(0.007)	
F. Occup. → R. Occup.	0.043	0.61	0.033	0.31	0.086 **	0.41	0.053	0.30	0.050	0.49	0.057	0.41
	(0.048)		(0.025)		(0.033)		(0.036)		(0.037)		(0.038)	
R. Educ. → R. Occup.	3.712 ***		2.917 ***		3.691 ***		2.913 ***		2.715 ***		2.924 ***	
	(0.276)		(0.147)		(0.271)		(0.217)		(0.131)		(0.180)	
F. Occup → R. Earn.	0.010	0.25	0.000	0.35	0.005	0.32	-0.006	0.38	0.004	0.37	-0.007	0.37
	(0.012)		(0.004)		(0.006)		(0.007)		(0.007)		(0.005)	
R. Educ. → R. Earn.	0.232 **		0.081 **		0.148 **		0.237 ***		0.086		0.193 ***	
	(0.089)		(0.030)		(0.056)		(0.042)		(0.047)		(0.031)	
R. Occup. → R. Earn.	0.004		0.057 ***		0.061 ***		0.054 ***		0.042 **		0.024 ***	
	(0.017)		(0.005)		(0.008)		(0.007)		(0.011)		(0.006)	

Notes: Employed subsample, weighted, imputed. Standard errors in parentheses.

Chi-square=562.473 (df=72), F (for combining chi square tests across imputations) =7.249 (p=0.000); RMSEA=0.027.

Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.

The direct effect of father's occupation on respondent's education is positive and statistically significant in all countries. In general, the effect is greater in Eastern European countries[31] when compared to liberal market economies, but smaller when compared to the two countries representing Continental Europe and social democratic countries. The differences in effect sizes across regions do not suggest that socialism had a considerable effect in lowering the importance of social origins in the determination of educational chances of children, at least not when compared to levels in liberal market economies. It is true that Eastern European effects are slightly lower than effects estimated in the other two European capitalist countries in the analysis, but without inspecting effect sizes across a wider range of European settled capitalist countries, the conclusion can only be tentative.

The patterns of direct effects of father's occupation on respondent's occupation are less clear-cut. In general, the effect is not statistically significant, but three of the former socialist countries (East Germany, Slovenia, and Poland) and one liberal market country (New Zealand) emerge as contexts in which the direct effect of father's occupation on respondent's occupation persists even when controlling for the mediating effect of respondent's education. In this case, again, results suggest that socialism did not result in a consistently diminished importance of social origins in the determination of occupational chances of children when compared to levels present in other countries.

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[31] To avoid repetition I use *Central and Eastern Europe*, *Eastern Europe*, *postcommunist countries* and *former socialist countries* as interchangeable labels for the same group of countries for which the exact geographical label is *Central and Eastern Europe*. Also, when referring to countries from both the Continental European group and the social-democratic group I will use the label *settled European capitalist countries*, and when referring to both these regions and liberal market capitalisms I will use the label *settled capitalist countries*.

The direct effect of respondent's education on respondent's occupation is strong[32] and statistically significant in all countries under analysis. The direct standardized effect ranges from 0.528 to 0.739, depending on the country under analysis. The effect is generally similar across all of the countries analyzed here, with no region emerging as having consistently smaller or greater effects than others, providing no support for the hypothesis that socialism resulted in an increased impact of education on occupational levels.

Controlling for respondent's education and occupation (and the other control variables introduced in the model), there is no direct effect of father's occupation on respondent's earnings in any of the countries under analysis, with the sole exception of Poland, where a small effect persists even when controlling for mediating social position variables ($\beta=0.091$).

Respondent's education has statistically significant direct effects on respondent's earnings in all countries under analysis. In the comparison of effect sizes across countries, no pattern emerges, as the two regions for which more than one country is present seem to be characterized by heterogeneous effects. In Eastern Europe, the Czech Republic and Slovenia diverge markedly from average within region effect levels (with above average effects), and within the liberal market region effects vary in size from effects smaller than the smallest effect in Eastern Europe (in Australia's case) to about the Eastern European average (in USA's case).

The only effect which seems to conform to a greater degree to the theoretical expectations advanced under the hypothesis of existence of socialist effects is the direct effect of respondent's occupation on respondent's earnings. In this case, with two exceptions (East Germany and Hungary), in former socialist countries the effects are not statistically significant,

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[32] However, the finding must be interpreted while keeping in mind the fact that one of the indicators of respondent's education is scaled proportional to occupation and earnings, a procedure that maximizes the effect of education on occupation and earnings.

while effects characterizing settled capitalist countries are small to moderate and statistically significant.

For the last two relationships discussed (the effect of respondent's education on respondent's earnings and the effect of respondent's occupation on respondent's earnings) the examination of the hierarchy of effects (see standardized coefficients in Table A-10) suggests that respondent's education and occupation are competing effects in the prediction of respondent's earnings: in general, in countries where the effect of education is strong, the effect of occupation tends to be weak, and the other way around.

4.1.2 Indirect and Total Effects in the Status Attainment Model

In addition to direct effects, indirect and total effects are presented in Table 4-2 (unstandardized estimates) and Table A-11 (standardized estimates). Since it is likely that respondent's education and respondent's occupation have different powers of mediating the relationships in the status attainment model depending on the country under analysis, it is possible that the socialist effects might be more apparent at the total effects level rather than the direct effects level. In order to compare total effects across countries I use the unstandardized coefficients, and in order to compare the relative importance of direct and indirect effects as proportions of the total effects I use standardized coefficients so that the compared effects have the same scale. A visual representation of direct, indirect and total effects in standardized form is provided in Figure A-7 through Figure A-9.

The total effects of father's occupation on respondent's occupation in the former socialist countries are generally higher than total effect levels in liberal market economies and similar or slightly lower than effects in the other two European countries, reproducing the same pattern that was apparent in terms of direct effects for the other ascription parameter: the effect of father's

Table 4-2 Status Attainment Direct, Indirect and Total Effects - 1992 (Unstandardized Estimates)

	E. Germany			Hungary			Czech Republic			Slovenia		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.104 +	0.204 ***	0.308 ***	0.032	0.254 **	0.286 **	0.057	0.213 ***	0.271 ***	0.080 *	0.244 ***	0.324 ***
	(0.055)	(0.029)	(0.062)	(0.033)	(0.053)	(0.060)	(0.041)	(0.034)	(0.048)	(0.036)	(0.030)	(0.042)
F. Occup. → R. Earn.	-0.006	0.025 ***	0.020 *	0.011	0.027 ***	0.038 ***	0.009	0.022 ***	0.031 ***	0.010	0.032 ***	0.042 ***
	(0.010)	(0.004)	(0.009)	(0.007)	(0.006)	(0.008)	(0.009)	(0.004)	(0.009)	(0.008)	(0.005)	(0.008)
R. Educ. → R. Earn.	0.156 *	0.118 ***	0.274 ***	0.169 ***	0.166 ***	0.334 ***	0.339 ***	0.002	0.341 ***	0.360 ***	0.052	0.412 ***
	(0.061)	(0.030)	(0.052)	(0.051)	(0.032)	(0.039)	(0.064)	(0.041)	(0.046)	(0.049)	(0.034)	(0.038)
	Poland			Russia			Slovakia			Australia		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.089 *	0.177 ***	0.266 ***	0.034	0.135 ***	0.169 ***	0.043	0.262 ***	0.306 ***	0.033	0.168 ***	0.201 ***
	(0.038)	(0.033)	(0.048)	(0.039)	(0.022)	(0.037)	(0.049)	(0.049)	(0.060)	(0.026)	(0.017)	(0.028)
F. Occup. → R. Earn.	0.031 **	0.014 ***	0.045 ***	-0.005	0.008 ***	0.003	0.010	0.018 ***	0.028 *	0.000	0.016 ***	0.016 ***
	(0.011)	(0.003)	(0.011)	(0.005)	(0.002)	(0.005)	(0.013)	(0.005)	(0.012)	(0.004)	(0.002)	(0.004)
R. Educ. → R. Earn.	0.163 ***	0.042	0.204 ***	0.132 ***	0.029	0.161 ***	0.232 *	0.016	0.248 ***	0.081 **	0.166 ***	0.247 ***
	(0.048)	(0.028)	(0.038)	(0.031)	(0.017)	(0.024)	(0.097)	(0.070)	(0.061)	(0.030)	(0.017)	(0.026)
	New Zealand			USA			W. Germany			Norway		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.086 *	0.155 ***	0.241 ***	0.053	0.124 **	0.177 ***	0.050	0.292 ***	0.342 ***	0.057	0.256 ***	0.313 ***
	(0.033)	(0.027)	(0.037)	(0.036)	(0.037)	(0.045)	(0.037)	(0.026)	(0.038)	(0.038)	(0.026)	(0.037)
F. Occup. → R. Earn.	0.005	0.021 ***	0.026 ***	-0.006	0.020 **	0.014 +	0.004	0.023 ***	0.028 ***	-0.007	0.025 ***	0.017 ***
	(0.006)	(0.003)	(0.006)	(0.007)	(0.005)	(0.007)	(0.007)	(0.004)	(0.005)	(0.005)	(0.003)	(0.005)
R. Educ. → R. Earn.	0.148 *	0.224 ***	0.372 ***	0.237 ***	0.157 ***	0.393 ***	0.086	0.113 **	0.198 ***	0.193 ***	0.069 ***	0.263 ***
	(0.058)	(0.036)	(0.048)	(0.043)	(0.024)	(0.040)	(0.048)	(0.030)	(0.028)	(0.032)	(0.017)	(0.026)

Notes: Employed subsample, weighted, imputed. Standard errors in parentheses. Bootstrapped standard errors and significance levels.
*Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.*

occupation on respondent's education. In all the countries under analysis, father's occupation operates mainly indirectly, via respondent's education in the determination of respondent's occupation, the direct effects constituting only a small part of the total effects. In all countries, the total effect of father's occupation on respondent's occupation is statistically significant.

The total effects of father's occupation on earnings are again statistically significant across all countries, with the sole exception of Russia. With this exception, total effects in Eastern Europe equal or surpass effect levels in the settled capitalist countries, in contradiction to expectations advanced under the hypothesis of existence of socialist effects. In this case, again, in most cases the majority of the total effect is made up of the indirect effects of father's occupation, operating via respondent's education and occupation.

Total effects of respondent's education on respondent's earnings theoretically capture two opposing influences, under the assumption of existence of socialist effects: the increased link between education and occupation and the decreased link between occupation and earnings. Therefore, the results contribute little to understanding the nature of socialist effects on social stratification. Results are presented for informative purposes only and suggest that Eastern European total effects do not conform to a homogenous pattern: in some of the former socialist countries effects are smaller and in others they are greater than the effects in the other settled capitalist countries.

There is an interesting reversal of relative importance of direct and indirect effects in this case compared to the total effects discussed above: the direct portions of the effects constitute a larger percentage of the total effects, in most cases surpassing the percentage of effects attributable to indirect effects of education on earnings through occupation. This pattern is partially justifiable by the greater importance of achievement processes in comparison to

ascription processes in modern societies (see next section for details regarding the relative importance of achievement versus ascription in the status attainment process). Given this, the finding that social origins operate in the status attainment process mainly indirectly is noncontroversial. The relatively greater preponderance of the direct effect in comparison to the indirect effect in the relationship between education and income suggests that occupation only partially mediates the effect of education on income. In Eastern Europe the small sizes of the indirect effects are mainly due to the small and statistically nonsignificant effects of occupation on earnings.

4.1.3 The Balance between Ascription and Achievement

Table A-14 examines the relative importance of ascription processes versus achievement processes in the status attainment model, using percentages of explained variance in a series of reduced status attainment models. The total variance in respondent's occupation and respondent's earnings is decomposed into the part due to ascription processes, the part due to achievement processes, and a residual part due to other measured and unmeasured influences.

The results in Table A-14 suggest that as a rule, achievement processes are prevalent in the status attainment process, no matter what the national context under examination is. However, the proportions in which achievement and ascription processes explain the variance in respondent's occupational statuses and earnings levels differ across national contexts.

Examining first the decomposition of variance in the case of occupational statuses, the percentages of variance due to ascription (explained by father's occupation) range from a minimum of 2% to a maximum of 10%, and the percentages of variance due to achievement (explained by respondent's education, net of father's occupation) range from a minimum of 25% to a maximum of 46%. The remaining differences to 100% are due either to the socio-

demographic control variables introduced in the model or to influences unaccounted for by the model.

In general, the Central and Eastern European societies are not characterized by a greater importance of achievement relative to ascription than the liberal market societies, although the ratios of percentages of variance due to achievement to percentages of variance due to ascription are slightly higher in former socialist societies when compared to West Germany and Norway. In most of the Central and Eastern European countries, achievement processes account for about four to five times more of the variance in occupational status than ascription processes. Russia and Poland stand out as different from this pattern, with much higher ratios of achievement to ascription. Russia is characterized by the highest ratio of achievement to ascription among the countries examined in 1992, with achievement accounting for 13 times more of the total variance in occupational status than ascription.

In the determination of earnings, the Eastern European societies are characterized in general by lower ratios of achievement to ascription than all other societies. The exception to this pattern is again Russia, which has the highest ratio among the countries with data available in 1992, and, to a smaller degree, East Germany, with a higher ratio than the rest of the former socialist societies. However, in the determination of earnings, achievement and ascription processes accounted for by the model explain relatively small percentages of the variance in earnings, the majority of the variance being due to other factors. In Eastern Europe, with the exception of East Germany and Russia, the part of the variance in earnings accounted for by education and occupation jointly (net of father's occupation) is two to three times larger than the part accounted for by father's occupation. Settled capitalist societies are characterized by ratios

larger than four, and liberal market societies in particular have larger ratios, ranging from 8 (in New Zealand's case) to 30 (in USA's case).

4.1.4 Homogeneity of Effects within Regions

The 1992 status attainment effect sizes suggest that the theoretically delineated regions are characterized in general by heterogeneous effects, and where homogeneity of effects does exist, it is rather the exception to the rule. In order to examine in more detail the question of homogeneity of effects within regions, and to determine whether the within region variations observable in the status attainment model parameters are statistically significant, I now turn to tests regarding parameters invariance within regions. The tests are presented for the two regions in which data for more than two countries is available: Central and Eastern Europe and liberal market economies. Table 4-3 below presents chi-square difference tests for hypotheses of equality of effects between pairs of countries within each of these two regions and hypotheses about equality of effects across all countries within each region. Each of the main status attainment effects is examined separately. The information provided by these tests is also summarized graphically in Figure A-1 through Figure A-6.

The results suggest that in Eastern Europe, the observed differences in effects are only statistically significant for the links between respondent's social status characteristics: the effect of respondent's education on respondent's occupation, the effect of respondent's education on respondent's earnings, and the effect of respondent's occupation on respondent's earnings. For the first two effects, differences emerge between various parings of countries within region. In the case of the last effect (of respondent's occupation on respondent's earnings), the tests suggest that East Germany and Hungary have similar effects that diverge from what are essentially null

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Table 4-3 Diagnostic Tests - Equality of Parameters within Regions, across Countries, 1992

	FO → RE invariance			FO → RO invariance			RE → RO invariance			FO → RI invariance			RE → RI invariance			RO → RI invariance			Δdf
	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	
Eastern Europe	14.173	1.660	0.172	6.022	0.362	0.886	24.365	3.348	0.007	14.276	1.802	0.125	25.667	3.873	0.001	26.482	3.674	0.003	6
E. Germany - Hungary	1.040	0.366	0.551	2.927	1.111	0.308	7.376	6.564	0.011	2.864	2.286	0.133	0.464	0.376	0.540	0.522	0.403	0.526	1
E. Germany - Czech Rep.	0.795	0.576	0.449	1.443	0.475	0.499	5.353	4.215	0.042	2.065	1.112	0.299	6.822	4.377	0.043	9.667	6.870	0.011	1
E. Germany - Slovenia	0.086	0.075	0.784	0.554	0.192	0.663	5.229	4.253	0.041	2.126	1.631	0.204	11.052	6.591	0.016	4.908	3.204	0.081	1
E. Germany - Poland	0.956	0.786	0.376	0.432	0.166	0.685	0.274	0.187	0.666	8.244	5.923	0.018	0.570	0.358	0.551	5.108	3.659	0.060	1
E. Germany - Russia	5.715	5.143	0.024	3.058	1.113	0.308	0.468	0.434	0.510	33.991	0.212	0.668	0.674	0.412	0.522	10.489	8.088	0.006	1
E. Germany - Slovakia	0.139	0.086	0.770	1.794	0.551	0.469	12.309	9.381	0.003	1.412	1.225	0.269	0.751	0.513	0.475	4.306	4.050	0.044	1
Hungary - Czech Rep.	1.925	1.288	0.260	0.280	0.266	0.606	0.099	0.082	0.775	0.189	0.143	0.705	5.111	4.358	0.038	12.249	9.602	0.003	1
Hungary - Slovenia	0.893	0.412	0.525	1.196	0.989	0.321	0.202	0.162	0.687	0.056	0.032	0.859	8.059	7.924	0.005	6.833	6.016	0.015	1
Hungary - Poland	2.105	1.786	0.182	1.482	1.252	0.264	4.952	4.683	0.031	2.593	2.209	0.138	0.027	0.023	0.879	7.058	6.918	0.009	1
Hungary - Russia	9.437	2.795	0.128	0.495	0.298	0.586	6.663	5.216	0.024	3.695	3.449	0.064	0.488	0.400	0.527	14.042	12.119	0.001	1
Hungary - Slovakia	0.582	0.498	0.480	0.092	0.048	0.827	1.719	1.339	0.249	0.071	0.052	0.819	0.441	0.372	0.542	5.703	5.182	0.023	1
Czech Rep. - Slovenia	0.773	0.715	0.398	0.296	0.183	0.669	0.161	0.097	0.756	0.112	0.089	0.765	0.156	0.113	0.736	1.212	1.066	0.302	1
Czech Rep. - Poland	0.139	0.052	0.820	0.441	0.315	0.575	3.523	3.011	0.084	2.707	2.622	0.105	5.663	4.986	0.026	1.056	0.767	0.383	1
Czech Rep. - Russia	2.181	1.924	0.166	0.730	0.378	0.541	4.607	3.357	0.071	2.229	1.738	0.190	9.957	9.191	0.003	0.707	0.544	0.462	1
Czech Rep. - Slovakia	0.207	0.150	0.699	0.090	0.072	0.789	1.654	1.352	0.246	0.164	0.144	0.705	1.009	0.954	0.329	0.101	0.098	0.754	1
Slovenia - Poland	1.038	0.874	0.350	0.031	0.027	0.871	3.216	2.972	0.085	2.892	2.549	0.111	8.938	8.525	0.004	0.063	0.036	0.850	1
Slovenia - Russia	6.705	6.156	0.013	1.450	0.765	0.387	4.365	3.910	0.049	2.607	2.321	0.128	16.858	15.981	0.000	0.400	0.242	0.623	1
Slovenia - Slovakia	0.106	0.092	0.762	0.576	0.375	0.541	2.668	2.074	0.152	0.124	0.075	0.785	1.607	1.525	0.217	0.453	0.328	0.567	1
Poland - Russia	1.934	1.348	0.249	1.671	1.072	0.305	0.115	0.064	0.800	9.707	8.682	0.003	0.392	0.305	0.581	0.244	0.136	0.712	1
Poland - Slovakia	0.285	0.231	0.631	0.736	0.542	0.463	9.574	8.631	0.003	1.906	1.545	0.215	0.542	0.458	0.499	0.339	0.262	0.609	1
Russia - Slovakia	2.687	2.454	0.118	0.349	0.220	0.639	11.511	9.102	0.003	1.545	1.415	0.234	1.189	1.140	0.286	0.137	0.109	0.741	1
Liberal Market Economies	6.146	1.577	0.236	1.975	0.805	0.448	7.917	3.906	0.020	2.108	0.550	0.583	9.845	4.671	0.010	0.495	0.161	0.851	2
Australia - New Zeeland	3.210	3.174	0.075	1.817	1.558	0.213	7.041	6.855	0.009	0.591	0.495	0.482	1.243	1.088	0.297	0.166	0.138	0.711	1
Australia - USA	4.554	1.240	0.292	0.416	0.308	0.579	0.104	0.078	0.780	0.975	0.327	0.572	9.714	9.230	0.002	0.188	0.133	0.715	1
New Zeeland - USA	0.719	0.439	0.509	0.634	0.439	0.509	5.767	5.446	0.020	1.864	1.241	0.269	1.694	1.537	0.215	0.474	0.369	0.544	1

Notes: Employed subsample, weighted, imputed. The chi-square difference tests use the unconstrained model as a reference model. F test used for combining chi square statistics across imputations. P is the significance level associated with $\Delta\chi^2$. FO = father's occupation; RE = respondent's education; RO= respondent's occupation; RI = respondent's earnings. Shaded cells denote statistically significant differences (at .1 significance level) between countries.

effects in the rest of the Central and Eastern European countries (see Table 4-1 for statistical significance of individual effects).

Effects of father's occupation on respondent's social status characteristics are not statistically significantly different within Central and Eastern Europe. While there are some statistically significant differences between isolated pairings of countries, overall, effects can be considered equal within region without a significant loss of model fit. The results suggest that in 1992's former socialist countries, while ascription processes operate with basically the same intensity, achievement effects operate differently in each country. Similarly, in the liberal market countries included in the analysis in 1992, the ascription effects are homogenous. In addition, the impact of respondent's occupation on respondent's earnings also emerges as a homogenous effect within the region.

Taken together, the relationships characterizing status attainment within each of these two regions are extremely similar. Table A-12 presents an index of similarity between sets of model parameters within region. Within the Eastern European region, the similarity index (computed as the average correlation between sets of standardized model parameters) amounts to 0.929, while the value of the index in the liberal market economies region is a little higher (0.961). The values of the index denote that while there are some differences in the sizes of coefficients across countries, the status attainment process is governed by essentially the same rules within the two regions. The same can be said about the status attainment process across all 12 countries under analysis. The similarity index in this case amounts to 0.903 (see Table A-13), a value somewhat lower than the values for within region similarity, but still very close to 1 (denoting identical relationships).

4.1.5 Summary of Findings

Given the new information on homogeneity of effects within region, I revisit the comparison of direct effects between the two regions using average within region effects for a summary picture of some of the status attainment processes. Since achievement effects are homogenous within regions, and there is certain homogeneity in the relationship between respondent's occupation and respondent's income, I will focus on average levels for these particular relationships.

Average levels of the effect of father's occupation on respondent's education are slightly higher in Central and Eastern Europe than in liberal market economies (the average effect in former socialist countries is .068 while in liberal market economies the average is .047). Both average effects are extremely small and consequently the difference in average effects is not substantial. The same is the case with the effect of father's occupation on respondent's occupation (the average effect in Eastern Europe is .063 while in liberal market economies the average is .057). The effect of father's occupation on respondent's earnings is essentially null in both regions, with Poland being an exception where the effect is statistically significant.

The effect of respondent's occupation on respondent's income splits the Central and Eastern European region into two groups: the majority of countries in the region are characterized by effects that are not statistically significant, while East Germany and Hungary are characterized by similar, statistically significant effects. Even with these two countries included, the Eastern European average effect is smaller (.020) than the average effect in liberal market economies (.057).

In terms of the preponderance of achievement versus ascription in the determination of occupational and earnings levels, there is again no evidence that Central and Eastern European societies are consistently characterized by higher ratios of achievement to ascription than settled

capitalist countries. The only Eastern European society that seems to have achieved a situation in which achievement processes have an overwhelming importance relative to ascription processes in both the determination of occupational prestige and earnings levels is Russia.

In sum, there is no evidence that social origins effects were smaller in socialist societies, at least not in the picture provided by the 1992 data. There is also no evidence that the link between education and occupation was stronger in socialist societies nor that the impact of education on income was weaker than in other societies. The only evidence of a socialist effect is apparent in the effect of respondent's occupation on respondent's earnings, with former socialist societies emerging, soon after the fall of socialist regimes, with generally smaller effects than all other countries included in the analysis. This suggests that the link between occupational prestige and earnings was indeed weaker in socialist societies and other principles of awarding financial rewards might have been operating in these societies (e.g. industrial branch) even after the fall of communism.

This particular finding should be interpreted with caution though, as relationships involving earnings in the status attainment models estimated in 1992 are likely to reflect financial rewards practices adopted immediately after the fall of communism, and at most socialist practices that survived the fall of the regime. The findings regarding relationships involving father's occupation, respondent's education, and respondent's occupation are less subjected to this type of problem, as for most of the Eastern European respondents, the values of these variables were determined during the socialist period.

4.2 Status Attainment in 1999 – Postsocialist Effects

4.2.1 Direct Effects in the Status Attainment Model

The results status attainment model results for 1999 are presented in Table 4-4 (unstandardized estimates) and Table A-15 (standardized estimates). In addition a visual representation of effects in 1999, compared to effects in 1992 is provided in Figure A-1 through Figure A-6. I will first discuss the effects estimated in 1999, and then, in order to examine postcommunist effects on social stratification, I will focus on the comparison of results between 1992 and 1999 where data for both years is available. The comparisons between 1992 and 1999 will be discussed taking into account tests of equivalence of effects within regions and across time, in order to avoid interpreting small variations that are not statistically significant as patterns of differences. The model for the 1999 data has a close fit in relation to its degrees of freedom (RMSEA = 0.017), but again, the chi-square goodness of fit test suggests that the hypothesis of perfect fit is rejected (chi-square=528.027, df=114, p=0.000). As it was the case for the 1992 data, the model has the highest explanative power in the prediction of respondent's occupation (R^2 ranges from 0.18 to 0.59), while the explanative power in the case of the other two endogenous variables is more modest.

The impact of father's occupation on respondent's education is positive and statistically significant in all countries analyzed here, with small to moderate effects (β values range from 0.156 to 0.463). Levels of effects are approximately the same for Eastern European countries, liberal market economies, and social democratic countries. The Continental European countries and the Mediterranean countries are generally characterized by larger effects (with the exception of Cyprus in the Mediterranean countries group).

Table 4-4 Status Attainment Model Estimates - 1999 (Unstandardized Estimates)

	E. Germany		Hungary		Czech Rep.		Slovenia		Poland		Russia		Slovakia	
	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2
F. Occup. → R. Educ.	0.067 *** (0.014)	0.12	0.050 *** (0.007)	0.15	0.072 *** (0.007)	0.14	0.069 *** (0.009)	0.19	0.041 *** (0.011)	0.19	0.045 *** (0.008)	0.12	0.054 *** (0.008)	0.11
F. Occup. → R. Occup.	0.067 (0.067)	0.40	0.102 ** (0.036)	0.42	0.056 + (0.031)	0.48	0.045 (0.036)	0.59	0.077 + (0.044)	0.47	0.006 (0.042)	0.30	0.038 (0.036)	0.52
R. Educ. → R. Occup.	2.625 *** (0.289)		3.312 *** (0.194)		3.408 *** (0.165)		3.894 *** (0.193)		2.999 *** (0.175)		3.115 *** (0.226)		3.988 *** (0.261)	
F. Occup → R. Earn.	0.010 (0.013)	0.23	0.005 (0.008)	0.16	-0.003 (0.007)	0.32	0.000 (0.009)	0.42	0.009 (0.011)	0.25	0.011 (0.011)	0.28	0.020 ** (0.006)	0.37
R. Educ. → R. Earn.	0.089 (0.078)		0.214 *** (0.061)		0.226 *** (0.041)		0.456 *** (0.068)		0.170 * (0.066)		0.248 *** (0.050)		0.095 + (0.056)	
R. Occup. → R. Earn.	0.057 ** (0.017)		0.025 + (0.012)		0.037 *** (0.008)		0.048 *** (0.013)		0.052 *** (0.013)		0.011 (0.009)		0.058 *** (0.009)	

	Latvia		Australia		New Zealand		USA		Canada		W. Germany		France	
	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2
F. Occup. → R. Educ.	0.044 *** (0.008)	0.11	0.053 *** (0.007)	0.10	0.046 *** (0.008)	0.14	0.065 *** (0.008)	0.16	0.051 *** (0.009)	0.12	0.119 *** (0.011)	0.23	0.084 *** (0.010)	0.26
F. Occup. → R. Occup.	0.044 (0.033)	0.50	0.034 (0.032)	0.28	0.086 * (0.038)	0.18	0.025 (0.042)	0.27	0.060 (0.039)	0.31	0.169 *** (0.042)	0.46	-0.014 (0.034)	0.40
R. Educ. → R. Occup.	4.265 *** (0.225)		2.418 *** (0.158)		2.068 *** (0.212)		2.844 *** (0.215)		2.807 *** (0.238)		2.133 *** (0.151)		2.513 *** (0.153)	
F. Occup → R. Earn.	0.012 (0.007)	0.29	-0.009 + (0.005)	0.38	0.010 + (0.006)	0.29	-0.002 (0.007)	0.28	-0.001 (0.008)	0.29	0.007 (0.010)	0.30	0.002 (0.006)	0.47
R. Educ. → R. Earn.	0.246 *** (0.057)		0.037 (0.032)		0.128 *** (0.036)		0.190 *** (0.048)		0.165 ** (0.051)		0.016 (0.045)		0.177 *** (0.037)	
R. Occup. → R. Earn.	0.034 *** (0.009)		0.076 *** (0.006)		0.061 *** (0.007)		0.040 *** (0.007)		0.042 *** (0.008)		0.066 *** (0.011)		0.084 *** (0.008)	

	Norway		Sweden		Cyprus		Portugal		Spain	
	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2	Estimate	R^2
F. Occup. → R. Educ.	0.044 *** (0.006)	0.13	0.036 ** (0.011)	0.07	0.047 *** (0.009)	0.34	0.165 *** (0.015)	0.33	0.154 *** (0.014)	0.29
F. Occup. → R. Occup.	0.040 (0.057)	0.43	0.039 (0.041)	0.34	0.098 * (0.038)	0.50	0.133 *** (0.039)	0.52	0.075 (0.046)	0.42
R. Educ. → R. Occup.	3.518 *** (0.260)		3.079 *** (0.244)		3.305 *** (0.171)		1.974 *** (0.108)		1.992 *** (0.149)	
F. Occup → R. Earn.	-0.004 (0.008)	0.35	0.004 (0.006)	0.40	0.001 (0.006)	0.35	-0.020 * (0.008)	0.45	0.005 (0.009)	0.33
R. Educ. → R. Earn.	0.142 *** (0.041)		0.259 *** (0.045)		0.275 *** (0.041)		0.300 *** (0.028)		0.136 *** (0.031)	
R. Occup. → R. Earn.	0.047 *** (0.007)		0.051 *** (0.007)		0.009 (0.008)		0.017 * (0.008)		0.039 *** (0.009)	

Notes: Employed sample, weighted, imputed
Standard errors in parentheses. Chi-square=528.027 (df=114), F (for combining chi square tests across imputations) =4.257 (p=0.000); RMSEA=0.017.
Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.

The effect of father's occupation on respondent's occupation tends to be nonsignificant, but there are some exceptions. Poland and New Zealand which were characterized by statistically significant effects in 1992 still emerge as contexts where the effect is statistically significant, but other than that, the picture shifts, with some countries 'loosing' and others 'gaining' statistically significant effects. The variation in effect sizes within and across regions makes it hard to define a clear-cut pattern. However, I will return to the discussion of this problem after examining the statistical tests for parameter invariance.

The effect of respondent's education on respondent's occupation is again the strongest effect in standardized terms among the main status attainment effects estimated (β values range from 0.397 to 0.756). The comparison of unstandardized effects across regions suggests that Eastern European effect levels are slightly higher than liberal market economies, Continental European levels, and Mediterranean countries levels (with the exception of Cyprus), but approximately similar to social democratic countries levels.

As it was the case in 1992, in general, direct effects of father's occupation on respondent's earnings are not statistically significant. However, Slovakia and New Zealand emerge with small positive and statistically significant effects, and Australia and Portugal emerge with small statistically significant effects but this time the effects are negative. The negative effects are small, and the sign could be due to a degree of colinearity between predictors of respondent's earnings.

In regard to the relationship between respondent's education and respondent's earnings, the direct effects vary widely within region. The effects are in general statistically significant, but there are a few exceptions (East Germany, Australia, and West Germany). Due to the high degree of within-region variation of effects, no clear-cut pattern of levels across regions is

apparent. If one ignores the Eastern European countries that are characterized by much smaller than region average effects (East Germany and Slovakia), then it could be said that former socialist countries display larger effects than liberal market economies and Continental European countries.

The 1999 pattern of significance of effects of respondent's occupation on respondent's earnings changes drastically from the pattern observed in 1992. While in 1992 most Eastern European effects were not statistically significant, in 1999 all former socialist countries with the exception of Russia are characterized by statistically significant effects. Although this suggests that the relationship has been increasing since 1992 in Eastern Europe, the rate at which it increased varies by country, producing a wide range of effect sizes within the region. The comparison of effect sizes across regions suggests that Eastern European effect levels are 'catching up' with levels in liberal market economies, and are increasing at a parallel pace with effects in Continental European countries and social democratic countries. The Mediterranean countries are characterized by varying effects, but the average region effect size is smaller than the average Eastern European average.

The pattern of competing effects of respondent's education and occupation on earnings is reproduced in the 1999 data (see standardized effect levels in Table A-15), with countries characterized by large education effects tending to display small occupation effects and the other way around. Furthermore, overtime changes in these two relationships also tend to take place in different directions: in general, in countries where the effect of education on earnings increases over time, the effect of occupation on earnings decreases over time (see Figure A-5 and Figure A-6). Since at least in Eastern Europe the effect of respondent's education on respondent's occupation hardly changes over time (see Figure A-3), the question regarding the process of a

recomposition of social status during the transition period is largely related to the possibly offsetting trends in the other two achievement parameters (the impact of respondent's education on respondent's earnings and the impact of respondent's occupation on respondent's earnings).

In order to examine in more detail the trends related to status consistency over time, a summary measure of status consistency is constructed and presented in Table A-16. In 1992, the status consistency indicator revolves around a 60% value for all countries with available data. There is no evidence in these results that socialist countries are characterized by lower levels of status consistency than the other settled capitalist countries, as the thesis of social status decomposition in socialist societies suggests. It is true, though, that for most Eastern European countries, the degree of status consistency slightly increased between 1992 and 1999 despite the apparently offsetting direct effects mentioned above, while for the other settled capitalist countries, the index generally maintained the same value over time or even slightly decreased.

Since there is no evidence that socialist countries were characterized by a greater degree of status decomposition in comparison to settled capitalist countries, it is unclear whether the slight increase in status consistency in Eastern Europe is due to the removal of a socialist logic of stratification or to other processes.

4.2.2   Indirect and Total Effects in the Status Attainment Model

Total effects of father's occupation on respondent's occupation (see Table 4-5, Table A-17, and Figure A-7 through Figure A-9) are positive and statistically significant in all countries examined here. The total effects suggest a more coherent pattern than the direct effects (which tended to be nonsignificant) did. With the exception of Russia, Eastern European total effects are slightly larger than effects in liberal market economies and in social democratic countries. The other two regions (Central Europe and Mediterranean countries) are less homogenous in terms of total

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Table 4-5 Status Attainment Direct, Indirect and Total Effects - 1999 (Unstandardized Estimates)

	E. Germany			Hungary			Czech Republic			Slovenia		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.067	0.176 ***	0.242 **	0.102 **	0.165 ***	0.267 ***	0.056 +	0.246 ***	0.302 ***	0.045	0.271 ***	0.315 ***
	(0.067)	(0.039)	(0.074)	(0.035)	(0.026)	(0.043)	(0.031)	(0.024)	(0.034)	(0.037)	(0.037)	(0.046)
F. Occup. → R. Earn.	0.010	0.020 **	0.030 *	0.005	0.017 ***	0.022 **	-0.003	0.028 ***	0.024 ***	0.000	0.047 ***	0.047 ***
	(0.014)	(0.007)	(0.014)	(0.008)	(0.003)	(0.008)	(0.007)	(0.003)	(0.006)	(0.009)	(0.006)	(0.010)
R. Educ. → R. Earn.	0.089	0.150 **	0.239 ***	0.214 **	0.083 +	0.297 ***	0.226 ***	0.126 ***	0.353 ***	0.456 ***	0.186 **	0.643 ***
	(0.082)	(0.048)	(0.065)	(0.064)	(0.041)	(0.051)	(0.041)	(0.027)	(0.033)	(0.070)	(0.054)	(0.045)

	Poland			Russia			Slovakia			Latvia		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.077 +	0.124 ***	0.202 ***	0.006	0.141 ***	0.147 *	0.038	0.213 ***	0.251 ***	0.044	0.188 ***	0.232 ***
	(0.045)	(0.034)	(0.052)	(0.043)	(0.028)	(0.053)	(0.036)	(0.034)	(0.045)	(0.034)	(0.036)	(0.045)
F. Occup. → R. Earn.	0.009	0.018 ***	0.027 *	0.011	0.013 ***	0.024 *	0.020 **	0.019 ***	0.039 ***	0.012	0.019 ***	0.031 ***
	(0.011)	(0.005)	(0.012)	(0.011)	(0.003)	(0.009)	(0.006)	(0.004)	(0.006)	(0.007)	(0.004)	(0.007)
R. Educ. → R. Earn.	0.170 *	0.158 ***	0.328 ***	0.248 ***	0.035	0.283 ***	0.095 +	0.229 ***	0.324 ***	0.246 ***	0.147 ***	0.393 ***
	(0.067)	(0.040)	(0.048)	(0.050)	(0.027)	(0.041)	(0.058)	(0.040)	(0.042)	(0.057)	(0.037)	(0.042)

	Australia			New Zealand			USA			Canada		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.034	0.127 ***	0.161 ***	0.086 *	0.095 ***	0.181 ***	0.025	0.185 ***	0.210 ***	0.060	0.144 ***	0.204 ***
	(0.033)	(0.018)	(0.034)	(0.039)	(0.020)	(0.038)	(0.042)	(0.028)	(0.040)	(0.039)	(0.026)	(0.038)
F. Occup. → R. Earn.	-0.009 +	0.014 ***	0.006	0.010 +	0.017 ***	0.027 ***	-0.002	0.021 ***	0.019 *	-0.001	0.017 ***	0.016 *
	(0.005)	(0.003)	(0.006)	(0.006)	(0.003)	(0.006)	(0.007)	(0.004)	(0.007)	(0.007)	(0.003)	(0.008)
R. Educ. → R. Earn.	0.037	0.184 ***	0.221 ***	0.128 ***	0.126 ***	0.255 ***	0.190 ***	0.115 ***	0.305 ***	0.165 **	0.117 ***	0.281 ***
	(0.032)	(0.019)	(0.030)	(0.037)	(0.021)	(0.036)	(0.049)	(0.021)	(0.044)	(0.051)	(0.026)	(0.043)

	W. Germany			France			Norway			Sweden		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.169 ***	0.254 ***	0.423 ***	-0.014	0.211 ***	0.197 ***	0.040	0.156 ***	0.196 *	0.039	0.112 **	0.151 *
	(0.043)	(0.030)	(0.043)	(0.033)	(0.026)	(0.035)	(0.057)	(0.024)	(0.060)	(0.041)	(0.032)	(0.056)
F. Occup. → R. Earn.	0.007	0.030 ***	0.036 ***	0.002	0.031 ***	0.033 ***	-0.004	0.016 **	0.012	0.004	0.017 **	0.021 **
	(0.010)	(0.006)	(0.010)	(0.006)	(0.004)	(0.007)	(0.008)	(0.004)	(0.008)	(0.006)	(0.005)	(0.007)
R. Educ. → R. Earn.	0.016	0.142 ***	0.157 ***	0.177 ***	0.210 ***	0.386 ***	0.142 ***	0.163 ***	0.306 ***	0.259 ***	0.156 ***	0.416 ***
	(0.046)	(0.027)	(0.039)	(0.037)	(0.023)	(0.032)	(0.043)	(0.026)	(0.036)	(0.044)	(0.025)	(0.041)

	Cyprus			Portugal			Spain			Notes: Employed subsample,		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	weighted, imputed.		
F. Occup. → R. Occup.	0.098 *	0.155 ***	0.252 ***	0.133 ***	0.326 ***	0.458 ***	0.075	0.307 ***	0.381 ***	Standard errors in parentheses.		
	(0.039)	(0.032)	(0.049)	(0.040)	(0.036)	(0.044)	(0.047)	(0.037)	(0.045)	Bootstrapped standard errors and		
F. Occup. → R. Earn.	0.001	0.015 ***	0.016 *	-0.020 *	0.057 ***	0.037 ***	0.005	0.036 ***	0.040 ***	significance levels.		
	(0.007)	(0.003)	(0.007)	(0.008)	(0.006)	(0.008)	(0.010)	(0.005)	(0.009)	Significance levels: *** $p < 0.001$,		
R. Educ. → R. Earn.	0.275 ***	0.028	0.303 ***	0.300 ***	0.034 *	0.334 ***	0.136 ***	0.077 ***	0.213 ***	** $p < 0.01$, * $p < 0.05$, + $p < 0.1$.		
	(0.041)	(0.025)	(0.028)	(0.029)	(0.017)	(0.021)	(0.032)	(0.018)	(0.026)			

effects sizes. The 1992 ordering of total effects is largely preserved in 1999, with most effects having a tendency to slightly diminish over time. As it was the case in 1992, the largest part of the total effects is constituted by the indirect effect of father's occupation operating through respondent's education.

Total effects of father's occupation on respondent's earnings are also statistically significant in the majority of cases (the exceptions being Australia and Norway, where negative direct effects offset the positive indirect effects). As it was the case in 1992, total effects in Eastern Europe generally equal or surpass effects in liberal market economies and social democratic countries, although there is a fair degree of variation within the former socialist countries region. The continental European effects are within the range covered by former socialist countries, and in the Mediterranean countries case, effects seem once again the least homogenous. Indirect effects through respondent's education and occupation are again, as in 1992, accounting for the largest part of the total effects in most countries. Unlike the total effects of father's occupation on respondent's occupation, there is no consistent trend of diminishing effects over time in this case.

Eastern European total effects of respondent's education on respondent's earnings are slightly greater than effects in liberal market economies and, ignoring 'outlier' effects like Slovenia, effects are at about the same level as social democratic countries effects and Mediterranean effects. The two Continental European countries are characterized by different effect sizes and do not seem to define a homogenous pattern. In general the pattern observed in 1992 of greater portions of the total effect being attributable to direct effects is preserved in 1999.

4.2.3 The Balance between Ascription and Achievement

In general, the ratio of achievement to ascription in the determination of occupational status in Eastern Europe increases over the time period studied (see Table A-14). Russia and Poland continue to be characterized by the highest ratios (achievement processes account for about 13 to 14 times more of the variance in occupational prestige than ascription processes).For the other countries with data available at both time points there is a less clear over time trend. In the liberal market economies group, ratios of achievement to ascription for New Zealand and USA slightly decrease while in Australia the ratio increases. The remaining two countries with data at both time points also have contrasting trends (the ratio decreases for West Germany and increases for Norway).

While for 1992 the results suggested that in general Eastern European countries were not characterized by a greater importance of achievement relative to ascription in comparison to settled capitalist countries, the over time trends make the 1999 cross-region comparison less clear. Over time, however, there is no evidence that ascription processes in Eastern Europe gain in importance, neither in terms of absolute percentages of variance in respondent's occupation explained by father's occupation (in general these percentages decrease over time) nor in terms of achievement to ascription ratios (which generally increase over time).

In terms of processes determining earnings levels, a similar increasing trend in ratios of achievement to ascription emerges in Eastern Europe (East Germany and Russia and, to a smaller degree, Slovakia are exceptions to this trend). In the rest of the countries with data available at both time points the over time trends characterizing the determination of earnings are in the same direction as trends described earlier in the determination of occupational prestige.

In sum, results regarding the balance between ascription and achievement in processes determining occupational prestige and earnings levels do not provide any evidence that ascription processes begin to gain in importance in Central and Eastern European societies after the fall of socialist regimes. The over time conflicting trends in the balance index for settled capitalist countries make the cross regional patterns of the relative importance of achievement and ascription harder to interpret in 1999 in comparison to 1992.

4.2.4 Homogeneity of Effects within Regions and across Time

The tests of effect invariance across countries within regions for 1999 (see Table 4-6 and Figure A-1 through Figure A-6) suggest that for this time point there are more pervasive differences between effects within regions. In Eastern Europe only two of the three ascription parameters can be considered equal across the countries in the region (the impact of father's occupation on respondent's occupation and the impact of father's occupation on respondent's earnings which in general were found to be statistically nonsignificant – see Table 4-4). The effect of father's occupation on respondent's education which was found to be invariant within Eastern Europe in 1992 can no longer be considered equal within the region without a statistically significant loss of model fit. Similarly to 1992 results, all three achievement parameters (the effect of respondent's education on respondent occupation and on respondent's earnings and the effect of respondent's occupation on respondent's earnings) are heterogeneous within the Eastern European region.

The liberal market economies emerge with homogenous effects for all three ascription parameters, similar to the 1992 case, but the 1992 homogeneity in the impact of respondent's occupation on respondent's earnings is no longer observable in 1999 within the region. The social democratic countries form the most homogenous group, with invariant effects for each of

Table 4-6 Diagnostic Tests - Equality of Parameters within Regions, across Countries, 1999

	FO → RE invariance			FO → RO invariance			RE → RO invariance			FO → RI invariance			RE → RI invariance			RO → RI invariance			Δdf
	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	
Eastern Europe	17.751	2.374	0.022	5.916	0.674	0.693	48.751	5.327	0.001	10.543	1.235	0.294	25.263	3.444	0.001	24.516	2.928	0.010	7
E. Germany - Hungary	1.358	1.144	0.285	0.691	0.207	0.652	4.956	3.621	0.061	0.146	0.100	0.752	2.109	1.621	0.205	3.661	2.325	0.135	1
E. Germany - Czech Rep.	0.195	0.143	0.705	0.217	0.178	0.673	7.268	5.139	0.027	0.926	0.803	0.371	3.059	2.233	0.139	1.683	1.189	0.278	1
E. Germany - Slovenia	0.108	0.065	0.798	0.566	0.344	0.559	16.607	12.367	0.001	0.585	0.339	0.562	15.076	13.479	0.000	0.480	0.209	0.649	1
E. Germany - Poland	2.313	1.944	0.164	0.360	0.227	0.634	1.776	1.113	0.296	0.110	0.084	0.772	0.940	0.662	0.417	0.193	0.120	0.729	1
E. Germany - Russia	2.207	1.803	0.181	1.121	0.651	0.423	2.322	1.965	0.162	0.303	0.248	0.619	3.571	3.106	0.079	7.860	6.635	0.011	1
E. Germany - Slovakia	0.927	0.675	0.412	0.622	0.591	0.442	17.144	10.601	0.003	0.567	0.477	0.490	0.134	0.079	0.779	0.183	0.113	0.737	1
E. Germany - Latvia	2.561	2.016	0.158	0.522	0.349	0.555	24.628	18.942	0.000	0.089	0.037	0.848	3.105	2.642	0.105	1.952	1.491	0.224	1
Hungary - Czech Rep.	5.057	4.870	0.027	1.213	0.946	0.332	0.193	0.143	0.706	0.727	0.653	0.419	0.186	0.098	0.755	1.284	0.698	0.408	1
Hungary - Slovenia	3.031	2.957	0.086	1.586	1.227	0.270	4.894	4.739	0.030	0.335	0.277	0.598	8.656	7.671	0.006	2.560	1.757	0.190	1
Hungary - Poland	0.426	0.403	0.526	0.366	0.191	0.662	1.528	1.458	0.227	0.209	0.098	0.755	0.560	0.302	0.584	3.565	2.372	0.130	1
Hungary - Russia	0.258	0.196	0.658	3.865	3.023	0.085	0.585	0.412	0.522	0.747	0.466	0.497	0.409	0.176	0.676	1.450	0.957	0.331	1
Hungary - Slovakia	0.209	0.102	0.749	1.920	1.816	0.178	5.582	4.843	0.029	2.309	2.101	0.148	2.472	2.130	0.145	6.211	4.917	0.029	1
Hungary - Latvia	0.545	0.399	0.528	1.613	1.456	0.228	11.284	10.695	0.001	0.534	0.483	0.487	0.271	0.146	0.703	0.708	0.420	0.519	1
Czech Rep. - Slovenia	0.082	0.057	0.811	0.343	0.180	0.672	4.223	3.482	0.064	0.390	0.194	0.660	9.827	8.109	0.005	0.960	0.429	0.516	1
Czech Rep. - Poland	5.738	5.477	0.019	0.486	0.425	0.515	3.211	2.963	0.085	1.250	0.939	0.334	0.894	0.546	0.462	1.456	0.952	0.333	1
Czech Rep. - Russia	7.673	6.852	0.009	1.291	1.109	0.293	1.338	1.084	0.299	2.873	1.431	0.243	0.216	0.158	0.691	6.156	5.794	0.016	1
Czech Rep. - Slovakia	3.522	3.146	0.077	0.353	0.266	0.606	4.819	4.071	0.045	7.640	6.141	0.015	3.829	3.700	0.054	3.133	2.963	0.085	1
Czech Rep. - Latvia	9.046	7.049	0.009	0.270	0.122	0.728	10.655	10.430	0.001	3.188	3.102	0.078	0.119	0.089	0.765	0.129	0.078	0.780	1
Slovenia - Poland	4.075	3.975	0.046	0.530	0.331	0.566	12.885	11.621	0.001	0.535	0.464	0.496	11.652	10.908	0.001	0.130	0.075	0.785	1
Slovenia - Russia	4.768	4.523	0.034	0.818	0.485	0.488	7.848	6.311	0.013	1.247	0.831	0.365	7.287	5.747	0.018	7.541	5.106	0.029	1
Slovenia - Slovakia	2.022	1.865	0.172	0.214	0.121	0.728	0.246	0.203	0.652	4.024	3.213	0.075	19.015	16.342	0.000	0.637	0.347	0.558	1
Slovenia - Latvia	5.642	4.556	0.035	0.042	0.030	0.862	1.804	1.555	0.213	1.704	0.940	0.338	6.331	5.333	0.022	1.125	0.679	0.413	1
Poland - Russia	0.091	0.080	0.777	2.152	1.121	0.298	0.279	0.162	0.687	0.142	0.104	0.748	1.407	0.796	0.377	9.091	7.225	0.008	1
Poland - Slovakia	0.886	0.759	0.384	0.854	0.436	0.512	13.102	10.926	0.001	0.854	0.748	0.388	1.141	0.692	0.409	0.248	0.107	0.743	1
Poland - Latvia	0.205	0.115	0.734	0.516	0.373	0.542	21.835	20.106	0.000	0.228	0.166	0.683	1.091	0.705	0.404	1.674	1.365	0.244	1
Russia - Slovakia	0.791	0.527	0.469	0.571	0.363	0.548	8.550	5.706	0.021	1.375	0.526	0.476	4.540	4.264	0.039	15.882	14.866	0.000	1
Russia - Latvia	0.402	0.221	0.639	0.828	0.498	0.482	14.755	12.661	0.000	0.570	0.309	0.580	0.037	0.024	0.876	4.224	3.892	0.049	1
Slovakia - Latvia	0.994	0.803	0.371	0.150	0.090	0.764	0.887	0.736	0.392	0.952	0.627	0.430	3.719	3.553	0.060	3.494	3.400	0.065	1

Table 4-6 (continued)

	FO → RE invariance			FO → RO invariance			RE → RO invariance			FO → RI invariance			RE → RI invariance			RO → RI invariance			Δdf
	Δχ²	F	p	Δχ²	F	p	Δχ²	F	p	Δχ²	F	p	Δχ²	F	p	Δχ²	F	p	
Liberal Market Economies	6.056	0.523	0.681	2.586	0.390	0.762	9.604	2.991	0.030	6.104	1.972	0.116	11.390	3.087	0.032	21.565	7.010	0.000	3
Australia - New Zeeland	0.753	0.343	0.561	1.404	1.070	0.303	1.960	1.593	0.208	5.721	5.644	0.018	3.943	3.484	0.063	3.171	2.620	0.107	1
Australia - USA	2.085	1.322	0.255	0.155	0.127	0.722	2.757	2.598	0.107	0.692	0.475	0.492	8.857	6.493	0.013	16.524	16.131	0.000	1
Australia - Canada	0.147	0.088	0.766	0.552	0.240	0.626	2.072	1.835	0.176	0.953	0.736	0.392	5.167	5.039	0.025	12.403	11.916	0.001	1
New Zeeland - USA	5.263	2.087	0.171	1.789	1.223	0.272	7.238	6.410	0.012	2.302	1.652	0.202	1.284	1.115	0.291	5.338	4.788	0.029	1
New Zeeland - Canada	0.301	0.260	0.610	0.416	0.275	0.600	5.975	5.406	0.020	1.632	1.357	0.245	0.432	0.324	0.569	3.976	2.923	0.091	1
USA - Canada	2.506	1.236	0.277	0.916	0.327	0.572	0.118	0.083	0.774	0.164	0.089	0.765	0.336	0.139	0.710	0.063	0.031	0.860	1
Continental Europe (W. Germ.-France)	7.667	5.693	0.020	15.769	10.852	0.002	3.414	3.147	0.076	0.294	0.174	0.677	8.196	7.369	0.007	1.614	1.495	0.222	1
Social Democracies (Norway-Sweden)	1.302	0.462	0.504	1.518	0.625	0.437	2.410	1.348	0.254	1.854	0.691	0.416	3.938	3.713	0.054	0.290	0.175	0.676	1
Mediterranean Countries	69.514	29.302	0.000	1.084	0.474	0.623	50.912	23.707	0.000	6.802	3.087	0.047	18.537	8.312	0.000	8.936	3.400	0.040	2
Cyprus - Portugal	44.890	41.817	0.000	0.527	0.411	0.522	45.027	41.806	0.000	4.885	4.348	0.038	0.444	0.317	0.574	0.723	0.581	0.447	1
Cyprus - Spain	43.276	36.996	0.000	0.194	0.164	0.686	36.029	33.727	0.000	0.451	0.192	0.663	9.174	6.833	0.011	8.733	6.663	0.012	1
Portugal - Spain	0.308	0.286	0.593	0.987	0.914	0.339	0.051	0.037	0.848	5.541	4.666	0.032	16.793	16.037	0.000	3.488	3.285	0.070	1

Notes: Employed subsample, weighted, imputed. The chi-square difference tests use the unconstrained model as a reference model. F test used for combining chi square statistics across imputations. P is the significance level associated with Δχ². FO = father's occupation; RE = respondent's education; RO= respondent's occupation; RI = respondent's earnings. Shaded cells denote statistically significant differences (at .1 significance level) between countries.

Table 4-7 Diagnostic Tests - Equality of Parameters within Countries, across Years, 1992 and 1999

	FO → RE invariance			FO → RO invariance			RE → RO invariance			FO → RI invariance			RE → RI invariance			RO → RI invariance			Δdf
	Δχ²	F	p	Δχ²	F	p	Δχ²	F	p	Δχ²	F	p	Δχ²	F	p	Δχ²	F	p	
E. Germany	0.372	0.233	0.630	0.684	0.369	0.545	0.264	0.223	0.637	1.187	0.848	0.359	1.060	0.442	0.511	0.854	0.501	0.481	1
Hungary	7.068	2.968	0.107	2.373	2.160	0.142	0.081	0.062	0.803	0.463	0.377	0.539	0.551	0.373	0.542	3.778	2.467	0.123	1
Czech Rep.	0.462	0.417	0.518	0.197	0.135	0.714	0.304	0.151	0.698	1.846	1.099	0.300	2.571	2.280	0.132	7.930	5.446	0.024	1
Slovenia	0.254	0.234	0.629	0.667	0.487	0.486	7.026	5.973	0.015	0.953	0.614	0.435	1.593	1.360	0.244	4.926	3.286	0.076	1
Poland	2.373	2.016	0.157	0.128	0.080	0.777	0.627	0.616	0.432	2.303	2.151	0.143	0.270	0.176	0.675	6.335	5.242	0.023	1
Russia	0.332	0.292	0.589	0.592	0.301	0.585	1.901	1.416	0.236	3.820	1.727	0.205	4.526	3.777	0.053	0.178	0.138	0.711	1
Slovakia	1.498	1.324	0.250	0.108	0.058	0.810	0.755	0.594	0.442	0.637	0.458	0.499	1.790	1.664	0.197	7.779	7.536	0.006	1
Australia	0.393	0.305	0.581	0.122	0.068	0.794	5.494	5.292	0.021	1.527	1.381	0.240	1.159	0.993	0.320	6.247	6.141	0.013	1
New Zeeland	0.281	0.131	0.718	0.083	0.056	0.814	25.853	24.396	0.000	0.406	0.334	0.563	0.096	0.084	0.772	0.050	0.039	0.844	1
USA	8.567	1.713	0.230	0.757	0.284	0.597	0.169	0.142	0.706	0.614	0.168	0.685	0.735	0.507	0.478	2.174	1.784	0.183	1
W. Germany	1.020	0.656	0.420	7.287	5.361	0.024	10.602	9.447	0.002	0.369	0.231	0.631	2.201	1.196	0.282	3.956	2.528	0.119	1
Norway	20.241	16.683	0.000	0.619	0.432	0.512	5.537	4.154	0.045	0.727	0.406	0.526	1.011	0.954	0.329	6.980	6.278	0.013	1

Notes: Employed subsample, weighted, imputed. The chi-square difference tests use the unconstrained model as a reference model. F test used for combining chi square statistics across imputations. P is the significance level associated with Δχ². FO = father's occupation; RE = respondent's education; RO= respondent's occupation; RI = respondent's earnings. Shaded cells denote statistically significant differences (at .1 significance level) across time.

the main status attainment parameters except for the impact of respondent's education on respondent's earnings. The two countries from the Continental European group and the three from the Mediterranean countries group are in general characterized by different within region effects for a larger number of the main status attainment parameters.

For the countries with available data at both time points, results suggest that in general differences in the ascription parameters over time are not statistically significant (see Table 4-7 and Figure A-1 through Figure A-6). Most of the countries are also characterized by over time invariant effects of respondent's education on respondent's earnings (the only exception is Russia for which the effect increases significantly over time). For most of the Eastern European countries, the impact of respondent's education on respondent's occupation does not change significantly over time (excepting Slovenia's case), while changes in this effect tend to be significant in most other countries examined here. There is less of a pattern in the changes across time in the effect of respondent's occupation on respondent's earnings. For some Eastern European countries the effect is statistically different across time (Czech Republic, Slovenia, Poland, and Slovakia), but East Germany, Hungary and Russia are characterized by nonsignificant differences. Among the other settled capitalist countries, New Zealand, USA, and West Germany are characterized by nonsignificant differences.

Despite differences in individual effects within regions in 1999, the global within region similarity indexes are still high (see Table A-18). The index value for Eastern Europe in 1999 (0.928) is extremely close to the 1992 value (0.929), but the index decreases slightly for liberal market economies (the index value in 1992 was 0.961 and the 1999 value is 0.909). As the previously discussed, more detailed diagnostic tests of parameter invariance within region suggested, the two social democratic countries form the most homogenous group (the similarity

index value is 0.970), and the other two groups are characterized by more heterogeneity in status attainment effects (the similarity index is 0.849 for Continental Europe and 0.860 for Mediterranean countries). The overall cross-country similarity index value is also slightly lower than the 1992 value (the index decreases from a value of 0.903 to 0.871). While in the 1992 case the within region similarity indexes were higher than the index value across all countries, in 1992 the two least homogenous groups (Continental Europe and Mediterranean countries) are characterized by lower index values than the cross country value, reinforcing the picture of extreme heterogeneity of effects in these two groups.

Across time, similarity indexes for each country are high, with Slovakia being the only country with a lower than .90 value (see Table A-19). The small value in this case is triggered largely by the over time increase in the effect of respondent's occupation on respondent's earnings.

4.2.5   Patterns of Direct Effects by Cohort Groups in Central and Eastern Europe

Contrary to expectations, very few statistically significant over time differences emerge when the status attainment process is examined by cohort groupings (see Table 4-8). This suggests that to a large degree the status attainment process is similar across cohorts, at least in the Eastern European case.

The expectation that changes in the ascription parameters of the status attainment model are more likely to affect Eastern European respondents who were younger at the time of the fall of the regimes is not confirmed by these results. The majority of observed statistically significant over time changes involve the achievement relationships. Furthermore, to the extent that over time differences in ascription parameters emerge, they do so in the cohort of respondents born

Table 4-8 Status Attainment Model Estimates by Cohort – 1992 and 1999 (Unstandardized Estimates)

	E. Germany						Hungary					
	Cohort 1		Cohort 2		Cohort 3		Cohort 1		Cohort 2		Cohort 3	
	1992	1999	1992	1999	1992	1999	1992	1999	1992	1999	1992	1999
F. Occup. → R. Educ.	0.107 ***	0.111 **	0.070 ***	0.061 **	0.049 **	0.042 *	0.090 *	0.082 **	0.067 ***	0.040 **	0.070 ***	0.048 ***
	(0.018)	(0.039)	(0.015)	(0.020)	(0.015)	(0.018)	(0.030)	(0.025)	(0.012)	(0.012)	(0.016)	(0.009)
F. Occup. → R. Occup.	0.114	0.060	0.074	0.084	0.135	0.031	0.042	-0.010	0.007	0.090	0.134	0.139 **
	(0.100)	(0.169)	(0.059)	(0.088)	(0.094)	(0.093)	(0.056)	(0.090)	(0.044)	(0.056)	(0.090)	(0.054)
R. Educ. → R. Occup.	2.655 ***	2.243 ***	2.984 ***	2.578 ***	1.728 **	3.502 ***	3.406 ***	3.525 ***	3.313 ***	3.113 ***	3.058 ***	3.658 ***
	(0.282)	(0.528)	(0.251)	(0.377)	(0.636)	(0.835)	(0.251)	(0.381)	(0.282)	(0.291)	(0.592)	(0.370)
F. Occup → R. Earn.	-0.009	0.016	0.019	0.000	-0.019	-0.002	0.006	-0.027	0.016 +	0.012	0.021	0.005
	(0.017)	(0.035)	(0.012)	(0.023)	(0.025)	(0.028)	(0.013)	(0.020)	(0.010)	(0.013)	(0.020)	(0.013)
R. Educ.→ R. Earn.	0.116	0.049	0.100	0.079	0.042	0.161	0.173 *	0.419 **	0.100	0.284 **	0.153	0.057
	(0.090)	(0.126)	(0.073)	(0.105)	(0.157)	(0.242)	(0.074)	(0.126)	(0.074)	(0.097)	(0.145)	(0.108)
R. Occup. → R. Earn.	0.052 **	0.053 *	0.046 ***	0.066 **	0.024	0.038	0.062 ***	-0.013	0.058 ***	0.017	0.020	0.043 *
	(0.016)	(0.025)	(0.012)	(0.023)	(0.025)	(0.037)	(0.015)	(0.025)	(0.014)	(0.021)	(0.020)	(0.019)

	Czech Rep.						Slovenia					
	Cohort 1		Cohort 2		Cohort 3		Cohort 1		Cohort 2		Cohort 3	
	1992	1999	1992	1999	1992	1999	1992	1999	1992	1999	1992	1999
F. Occup. → R. Educ.	0.051 **	0.078 ***	0.072 ***	0.083 ***	0.046 **	0.047 ***	0.088 ***	0.072 **	0.077 ***	0.076 ***	0.057 ***	0.061 ***
	(0.016)	(0.016)	(0.014)	(0.010)	(0.018)	(0.010)	(0.021)	(0.028)	(0.011)	(0.014)	(0.013)	(0.012)
F. Occup. → R. Occup.	0.067	0.042	-0.006	0.030	0.229 *	0.114 *	-0.083	0.128	0.143 **	-0.050	0.133 *	0.141 *
	(0.056)	(0.053)	(0.068)	(0.046)	(0.112)	(0.055)	(0.084)	(0.079)	(0.048)	(0.050)	(0.063)	(0.059)
R. Educ. → R. Occup.	3.028 ***	2.958 ***	3.385 ***	3.497 ***	5.022 ***	4.176 ***	3.640 ***	3.505 ***	3.102 ***	4.177 ***	2.864 ***	3.689 ***
	(0.290)	(0.226)	(0.361)	(0.249)	(0.915)	(0.425)	(0.344)	(0.432)	(0.245)	(0.264)	(0.380)	(0.357)
F. Occup → R. Earn.	0.005	0.020 +	0.002	-0.014	0.033	-0.009	0.007	-0.024	0.013	0.001	0.014	0.000
	(0.010)	(0.011)	(0.015)	(0.010)	(0.027)	(0.013)	(0.017)	(0.025)	(0.010)	(0.013)	(0.017)	(0.014)
R. Educ.→ R. Earn.	0.350 ***	0.173 **	0.429 ***	0.261 ***	-0.437 +	0.308 **	0.377 ***	0.802 ***	0.354 ***	0.424 ***	0.202	0.413 ***
	(0.081)	(0.056)	(0.099)	(0.060)	(0.251)	(0.112)	(0.091)	(0.211)	(0.066)	(0.102)	(0.140)	(0.107)
R. Occup. → R. Earn.	-0.009	0.029 *	-0.015	0.044 ***	0.090 **	0.035 *	0.010	-0.001	0.028 *	0.054 *	-0.009	0.052 **
	(0.018)	(0.013)	(0.017)	(0.012)	(0.030)	(0.016)	(0.018)	(0.047)	(0.013)	(0.020)	(0.029)	(0.019)

Table 4-8 (continued)

	Poland						Russia					
	Cohort 1		Cohort 2		Cohort 3		Cohort 1		Cohort 2		Cohort 3	
	1992	1999	1992	1999	1992	1999	1992	1999	1992	1999	1992	1999
F. Occup. → R. Educ.	0.067 **	0.068 *	0.072 ***	0.020	0.043 *	0.051 **	0.054 **	0.076 **	0.056 ***	0.045 ***	0.011	0.037 ***
	(0.024)	(0.031)	(0.012)	(0.015)	(0.017)	(0.019)	(0.015)	(0.023)	(0.010)	(0.013)	(0.017)	(0.010)
F. Occup. → R. Occup.	0.098	-0.024	0.032	0.095	0.090	0.106	0.086	0.018	-0.001	-0.064	0.008	0.073
	(0.073)	(0.115)	(0.046)	(0.061)	(0.097)	(0.069)	(0.064)	(0.090)	(0.049)	(0.079)	(0.065)	(0.060)
R. Educ. → R. Occup.	3.055 ***	2.509 ***	3.354 ***	3.372 ***	2.207 ***	2.766 ***	2.408 ***	2.562 ***	3.142 ***	3.131 ***	3.196 ***	3.483 ***
	(0.224)	(0.420)	(0.209)	(0.278)	(0.442)	(0.287)	(0.196)	(0.421)	(0.234)	(0.378)	(0.547)	(0.426)
F. Occup → R. Earn.	0.033 +	-0.003	0.032 *	0.004	0.050 +	0.022	-0.009	0.005	0.004	0.012	-0.004	0.015
	(0.019)	(0.028)	(0.015)	(0.016)	(0.028)	(0.018)	(0.010)	(0.019)	(0.008)	(0.021)	(0.012)	(0.011)
R. Educ.→ R. Earn.	0.179 *	0.124	0.124	0.207 *	0.059	0.085	0.093 *	0.121	0.066	0.327 ***	0.178 +	0.196 +
	(0.074)	(0.155)	(0.086)	(0.093)	(0.089)	(0.097)	(0.041)	(0.083)	(0.047)	(0.087)	(0.100)	(0.106)
R. Occup. → R. Earn.	0.026 +	0.064 +	0.021	0.054 **	-0.037 +	0.057 **	0.034 ***	0.037 *	-0.002	0.001	0.000	0.015
	(0.015)	(0.032)	(0.017)	(0.017)	(0.022)	(0.020)	(0.009)	(0.018)	(0.008)	(0.012)	(0.016)	(0.017)

	Slovakia					
	Cohort 1		Cohort 2		Cohort 3	
	1992	1999	1992	1999	1992	1999
F. Occup. → R. Educ.	0.059 *	0.070 ***	0.061 **	0.057 ***	0.064 ***	0.041 **
	(0.026)	(0.018)	(0.019)	(0.012)	(0.016)	(0.013)
F. Occup. → R. Occup.	0.032	0.001	0.033	0.039	0.041	0.049
	(0.078)	(0.094)	(0.064)	(0.055)	(0.121)	(0.057)
R. Educ. → R. Occup.	3.542 ***	3.603 ***	3.505 ***	3.956 ***	4.611 ***	4.306 ***
	(0.392)	(0.513)	(0.377)	(0.376)	(1.093)	(0.476)
F. Occup → R. Earn.	0.002	0.012	0.022	0.025 **	-0.011	0.015
	(0.021)	(0.013)	(0.017)	(0.009)	(0.027)	(0.013)
R. Educ.→ R. Earn.	0.059	0.110	0.427 ***	0.133 +	0.241	-0.031
	(0.141)	(0.106)	(0.125)	(0.077)	(0.284)	(0.122)
R. Occup. → R. Earn.	0.047	0.044 *	-0.031	0.056 ***	0.015	0.069 ***
	(0.030)	(0.020)	(0.025)	(0.013)	(0.035)	(0.019)

Notes: Employed subsample, weighted, imputed. Standard errors in parentheses. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$.
Cohort 1 – born before 1950, Cohort 2 – born between 1950 and 1964, Cohort 3 – born after 1964.
Shaded cells denote statistically significant differences across time in effects (at 0.1 significance level). See Table A-20 for values of tests for these differences.

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between 1950 and 1964, and not in the youngest cohort, and they go in a different direction than the theoretically expected one. These changes are observed in Slovenia (the impact of father's occupation on respondent's occupation decreases over time) and in Poland (the impact of father's occupation on respondent's education decreases over time)[33].

The changes in achievement parameters partially conform to the advanced expectations in that changes affect all cohorts irrespective of their age at the time of the fall of the socialist regimes. The unexpected finding is that where there is change, the direction of change differs from nation to nation.

Changes in the effect of respondent's education on respondent's earnings and the effect of respondent's occupation on respondent's earnings tend to occur in tandem, with changes in opposite directions (a pattern that consistently emerged in the results previously discussed here). The situation can be seen in the case of Hungary and the Czech Republic (for the cohort born before 1950), and Slovakia (for the cohort born between 1950 and 1964).

In the youngest cohort (respondents born after 1964) all statistically significant changes over time involve achievement parameters and all changes suggest an increasing importance of achievement in the status attainment process (see East Germany, the Czech Republic, Slovenia, and Poland in the table above).

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[33] I am ignoring a third case where an ascription parameter increases slightly over time (the impact of father's occupation on respondent's occupation in the oldest cohort in Slovenia) because even though the over time change is statistically significant, individually, neither the 1992 nor the 1999 effect are statistically significant.

4.2.6   Summary of Findings

The results suggest that ascription parameters in the status attainment model generally did not change significantly over the time period under study, neither for Eastern Europe, nor for the other groups of countries. Therefore, the hypothesis that with the fall of the socialist regimes ascription effects will begin to increase in Eastern Europe is not supported by the data. In fact, in Eastern Europe, achievement effects tend to gain in importance over time relative to ascription effects.

The impact of father's occupation on respondent's education in Eastern Europe in 1999 is at about the same level as the level characterizing liberal market societies and the two social democratic countries, although there are some statistically significant variations within Eastern Europe in the effect level.

The effect of father's occupation on respondent's occupation is generally homogenous within regions according to chi square difference tests, although the inspection of effect sizes suggested a greater degree of heterogeneity. By taking into account this information, average within region levels of effects suggest that Eastern European levels are again close to levels in liberal market economies and levels in social democratic countries. The effect of father's occupation on respondent's earnings is essentially null in most of the countries in 1999, as it was the case in 1992.

For these ascription parameters, since neither over time changes in Eastern Europe nor overtime changes in the other regions are statistically significant, it is impossible to talk about a convergence effect involving former socialist and settled capitalist countries.

Effects of respondent's education on respondent's occupation in Eastern European countries maintain their levels throughout the time period under study, while for most other

settled capitalist countries with data at both time points there is a tendency of the effect to decrease (with statistically significant decreases). The slightly decreasing trend in settled capitalist countries suggests that an explanation using the status maintenance thesis might be appropriate in this case (see Table 2-1). Since the 1992 data did not support the hypotheses advanced under the assumption of existence of socialist effects, it would be hard to pair the Eastern European empirical results with any of the predictions advanced in Table 2-1.

The last two achievement relationships in the status attainment model (the impact of respondent's education on respondent's earnings and the impact of respondent's occupation on respondent's earnings) generally reveal offsetting over time patterns of change, contrary to predictions advanced in Table 2-1, according to which both effects should follow the same pattern of change. The overtime changes in the first of these two relationships tend to be smaller and not statistically significant, while over time differences in the second relationship tend to be larger and statistically significant.

While there is some evidence of a 'recomposition' of social status taking place between 1992 and 1999 in Eastern Europe, the evidence for the previous condition of status decomposition in the region at the end of the communist period is lacking.

4.3   Industrialization Effects

Industrialization effects and support for the industrialism thesis versus the status maintenance thesis are examined using a hierarchical linear model of status attainment applied on the sample of countries with data available in 1999. Descriptive statistics for the industrialization level 2 predictors used in these models are presented in Table A-21.

Table 4-9 Status Attainment Hierarchical Linear Model, 1999

	R. Educ.	R. Occup.	R. Earnings
Intercept	-0.292	44.742 ***	5.226 ***
	(1.067)	(2.765)	(0.276)
Gender (male)	-0.213 ***	0.503	1.548 ***
	(0.056)	(0.451)	(0.091)
Age	-0.016 *	0.122 ***	0.023 ***
	(0.008)	(0.019)	(0.005)
Marital status (married)	0.055	0.893 **	0.251 **
	(0.072)	(0.277)	(0.081)
Residence (urban)	0.840 ***	0.425	0.501 ***
	(0.120)	(0.327)	(0.080)
F. Occup.	0.063 ***	0.082 ***	0.005 *
	(0.008)	(0.011)	(0.002)
R. Educ.	---	3.035 ***	0.169 ***
		(0.179)	(0.027)
R. Occup.	---	---	0.050 ***
			(0.005)
Variance components			
Level 1 intercept	5.038 ---	101.372 ---	4.038 ---
Level 2 intercept	16.324 ***	126.815 ***	1.055 ***
F. Occup. → R. Educ. slope	0.001 ***		
F. Occup. → R. Occup. slope		0.001 **	
R. Educ. → R. Occup. slope		0.579 ***	
F. Occup. → R. Earn. slope			0.000 ***
R. Educ. → R. Earn. slope			0.011 ***
R. Occup. → R. Earn. slope			0.000 ***

Notes: Employed subsample, weighted, imputed. Unstandardized estimates; Standard errors in parentheses.
Age, F. Occup., R. Educ., R. Occup. centered around grand mean
*Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.*
Level 1 N=13,171; Level 2 N=19.

In order to make the transition from the structural equation models framework to the

hierarchical linear models (HLM) framework, I start by presenting an HLM model without any

level 2 predictors. The model (see results in Table 4-9) parallels the construction of the status

attainment models discussed in the previous sections. Effects of control variables are in the

expected direction (women, younger people, and urban residents tend to be better educated; older

and married people tend to be characterized by higher prestige levels; and older married men

living in urban areas have on average higher levels of earnings). The main status attainment

effects are all statistically significant and in the expected direction (all effects are positive). All

level 1 slopes have statistically significant variances, indicating that there are significant differences remaining between countries in each of the main status attainment parameters.

Table 4-10 summarizes effects in the various estimated HLM models that account for effects of level 2 predictors. Since the intensity of effects is of more interest in this case, and cross-country comparisons are no longer employed here, I present standardized coefficients in this table. In general effects of industrialization indicators are extremely small, but several effects emerge as statistically significant. In the case of ascription slopes (educational ascription, occupational ascription, and earnings ascription) all statistically significant effects suggest that industrialization determines decreases in the ascription parameters, as the industrialization thesis suggested. In general, the more industrialized a country is, the smaller the ascription parameters. Controlling for initial industrialization levels, over time increases of industrialization levels within a country also tend to decrease ascription processes in the status attainment model, suggesting that the rate of industrialization has an effect over and above the effect of industrialization level. Interaction effects between levels and rates of industrialization generally do not emerge as being statistically significant, and when they do, the main effects are not statistically significant.

In the prediction of the occupational achievement slope, industrialization effects that emerge as statistically significant have negative signs, providing partial support for the status maintenance thesis. While the thesis included the prediction that industrialization would trigger increases in occupational ascription (a prediction not supported by these results), the results presented here suggest that industrialization does determine decreases in occupational achievement, as the thesis suggested. Increases in industrialization indicators also determine decreases in the second achievement slope: earnings achievement. For the final achievement

Table 4-10 Standardized Macro Level Effects on Status Attainment Slopes

	Educational ascription	Occupational ascription	Occupational achievement		Earnings ascription	Earnings achievement		Income returns to occupation	
			Total effects	Direct effects		Total effects	Direct effects	Total effects	Direct effects
Electricity consumption									
Level	-0.049 *	-0.009	0.014	0.042	-0.012	-0.029	-0.021	0.003	0.013
Change	0.037	0.010	-0.017	-0.033	-0.037 ***	0.056	0.050	-0.017	-0.020
Level * Change	-0.023	-0.040 *	-0.121	-0.023	0.007	0.032	0.044	0.103 *	0.113 *
Tertiary enrollment									
Level	-0.024	-0.019 +	-0.080 +	-0.035	-0.005	0.009	0.012	0.029	0.035
Change	-0.012	0.004	0.019	0.013	-0.030 *	-0.058 *	-0.035	-0.052 ***	-0.043 **
Level * Change	0.090	-0.037	-0.506 *	-0.507 +	-0.115 ***	-0.380 +	-0.161	-0.110	0.027
Services employment									
Level	---	-0.017 *	-0.047	-0.005	-0.029 *	-0.023	-0.004	0.029	0.036 +
Change	---	-0.019	-0.140 *	-0.120	0.009	-0.220 ***	-0.223 ***	-0.094 *	-0.002
Level * Change	---	0.001	0.009	0.003	-0.001	-0.027	-0.027	0.009	0.030

Notes: Employed subsample, weighted, imputed. Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$. Level 1 N=13,171; Level 2 N=19.

Level indicators are measured in 1977; Change indicators are changes in indicators between 1977 and 1999.

"Total effects" models contain effects of macro level indicators on only the status attainment slope of interest. "Direct effects" models contain effects of macro level indicators on the status attainment slope of interest and previous slopes in the status attainment model.

Level effects are computed in models that introduce only the level indicator as predictor; change effects are computed in models that introduce level and change indicators as predictors; interaction effects are computed in models that introduce level, change, and interactions as predictors.

slope (income returns to occupation), effects of industrialization indicators are mixed, as some have negative effects and others have positive effects.

Since some of the status maintenance thesis predictions receive some support in these results, the next model (see Table 4-11) examines one of the mechanisms advanced by this thesis (namely educational ascription) in order to explain the negative industrialization effects on achievement processes in status attainment. However, the hypothesis that decreases in educational ascription lead to increases in occupational ascription (and concurrently to decreases in occupational achievement) is not supported by the present results. Effects emerge with an opposite sign than the sign predicted under the status maintenance thesis.

The directions of the industrialization effects paint a somewhat puzzling picture in which industrialization acts to decrease both ascription and achievement parameters in the status attainment model. It is possible that as industrialization levels increase, other factors that were not taken into account in these models, different from both social origins and respondents' social status characteristics start to gain in importance in the determination of individuals' social destinations.

Table 4-11 The Impact of Educational Ascription on Status Attainment Slopes, 1999

	R. Educ.		R. Occup.		R. Earnings	
Intercept	-0.292		44.758	***	5.225	***
	(1.067)		(2.779)		(0.275)	
Gender (male)	-0.213	***	0.501		1.548	***
	(0.056)		(0.451)		(0.090)	
Age	-0.016	*	0.122	***	0.024	***
	(0.008)		(0.019)		(0.005)	
Marital status (married)	0.055		0.897	**	0.250	**
	(0.072)		(0.277)		(0.081)	
Residence (urban)	0.840	***	0.427		0.500	***
	(0.120)		(0.326)	***	(0.080)	
F Occup	0.063	***	0.082		0.005	+
	(0.008)		(0.010)		(0.002)	
R Educ	---		3.050	***	0.169	***
			(0.150)		(0.027)	
R Occup	---		---		0.050	***
					(0.005)	
Educational ascription →						
Occupational ascription	---		0.733	*	---	
			(0.292)			
Occupational achievement	---		-11.732	***	---	
			(2.187)			
Income ascription	---		---		-0.088	
					(0.067)	
Income achievement	---		---		-0.040	
					(0.771)	
Income returns to occupation	---		---		-0.022	
					(0.118)	
Variance components						
Level 1 intercept	5.038	---	101.299	---	4.037	---
Level 2 intercept	16.324	***	128.012	***	1.052	***
F. Occup. → R. Educ. slope	0.001	***				
F. Occup. → R. Occup. slope			0.001	*		
R. Educ. → R. Occup. slope			0.386	***		
F. Occup. → R. Earn. slope					0.000	**
R. Educ. → R. Earn. slope					0.012	***
R. Occup. → R. Earn. slope					0.000	***

Notes: Employed subsample, weighted, imputed. Unstandardized estimates; Standard errors in parentheses.
Age, F. Occup., R. Educ., R. Occup. centered around grand mean
*Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.*
Level 1 N=13,171; Level 2 N=19.

5   Discussion and Conclusions

The primary goal of the present paper was to explore to what degree patterns of status attainment are influenced by two categories of factors: types of socio-political systems and economic development. The influence of the first factor has been studied by comparing the main status attainment model parameters across a range of societies characterized by different socio-political systems, while the influence of the second factor has been studied by computing effects of several indicators of industrialization on the main status attainment parameters.

The systematic comparison of status attainment patterns undertaken here has been realized with special attention given to the comparability of model results across societies and across time. To this end, an identical model has been used for estimating status attainment parameters and variables have been measured using comparable scales: father's and respondent's occupation have been measured using an internationally comparable prestige scale (SIOPS), education has been operationalized as a construct with two indicators – both internationally comparable – years of education and effect proportional scales of education, and earnings have been measured in terms of the relative position of individuals in society on an earnings hierarchy.

This final chapter summarizes the findings of the analysis and discusses some of the implications of these findings for answers to the research questions posed in chapter two. In addition, I try to point out some of the limits of the approach undertaken in this study and suggest how future research could circumvent these drawbacks.

This paper opened with a discussion of whether in comparing status attainment models across societies one can talk about similar patterns characterizing groups of societies or whether each society is characterized by unique status attainment processes. The analyses presented here suggest that the answer to this question is different depending on the type of status attainment

relationship under examination – whether the relationship captures ascription or achievement processes.

5.1   Homogeneity of Status Attainment Parameters within Regions

The regions defined here (based on industrialization levels, types of socio-political systems, geography, culture, types of labor markets, and the type of welfare state) are, generally, fairly homogenous in terms of ascription relationships, but less so in terms of achievement relationships, when statistical tests of significant differences (chi-square difference tests) are used as a criterion for deciding the degree of homogeneity. Using less stringent criteria (inspection of effect sizes and similarity indexes) suggests that even if there are statistically significant differences between effects within regions, these differences are not substantial enough to create a picture of trendless fluctuation or a "one country – one status attainment pattern" type of picture.

This being said, some regions are characterized by greater degrees of variability in effects that others, and the greater this variability, the harder it is to define a pattern of status attainment effects. In general a model that proposes a dichotomy between former socialist countries and settled capitalist countries would ignore too much of the variability in status attainment parameters apparent among settled capitalist countries. With small exceptions, the Central and Eastern European societies can be described by a common status attainment pattern and no clear lines of demarcation appear to suggest that there are sub-regions defined by greater homogeneity within this region. The situation is different in the case of settled capitalist countries. The four types of capitalism proposed here based on the varieties of capitalism literature (liberal market economies, Continental Europe, social democratic countries, and Mediterranean countries) help account for some of the variability in status attainment parameters among settled capitalist

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countries. Even so, some of these regions seem to be characterized by more homogeneity than others, with social democratic countries and liberal market economies emerging with more homogenous effects and Continental European countries and Mediterranean countries emerging with less homogenous effects. It is possible that institutional arrangements and historical and cultural differences – the other two types of factors briefly discussed in the introductory chapter – could further account for some of the differences observed in status attainment patterns within the regions defined here, however, influences of these factors could not be taken into account in the present empirical analysis.

The main implication of the differences existing in status attainment patterns among settled capitalist countries is that simple comparisons in terms of socialist or postsocialist patterns versus capitalist patterns of status attainment cannot be made. Central and Eastern European levels of effects are most of the times related differently to levels of effects within the different settled capitalist regions. Under these conditions, it is hard to determine whether the status attainment patterns present in Central and Eastern European countries in 1992 are due mainly to the influence of socialist ideology and policy.

5.2   Socialist Effects

Even if some differences emerge between the Central and Eastern European pattern and the several settled capitalist patterns, most of these are not in the expected direction under the assumption of existence of socialist effects. An explanation for these findings might be that the socialist policies aimed at increasing equality were becoming less effective by the end of the socialist period and were to a large degree circumvented by both individual actions (e.g. misrepresentation of social origins) and conflicting state policy goals (e.g. the goal of economic

development), resulting in unexpected status attainment effects, compared to intended policy effects.

Taking into account the stated intentions of socialist policies and characteristics of the planned economy, the Central and Eastern European countries during the socialist period were expected to display a decreased importance of social origins in the status attainment process when compared to capitalist countries. According to the empirical results presented here, the state socialist policies in the educational domain aimed at facilitating the access of underprivileged groups to education appear to have been less effective than intended, as some of the literature discussed in chapter two suggested (S. Szelenyi & Aschaffenburg, 1993; Hanley & McKeever, 1997; Eyal, Szelenyi & Townsley, 1998; Ganzeboom & Nieuwbeerta, 1999; Lenski, 2001).

The direct impact of father's occupation on respondent's education in Central and Eastern European countries soon after the fall of the communist regimes is in general greater than levels in liberal market economies and lower than levels in the countries representing Continental Europe and social democracies. This suggests that while socialist regimes might have achieved a reduction in the effect of social origins on respondent's education, they did so only in comparison to certain types of settled capitalisms. However, the small number of countries representing these types of capitalisms in 1992 limits the power to generalize this conclusion.

The remaining two direct effects measuring ascription (the effect of father's occupation on respondent's occupation and on respondent's earnings) are generally not statistically significant in any of the countries studied here. Since effects in settled capitalist countries are small to begin with, there is no room for diminishing the direct effects in absolute terms. Total effects of social origins can also be used to describe ascription processes in a society, but in this

case effects also include the role of respondent's education and occupation in transmitting parental advantages. In terms of total effects for the last two relationships, the empirical results suggest again that socialist regimes did not consistently result in diminished ascription effects. The total effect of father's occupation on respondent's occupation is smaller in Central and Eastern European countries when compared to effect levels in the countries representing Continental Europe and social democracies, but greater when compared to liberal market economies levels. The total effect of father's occupation on respondent's earnings in Central and Eastern European countries generally equals or surpasses effect levels in the other settled capitalist countries.

In sum, there is no evidence that socialist regimes in Central and Eastern Europe consistently resulted in a diminished importance of social origins in the status attainment process in comparison to levels in settled capitalist countries. There is limited evidence that effects might have been smaller in the former socialist countries when compared to levels in certain types of capitalisms, like those characterizing Continental European countries and social democratic countries, but the conclusion is based on comparisons with one country for each of the latter two regions, and cannot be generalized without inspecting results from other countries in these regions. In comparison to liberal market economies, the evidence is consistently opposed to expectations based on intended effects of socialist policies, with larger ascription effects characterizing Central and Eastern European countries than liberal market economies.

The evidence is also contrary to the expectation that socialist societies were characterized by stronger links between education and occupation due to the practice of pairing individuals with jobs based on their education (Connor, 1979; Meyer, Tuma & Zagorski, 1979; Simkus, 1982; Slomczynski, 1986; Domanski, 1994). In 1992 the direct effects of respondent's education

on respondent's occupation are generally similar across all countries, suggesting that if indeed strict rules of occupational placement according to educational levels were observed in socialist societies, this did not result in a much larger association between education and occupation than associations present in capitalist societies, where competition on the labor market plays a more important role. The alternative expectation that the association between education and occupation was weaker in socialist societies due to political loyalty rather than skill playing an important role in occupational placement (Mateju & Kreidl, 2001) is not supported by the results either. Since the link between education and occupation tends to be strong in all societies, it is possible that the mechanism of job distribution devised in state socialist societies mimicked to a large degree the effects of free competition on the labor market on this relationship.

The achievement relationships involving respondent's earnings were expected to be smaller in state socialist societies when compared to capitalist societies since wages were determined through central planning and the differences in material rewards between different educational and occupational groups were reduced. A part of the reduction in these relationships can be attributed to the compressed scale of earnings characterizing these societies, but in order to estimate effects that remove the influence of the compression in the earnings scale, this study employed deciles of earnings in the estimation of status attainment effects.

The decision implies that rather than estimating distances between educational and occupational groups in terms of absolute earnings, the model captures the amount of heterogeneity in terms of educational and occupational levels within an earnings group. In terms of unstandardized coefficients, smaller values denote greater heterogeneity in the educational and occupational makeup of an earnings decile. The measurement of earnings in deciles does not affect the statements regarding effect sizes under the assumption of existence of socialist effects:

state socialist societies are expected to display more heterogeneity in the educational and occupational profile of an earnings decile, thus the impacts of respondent's education and occupation on respondent's earnings are expected to be smaller than in the other settled capitalist societies.

The expectations are only confirmed for the relationship between respondent's occupation and respondent's earnings. In the case of the relationship between respondent's education and respondent's earnings, effects vary widely across countries and within regions, and no clear pattern of effects emerges – neither in terms of direct effects, nor in terms of total effects. The high amount of within region heterogeneity of this effect suggests that the nature of the socio-political organization does not contribute much in the determination of the size of this relationship. The effect of respondent's occupation on respondent's earnings is in general smaller in Central and Eastern European countries than effects in the other settled capitalist countries. This is the only parameter among the main status attainment parameters that conforms to a larger degree to expectations advanced under the assumption of existence of social effects.

The usage of 1992 data in order to explore the existence of socialist effects poses some additional problems in the case of the relationships involving earnings, since the variable no longer captures pure socialist practices of earnings distribution. Under these conditions it is unclear whether the last relationship discussed above captures persisting socialist practices in earnings distribution or effects of the early transition period in Central and Eastern European countries.

The calculated ratios capturing the importance of achievement relative to ascription in each society also suggest that with a few exceptions (Russia being the most notable one) state socialist societies did not achieve a situation in which achievement processes had an

overwhelming importance relative to ascription processes in status attainment in comparison to all other capitalist societies. There is some evidence though that the Central and Eastern European ratios of achievement to ascription in the determination of occupational prestige are higher than those characterizing Continental European capitalisms and social democratic countries, with the same limitation mentioned earlier – there is only one country representing each of these regions in 1992.

The review of the main findings regarding the existence of socialist effects allows the formulation of the following summary answers to the research questions posed in chapter two:

A1: There is a fairly high degree of similarity among Central and Eastern European societies in terms of status attainment processes, with more similarity in the case of ascription relationships and more variations in the case of achievement relationships, but it is unclear what role, if any, socialism had in producing this similarity since patterns of effects generally do not conform to expectations advanced under the assumption of existence of socialist effects.

A2: There is no single pattern of Western capitalist status attainment. Instead, patterns differ according to characteristics of varieties of capitalism. The state socialist pattern of status attainment (at least as reflected in the 1992 data) is not radically different from patterns characterizing the different types of capitalism. Where clear-cut differences emerge, they are often in an opposite direction to expectations, especially in the comparison with liberal market economies. Expectations based on the assumption of existence of social effects are confirmed only in isolated cases: the smaller size of the educational ascription parameter in Central and Eastern Europe when compared to West Germany and Norway, and the smaller size of the effect of occupation on earnings in most of the former state socialist societies in comparison to the other settled capitalist countries.

5.3 Postsocialist Effects

The comparison of effects over time for Central and Eastern European countries suggests that during the time span under study most of the relationships did not change significantly. There are no statistically significant differences in any of the ascription relationships and generally the effects of respondent's education on respondent's occupation and earnings remain unchanged over time in the region. The only status attainment parameter that undergoes a larger amount of change in former socialist countries is the impact of respondent's occupation on respondent's earnings. This is the same parameter that in 1992 conformed to predictions advanced based on the assumption of existence of socialist effects, and the direction of change in this parameter (increasing over time) also conforms to predictions advanced based on the assumption of existence of postsocialist effects that reverse the influences that socialism had on status attainment. While the small 1992 effects in former socialist countries have been justified by the persistence of socialist practices of income distribution, it is possible that the over time increases in this effect are mainly due to the growth of the private sector in Central and Eastern European societies after the fall of communism.

The absence of statistically significant changes in ascription parameters in Central and Eastern Europe parallels the situation in most of the other settled capitalist countries. The stability over time in the effect of respondent's education on respondent's earnings is also observed in the other settled capitalist countries, and the increasing trend in the relationship between respondent's occupation and respondent's earnings observed in Central and Eastern European countries is also present to a smaller degree in capitalist countries, conforming to predictions of the industrialization thesis. For the remaining achievement parameter, patterns of change are different in capitalist countries compared to former socialist countries. While there is

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little change in the effect of respondent's education on respondent's occupation in Central and Eastern Europe over time, there is a general decreasing trend in the relationship in settled capitalist countries, which conforms this time to predictions of the status maintenance thesis.

The apparently conflicting over time trends in settled capitalist countries in the relationship between respondent's education and respondent's occupation on one hand and respondent's occupation and respondent's earnings on the other hand suggest that the two alternative explanations of industrialization effects (the industrialization thesis and the status maintenance thesis) might be appropriate for different processes in the status attainment model. While the status maintenance thesis might be more relevant for the process of occupational status attainment, the industrialization thesis might be more relevant for the process of earnings attainment.

The examination of status attainment parameters for separate cohort groups reveals slightly more over time changes than effects estimated for the entire employed population. As it was the case with employed samples, the ascription parameters in the status attainment model generally do not reveal statistically significant over time changes, but some differences emerge between achievement parameters for different cohorts over time. While the direction of change varies in these cases, a pattern emerges for the youngest cohort, where the over time changes in achievement parameters are indicating increasing achievement effects.

While there is no evidence at the end of the socialist period that Central and Eastern societies were characterized by lower levels of status consistency than the other settled capitalist countries, there is a slight trend of increasing status consistency in the former countries over time, while status consistency maintains at the same levels or slightly decreases in the latter countries. Since this trend apparently does not constitute a reversal of socialist effects on status

attainment, it is unclear whether it is due to the removal of the socialist logic of social stratification or to other effects operating during the postcommunist transition period.

Due to the fact that little over time change is observed in status attainment parameters in former socialist countries, one could say that socialist patterns of status attainment are largely preserved during the first years of the transition period in the region. However, since 1992 results suggested weak effects of socialist ideology and policy on status attainment patterns, a more exact interpretation would be that status attainment patterns are largely preserved throughout the transition period mainly because neither socialism nor postsocialism have had substantial effects on status attainment processes. This implies that while a Central and Eastern European pattern of status attainment exists, neither socialism nor postsocialism had an important role in creating this pattern, as suggested by some of the literature reviewed in chapter one (Mach & Peschar, 1990).

There is some evidence that achievement effects increase during the transition period, but the change is probably mainly due to economic development effects rather than to the removal of the socialist logic of social stratification. The only relationship that constitutes an exception to this is the effect of respondent's occupation on respondent's earnings, for which the over time dynamics suggest that the relationship was more sensitive to changes introduced by the socialist regimes and the subsequent changes triggered by the removal of socialist regimes.

Taking all these findings into account, summary answers to the research questions regarding postcommunist effects posed in chapter two can be formulated as follows:

A3. In sum, during the seven year period of postcommunist transition under study, in Central and Eastern European countries postcommunist effects on status attainment are only observed for the relationship between respondent's occupation and respondent's earnings. Over time, Eastern European levels of effects for this relationship are catching up with liberal market

economies levels and seem to be increasing at a parallel pace with effects in Continental European countries and social democratic countries. The hypothesis that ascription effects will begin to gain in importance in the status attainment process with the fall of the socialist regimes is not supported by the data. In fact, achievement to ascription ratios within the region suggest that achievement effects tend to gain in importance over time relative to ascription effects. An examination of effects by cohort groups suggests the same picture: ascription effects are largely invariant over time while achievement effects are more likely to change. The changes in achievement effects translate in an increasing status consistency over time in Central and Eastern European countries. While patterns of status attainment characterizing Central and Eastern societies at the end of the socialist period do persist to a large degree during the transition period, it is possible that this stability is due to the fact that both socialism and postsocialism have weak effects in modifying status attainment processes. Postcommunism, either because of the removal of the socialist logic of social stratification or because of associated processes of economic development and privatization, does tend to produce a slight increase in the status achievement parameters.

A4. Under the conditions of small initial differences between Central and Eastern European countries and settled capitalist countries and small over time changes in status attainment parameters for both types of countries, it is hard to talk about convergence effects. Only one relationship in the status attainment model shows trends of convergence – the effect of respondent's occupation on respondent's earnings. Over the time period under study this effect tends to increase for both former socialist countries and for settled capitalist countries, with more rapid increases characterizing the first group of countries, suggesting that effect levels in Central and Eastern Europe are catching up with effect levels in settled capitalist countries. The

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changes observable in achievement parameters over time seem to be better captured by the
status maintenance thesis in the case of the occupational attainment process and by the
industrialization thesis in the case of the earnings attainment process. The second case where the
industrialization thesis predictions seem to better fit the over time trends, is also the only case in
which the convergence effects predicted by the industrialization thesis are apparent.

5.4 Industrialization Effects

While the previously discussed results from the comparison of status attainment over time can be used to infer industrialization effects on status attainment, the effect that is captured in these comparisons is that of within country industrialization rates on changes in status attainment parameters, and effects are inferred under the assumption that within each country industrialization levels increase over time (the assumption is to a large degree supported by empirically observed changes in industrialization indicators).

In order to explore in more detail the nature of industrialization effects and without making the previous assumption (changes in industrialization levels are empirically measured rather than assumed to increase over time), a set of HLM models was used in this paper in order to examine effects of cross-country differences in industrialization levels and within country industrialization rates on status attainment parameters (in terms of 1999 levels of effects). The models capture a slightly different facet of industrialization effects and also provide a slightly different answer to the question regarding the direction of industrialization effects on status attainment relationships. The summary of findings from these models suggests the following answer to the final research question posed in chapter two:

A5. These models suggest that in general industrialization effects are small or not
statistically significant. In cases in which statistically significant effects emerge, the results

contribute to the debate regarding competing explanations of industrialization effects on patterns of status attainment relationships. In general, increases in levels and rates of industrialization tend to slightly decrease the amount of ascription present in a society, conforming to predictions of the industrialization thesis. However, achievement parameters also tend to decrease with increases in industrialization levels and rates, providing more support for the status maintenance thesis. Neither of the two theses fits perfectly to observed effects of industrialization on status attainment parameters, since results suggest that as industrialization progresses both ascription and achievement effects in the status attainment model are reduced. This suggests that industrialization processes act to loosen the links both between social origins and social destinations but also between social status characteristics of an individual (education, occupation, and earnings).

5.5 Limitations of Present Research and Directions for Future Research

The effects of socio-political organization and economic development have been studied in this paper in two separate frameworks. While the structural equation models presented in the first part of the analysis can offer some insights on both effects of socio-political systems and economic development effects, they do so under the assumption that industrialization levels increase over time without actually taking into account the amount of change in industrialization levels. On the other hand, the hierarchical linear models presented in the second part of the analysis, while not constrained by these limitations, suffer from the drawback of examining only effects on 1999 levels of status attainment parameters. For the present research, the small number of countries available at the initial time point prevented the integration of the two frameworks under a single unified model. Using additional data sources, the number of countries (for both the initial time point and the final time point) could be increased. With the possible exception of

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variables used to measure social origins, the variables used in the estimation of status attainment models are standard variables in social surveys, and the same procedures that were applied here in order to harmonize variable scales across societies can be applied to variables coming from other data sources.

The same problem of small numbers of countries was encountered here in the case of comparisons of patterns of status attainment effects across regions, especially in 1992 where with the exception of liberal market economies, the other varieties of capitalisms were represented by a single country. Some of the differences observed between Central and Eastern European patterns of effects on one hand and West Germany and Norway on the other hand could be generalized in terms of differences between types of socio-political systems if data was available for additional countries from the regions represented by West Germany and Norway. The conclusions regarding over time changes in status attainment parameters could also benefit from a larger number of countries with data present at both time points.

The present research drew conclusions regarding the existence of socialist effects on status attainment based on 1992 data. While the timing is close to the disintegration of state socialist regimes, it only provides a picture of effects operating during the late period of state socialism on status attainment, when it has been hypothesized that some policies and practices that would have had a strong impact on stratification patterns were relaxed (Hanley & McKeever, 1997). In addition, while at this time point influences starting to operate during the postcommunist transition are assumed here to have negligible influences, it is possible that however small, these might confound to a certain degree the observed status attainment patterns. Ideally, the existence of socialist effects on status attainment should be decided based on both comparisons with patterns present in settled capitalist countries (the strategy adopted in the

present research), but also on an examination of the dynamics of effects during the socialist period. However, this would require comparable data sources from the beginning of the state socialist period, which are not readily available.

The research on the influences of the postcommunist transition on status attainment could also benefit from an enlarged time span. The data employed here covers seven years of the postcommunist transition, and while the assumption employed in this research was that given the context, the time span is sufficient for changes related to the transition process to begin to operate on status attainment relationships, the empirical analysis revealed little change taking place in former socialist countries in terms of status attainment effects. More recent data would allow a more definitive conclusion on whether the observed stability reported here is due to a high degree of inertia characterizing status attainment relationships or whether the seven year time span is simply too short to reveal possible changes.

In terms of model construction, the use of multiple indicators in the measurement of the main status attainment variables could contribute to a more precise measurement of status attainment effects. The models estimated here employed multiple indicators in the measurement of the education variable only, but the same strategy could be applied in the measurement of social origins and respondent's occupation if additional indicators for these variables were available. The presence of multiple indicators for these constructs, including nationally specific measurements of father's and respondent's occupational status, in addition to standardized occupational prestige scales, could counter reservations expressed regarding the latter type of scales, according to which these may mask differences between countries (Kerckhoff, 1984; Krymkowski, 1988).

The status attainment models estimated in this paper include only the links between social origins and respondent's social status characteristics. As such, no explanation is provided by the model as to why these links between social origins and social destinations exist (Sewell, Haller & Portes, 1969). The purpose of the models estimated here is to provide a picture about the strength of these links across societies, rather than an explanation of how these links arise. More detailed models of status attainment, like the Wisconsin model include influences of psychological (mental ability) and social-psychological factors (reference groups and significant others, educational and occupational aspirations, experience of success or failure in school) as possible mechanisms that can explain these links.

In the Wisconsin model of status attainment the social-psychological variables mentioned above mediate the impact of social origins and mental ability on education and occupation. In the simpler version of the status attainment model used here, the omission of the Wisconsin model mediating variables implies that estimated direct effects of social origins on education approximately capture total effects in the Wisconsin status attainment model. For the impact of social origins on occupation, the direct effect estimated in the present analyses also includes indirect effects of social origins on occupation through socio-psychological mechanisms in the Wisconsin status attainment framework.

The omission of mental ability as an input variable from the model is likely to slightly increase the estimated direct effects of social origins on respondent's social status characteristics, and the direct effect of education on occupation since mental ability has a low positive correlation with social origins and small to moderate positive correlations with educational and occupational attainment (Sewell, Haller & Portes, 1969; Sewell, Haller & Ohlendorf, 1970).

In a comparison of a reduced status attainment model with and without accounting for the role of intelligence for a sample of U.S. men, Duncan, Featherman & Duncan (1972) find that the most substantial changes are observed in some of the status attainment parameters involving respondent's education: the effect of father's education on respondent's education and the effect of respondent's education on respondent's first job. The figure below, adapted from Duncan, Featherman & Duncan (1972) presents differences in coefficient sizes arising when controlling for respondent's mental ability.

Figure 5-1 Reduced status attainment model without and with the effects of respondent's intelligence
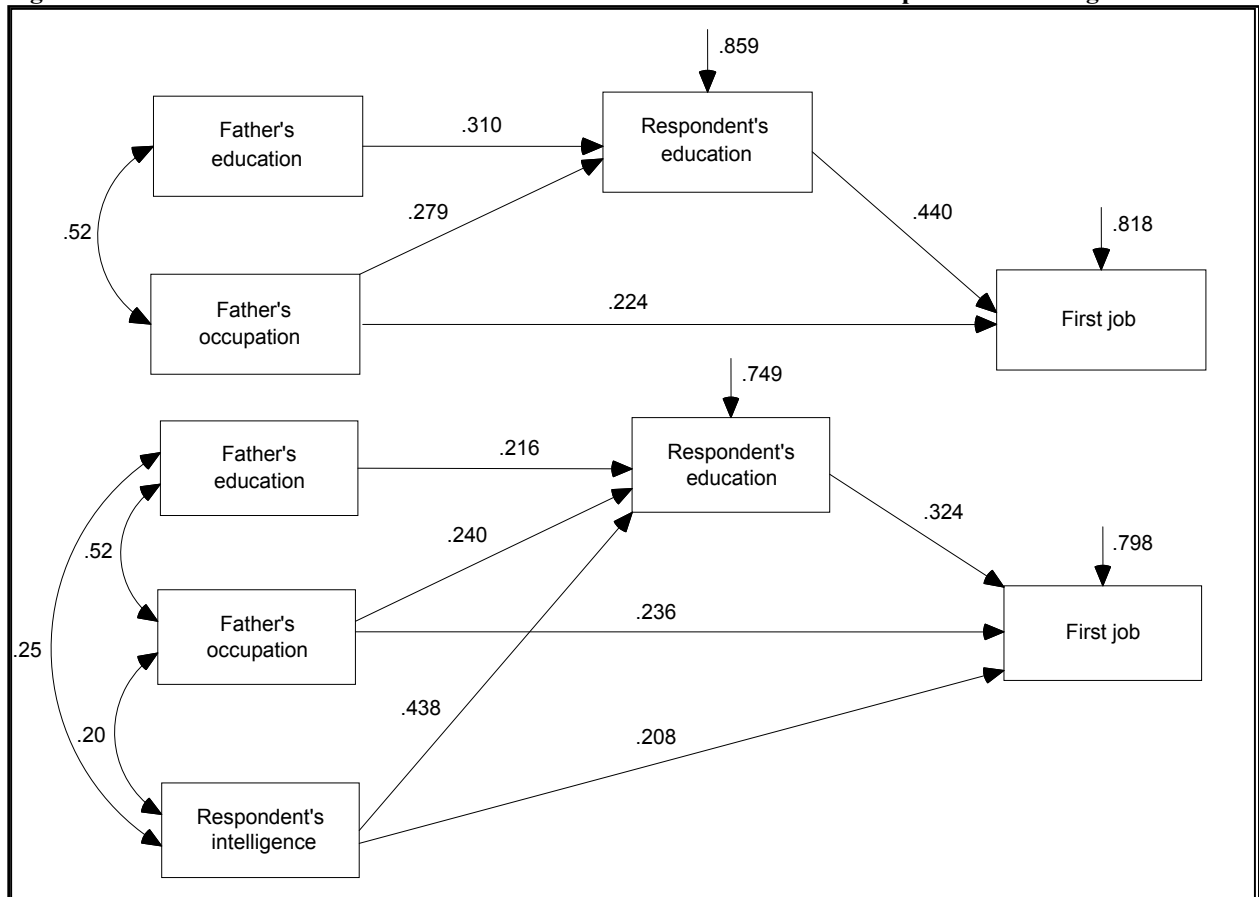
Source: Duncan, Featherman & Duncan (1972, pp. 89,90)

While the prediction of respondent's first occupational status is not improved markedly by the inclusion of intelligence in the model, there is a more substantial increase in the percent of explained variance in respondent's education. Furthermore, a comparison of the two sets of

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coefficients shows that by taking mental ability into account, effects of social origins variables on respondent's education diminish, although intelligence does not completely explain the effects of social origins on respondent's education. The implication is that in models that do not control for influences of mental ability, a part of the effect of social origins on education is due to the correlation between social origins and mental ability (Duncan, 1968).

Similarly, the effect of respondent's education on respondent's first job is diminished when taking intelligence into account. This suggests that in models that omit the effects of mental ability, effects of respondent's education on respondent's occupation include some occupational variation that is actually due to intelligence (Duncan, Featherman & Duncan, 1972, p. 91).

While within a society across time the correlations between mental ability and the other variables in the status attainment model are likely to be characterized by a high amount of stability, mental ability might be differently related to the rest of the variables in the model in different societies. It is possible that the correlation between mental ability and educational attainment varies depending on the characteristics of the educational system (for example societies with educational systems that filter out high percentages of students early on might be characterized by higher correlations between mental ability and educational attainment in comparison to societies in which educational transition points are delayed and lower percentages of students are filtered out at each transition point). In this case, the amount of overestimation in the status attainment parameters when mental ability is omitted will be different across societies.

Finally, in the analysis undertaken here, the findings are generalizable to employed populations. The small sample sizes prevented a more in depth examination of status attainment patterns for subgroups of these populations (urban versus rural, males versus females, employed

in the public sector versus the private sector). While diagnostic tests regarding differences along some of these demarcation lines suggested that differences are not pervasive, some differentiation was observed but was ignored due to insufficient sample sizes or unavailability of variables. It is possible that comparisons of status attainment patterns that take into account these differences might reveal more clear-cut patterns.

Appendix

Table A-1 Education – Country Specific Categories – 1992

	E. Germany	Hungary	Czech Rep.	Slovenia
Ed. cat.1	School wo qualification	None	Incompl. primary	4 years elementary or less
Ed cat. 2	Lower secondary school	Less than elementary	Primary compl.	4-8 years elementary
Ed cat. 3	Middle school qualification	Elementary	Incompl. secondary	Incompl. 2-3 years vocational
Ed cat. 4	Secondary technical or trade school	Vocational	Secondary compl.	Compl. 2-3 years vocational
Ed cat. 5	Arbitur	Vocational high	Incompl. university	Incompl. 4 years vocational
Ed cat. 6	Other qualification	Secondary	University compl.	Compl. middle school
Ed cat. 7	Special university qualification	College		Incompl. university or higher
Ed cat. 8	University	University		Higher degree
Ed cat. 9				University compl.

	Poland	Russia	Slovakia	Australia
Ed. cat.1	None	Less than 8-9 classes	Incompl. primary	None
Ed cat. 2	Incompl. primary	Secondary incompl.	Primary compl.	Incompl. primary
Ed cat. 3	Primary compl.	Sec. incompl.&short term prof. training	Incompl. secondary	Primary compl.
Ed cat. 4	Incompl. secondary	Sec. & short term prof. training	Secondary compl.	Incompl. secondary
Ed cat. 5	Secondary compl.	Secondary	Incompl. university	Secondary compl.
Ed cat. 6	Incompl. university	Secondary and vocational	Compl. university	University compl.
Ed cat. 7	University compl.	Sec. compl. & vocational		
Ed cat. 8		University incompl.		
Ed cat. 9		University compl.		

	New Zealand	USA	W. Germany	Norway
Ed. cat.1	None	Less than high school	School w/o qualification	Primary school
Ed cat. 2	Primary	High school	Lower secondary school	Secondary school
Ed cat. 3	Secondary (le 3 years)	Junior college	Middle school qualification	High school (skill oriented)
Ed cat. 4	Secondary (ge 4 years)	Bachelor/ Graduate	Secondary technical or trade school	High school (general/business)
Ed cat. 5	Some tertiary		Arbitur	Other university level
Ed cat. 6	Trade certificate		Other qualification	University
Ed cat. 7	University degree		Still at school	
Ed cat. 8			Special university qualification	
Ed cat. 9			University	

Note: Last category in each country is the reference category in models for the construction of effect proportional scores

Table A-2 Education – Country Specific Categories – 1999

	E. Germany	Hungary	Czech Rep.	Slovenia	Poland
Ed. cat.1	None/still at school	Not attendend	Incompl. primary	Incompl. primary	No formal schooling
Ed cat. 2	School w/o qualification	Less than 8 primary	Primary	Primary compl.	Incompl. elementary
Ed cat. 3	Lower secondary school	8 primary	Lower vocational education	Incompl. vocational or middle	Elementary
Ed cat. 4	Middle school qualification	Vocational	Secondary without diploma	2 or 3 years vocational	Basic vocational
Ed cat. 5	Secondary technical or trade sch.	Vocational secondary	Technical secondary with diploma	4 years middle school	Incompl. secondary
Ed cat. 6	Arbitur	Gymnasium	Academic secondary with diploma	Incompl. university or higher	Secondary general
Ed cat. 7	Special university qualification	College	Incompl. tertiary	Higher degree compl. (2 years)	Secondary vocational
Ed cat. 8	Other qualification	University	Compl. tertiary	University compl.	Postsecondary
Ed cat. 9	University				Incompl. higher
Ed cat. 10					Compl. higher

	Russia	Slovakia	Latvia	Australia	New Zealand
Ed. cat.1	None	Incompl. primary	None, Incompl. primary	Incompl. primary	None
Ed cat. 2	Incompl. primary	Primary compl.	Primary compl.	Primary compl.	Incompl. primary
Ed cat. 3	Primary compl.	Incompl. secondary	Incompl. secondary	Incompl. secondary	Primary compl.
Ed cat. 4	Incompl. secondary	Voc.(w/o sec. school Dipl.)	Compl. secondary	Secondary compl.	Incompl. secondary
Ed cat. 5	Secondary compl.	Sec.(with sec. school Dipl.)	Secondary prof., voc.	Incompl. university	Secondary compl.
Ed cat. 6	Incompl. university	Incompl. University	Incompl. university	Compl. university	Incompl. university
Ed cat. 7	Compl. university	University Bachelor/ Master	Higher, University compl.		Compl. university

	USA	Canada	W. Germany	France	Norway
Ed. cat.1	Less than high school	None	None/still at school	None	Primary compl.
Ed cat. 2	High school	Some grade school	School w/o qualification	Incompl. primary (w/o CEP)	Incompl. secondary
Ed cat. 3	Junior college	Finished grade school	Lower secondary school	Primary compl. (with CEP)	Secondary compl.
Ed cat. 4	Bachelor/ Graduate	Some high school	Middle school qualification	Incompl. secondary (college)	Incompl. university
Ed cat. 5		Finished high school	Secondary tech. or trade school	Secondary (w/obaccalaureat)	Compl. university
Ed cat. 6		Some college/CEGEP	Arbitur	Secondary (with baccalaureat)	
Ed cat. 7		Compl. college/CEGEP	Special university qualification	Sec. (general w/o baccalaureat)	
Ed cat. 8		Some university	Other qualification	Sec. (general with baccalaureat)	
Ed cat. 9		Compl. university/Graduate	University	Univ. degree/postgraduate	

	Sweden	Cyprus	Portugal	Spain
Ed. cat.1	Primary or comprehensive school	None	None	None
Ed cat. 2	Vocational school (1972 - 92)	Incompl. primary	Incompl. primary	Incompl. primary
Ed cat. 3	Vocational school(post 1992)	Primary compl.	Primary compl.	Primary compl.
Ed cat. 4	Vocational school (pre 1972)	Incompl. secondary	Incompl. secondary	Incompl. secondary
Ed cat. 5	Alternative secondary school	Secondary compl.	Secondary compl.	Vocational school
Ed cat. 6	Lower secondary school	Incompl. university	Incompl. university	Secondary compl.
Ed cat. 7	3 or 4 year gymnasium (acad. track)	Compl. university	Compl. university	COU-PREU
Ed cat. 8	Gymnasium (acad. track post 1992)			Incompl. university
Ed cat. 9	Higher secondary school			University compl.
Ed cat. 10	University studies without degree			
Ed cat. 11	University degree			

Note: Last category in each country is the reference category in models for the construction of effect proportional scores

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Table A-3 Construction of Educational EPS – Effect of Educational Categories on Social Status – 1992

	Educ. cat. 1	Educ. cat. 2	Educ. cat. 3	Educ. cat. 4	Educ. cat. 5	Educ. cat. 6	Educ. cat. 7	Educ. cat. 8	R^2 Soc. Status
E. Germany	-30.366 ***	-23.513 ***	-19.597 ***	-10.598 ***	-16.643 ***	-10.350 **	-3.615 +		0.62
	(2.445)	(1.224)	(1.186)	(1.997)	(1.994)	(3.639)	(2.159)		
Hungary	-39.072 ***	-35.814 ***	-31.590 ***	-25.013 ***	-18.097 ***	-16.471 ***	-9.209 ***		0.74
	(3.818)	(1.589)	(1.529)	(1.501)	(1.647)	(1.684)	(1.869)		
Czech Rep.	-31.456 ***	-26.592 ***	-21.240 ***	-12.766 ***	-4.166				1.00
	(8.289)	(1.613)	(1.426)	(1.366)	(5.055)				
Slovenia	-33.434 ***	-30.552 ***	-27.090 ***	-23.975 ***	-22.086 ***	-17.617 ***	-11.610 *	-7.026 **	0.95
	(2.402)	(1.399)	(1.941)	(1.354)	(3.307)	(1.320)	(4.355)	(2.012)	
Poland	-26.773 ***	-26.808 ***	-25.933 ***	-21.820 ***	-19.649 ***	-14.182 ***			0.69
	(3.949)	(1.188)	(0.960)	(1.784)	(0.911)	(1.569)			
Russia	-26.879 ***	-24.944 ***	-21.658 ***	-17.944 ***	-19.919 ***	-18.779 ***	-12.224 ***	-13.434 ***	0.70
	(1.998)	(1.460)	(1.403)	(1.647)	(1.266)	(1.581)	(1.010)	(2.429)	
Slovakia	-36.879 ***	-31.171 ***	-25.056 ***	-14.732 ***	-12.401				0.91
	(3.537)	(1.883)	(1.675)	(1.574)	(8.552)				
Australia	-20.167 ***	-7.824 *	-22.423 ***	-15.742 ***	-10.395 ***				0.32
	(2.668)	(2.997)	(1.232)	(0.780)	(0.831)				
New Zealand	-29.594 ***	-26.500 ***	-21.494 ***	-18.872 ***	-15.049 ***	-12.158 ***			0.47
	(2.703)	(2.262)	(1.194)	(1.260)	(1.414)	(1.304)			
USA	-20.890 ***	-12.866 ***	-8.813 ***						0.43
	(1.193)	(0.865)	(1.631)						
W. Germany	-34.918 ***	-26.315 ***	-18.786 ***	-18.061 ***	-19.679 ***	-22.700 ***	-31.737 ***	-5.912 ***	0.55
	(1.815)	(0.865)	(0.952)	(1.605)	(1.197)	(2.809)	(2.984)	(1.318)	
Norway	-23.548 ***	-22.006 ***	-17.552 ***	-17.870 ***	-3.738 **				0.51
	(1.448)	(1.483)	(1.354)	(1.418)	(1.284)				

Notes: Entire sample, weighted, imputed; Unstandardized estimates; Standard errors in parentheses.

Chi-square=475.417 (df=61), F (for combining chi square tests across imputations)=7.271(p=0.000); RMSEA=0.020

Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.

Table A-4 Construction of Educational EPS – Effect of Educational Categories on Social Status – 1999

	Educ. cat. 1	Educ. cat. 2	Educ. cat. 3	Educ. cat. 4	Educ. cat. 5	Educ. cat. 6	Educ. cat. 7	Educ. cat. 8	Educ. cat. 9	Educ. cat. 10	R^2 Soc. Status
E. Germany	-25.140 ** (7.968)	-18.191 * (6.362)	-22.695 *** (1.764)	-20.153 *** (1.882)	-15.204 *** (3.215)	-13.175 *** (2.632)	-21.031 * (10.301)	-18.091 (14.875)			0.52
Hungary	-25.149 * (9.315)	-29.505 *** (1.583)	-27.372 *** (1.452)	-21.864 *** (1.421)	-15.190 *** (1.527)	-14.806 *** (1.517)	-4.730 ** (1.612)				0.79
Czech Rep.	-35.130 *** (2.390)	-30.061 *** (0.961)	-24.774 *** (0.872)	-20.707 *** (0.993)	-13.988 *** (0.869)	-14.261 *** (1.067)	-10.105 *** (1.821)				0.79
Slovenia	-29.435 *** (1.286)	-27.963 *** (0.982)	-25.160 *** (1.897)	-22.789 *** (0.951)	-14.400 *** (0.891)	-11.099 *** (1.699)	-3.749 ** (1.266)				0.81
Poland	-16.786 * (7.515)	-19.802 * (5.068)	-22.797 *** (2.101)	-21.109 *** (1.346)	-23.820 *** (3.124)	-12.188 *** (2.341)	-14.109 *** (1.271)	-9.294 ** (2.916)	-13.035 *** (2.285)		0.64
Russia	-33.216 * (10.406)	-31.658 * (9.979)	-20.569 * (6.668)	-20.014 * (4.962)	-17.516 * (4.047)	-10.649 * (3.468)					0.86
Slovakia	-36.712 *** (2.632)	-29.426 *** (1.463)	-22.820 *** (1.889)	-23.970 *** (1.206)	-13.481 *** (1.129)	-12.315 *** (2.714)					0.65
Latvia	-31.064 *** (5.297)	-29.078 *** (2.595)	-29.344 *** (1.662)	-24.232 *** (1.463)	-19.445 *** (1.316)	-10.616 *** (2.034)					0.58
Australia	-17.119 *** (3.914)	-17.175 ** (4.369)	-13.563 *** (0.860)	-10.589 *** (1.105)	-3.718 ** (1.317)						0.23
New Zealand	-24.326 *** (6.267)	-23.074 *** (4.450)	-16.228 ** (3.201)	-12.807 *** (1.496)	-11.075 *** (1.507)	-8.272 *** (1.461)					0.23
USA	-22.182 *** (1.202)	-13.820 *** (0.876)	-8.887 *** (1.415)								0.46
Canada	-14.008 (18.055)	-7.527 (5.277)	-11.625 ** (3.830)	-16.350 *** (1.558)	-14.110 *** (1.443)	-15.217 *** (1.771)	-10.942 *** (1.455)	-12.531 *** (1.783)			0.24
W. Germany	-28.337 ** (7.683)	-22.004 *** (3.433)	-23.127 *** (2.200)	-18.108 *** (1.733)	-12.249 *** (2.149)	-14.540 *** (1.800)	-28.385 ** (8.627)	-17.608 (10.786)			0.45
France	-11.587 * (4.184)	-14.365 *** (2.696)	-13.198 *** (1.494)	-9.274 ** (1.801)	-13.080 *** (0.961)	-8.372 *** (1.609)	-9.251 *** (1.133)	-4.567 *** (1.035)			0.20
Norway	-22.746 *** (1.589)	-19.987 *** (1.210)	-13.423 *** (0.908)	-5.221 *** (1.273)							0.40
Sweden	-19.018 *** (1.176)	-16.523 *** (1.332)	-21.083 *** (2.103)	-14.585 *** (1.485)	-16.713 *** (2.386)	-9.449 *** (1.830)	-10.047 *** (1.303)	-21.785 *** (2.952)	-14.522 *** (2.081)	-9.060 *** (1.503)	0.42
Cyprus	-25.047 *** (1.546)	-20.734 *** (2.172)	-23.088 *** (1.505)	-19.800 *** (1.549)	-14.866 *** (1.031)	-10.542 *** (1.411)					0.99
Portugal	-26.604 *** (1.400)	-25.413 *** (1.366)	-22.952 *** (1.146)	-20.356 *** (1.126)	-13.403 *** (1.293)	-14.788 *** (1.850)					0.61
Spain	-30.509 *** (2.416)	-26.075 *** (1.658)	-22.600 *** (1.433)	-18.954 *** (1.852)	-16.473 *** (1.677)	-12.972 *** (2.100)	-17.717 *** (2.181)	-8.117 ** (2.207)			0.58

Notes: Entire sample, weighted, imputed; Unstandardized estimates; Standard errors in parantheses. Chi-square=592.250 (df=109), F (for combining chi square tests across imputations) =2.263(p=0.515); RMSEA=0.014. Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.

Table A-5 Diagnostic Tests for Sample Selection – Farm and Non-Farm Origins

	Measurement weights model (Δdf=1)						Structural weights model (Δdf=6)					
	1992			1999			1992			1999		
	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p
E Germany	0.275	0.211	0.646	3.121	2.673	0.104	11.915	1.658	0.138	7.640	1.101	0.367
Hungary	6.135	1.253	0.308	1.649	0.747	0.395	5.564	0.173	0.967	5.119	0.104	0.993
Czech Rep.	6.097	3.908	0.055	1.795	1.562	0.212	6.841	0.805	0.571	6.440	0.665	0.678
Slovenia	8.432	5.809	0.020	2.868	1.138	0.301	6.382	0.801	0.572	10.018	0.378	0.890
Poland	1.889	0.556	0.468	1.522	0.364	0.595	16.733	2.024	0.089	2.139	0.023	0.997
Russia	6.568	4.162	0.049	2.862	2.344	0.127	7.671	0.592	0.732	16.101	1.799	0.151
Slovakia	3.160	2.132	0.150	1.297	0.842	0.362	7.523	1.133	0.342	7.086	0.917	0.488
Latvia	---	---	---	4.323	1.826	0.195	---	---	---	8.150	1.051	0.402
Australia	1.131	0.550	0.463	3.314	1.908	0.177	6.285	0.622	0.711	5.385	0.864	0.521
New Zeeland	0.150	0.085	0.770	2.845	0.773	0.397	9.974	1.265	0.288	18.296	0.214	0.944
USA	1.203	1.091	0.296	0.861	0.250	0.623	6.691	0.740	0.621	12.705	0.988	0.522
Canada	---	---	---	0.796	0.495	0.484	---	---	---	8.385	1.170	0.334
W Germany	11.121	5.814	0.026	---	---	---	20.571	1.045	0.507	---	---	---
France	---	---	---	0.652	0.413	0.522	---	---	---	9.390	0.396	0.868
Norway	0.508	0.408	0.523	4.516	0.780	0.413	11.946	1.362	0.262	12.636	0.295	0.894
Sweden	---	---	---	3.270	0.609	0.456	---	---	---	8.881	1.250	0.286
Cyprus	---	---	---	1.055	0.429	0.517	---	---	---	13.290	1.141	0.407
Portugal	---	---	---	2.841	2.734	0.098	---	---	---	8.192	0.822	0.606
Spain	---	---	---	4.066	2.371	0.134	---	---	---	8.161	0.143	0.982

Notes: Entire sample, weighted, imputed. The chi-square difference tests ($\Delta\chi^2$) for the measurement weights model use the unconstrained model as reference, providing a test of the hypothesis that $m_{1\,(farm)}=m_{1\,(non\text{-}farm)}$; the chi-square difference tests for the structural weights model used the measurement weights model as reference (providing a test of the hypothesis that $s_{i\,(farm)}=s_{i\,(non\text{-}farm)}$ where $i=(1,...,6)$ (see Figure 3-3). F test used for combining chi square statistics across imputations. P is the significance level associated with $\Delta\chi^2$. Shaded cells denote statistically significant differences (at .1 significance level) between subsamples.

Table A-6 Diagnostic Tests for Sample Selection – Urban and Rural

	Measurement weights model (Δdf=1)						Structural weights model (Δdf=6)					
	1992			1999			1992			1999		
	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p
E Germany	0.356	0.236	0.627	1.268	1.124	0.289	8.829	1.073	0.392	3.243	0.209	0.969
Hungary	13.337	12.656	0.000	14.423	13.397	0.000	16.567	2.079	0.076	6.612	1.048	0.392
Czech Rep.	0.518	0.447	0.504	1.509	1.289	0.257	13.424	1.748	0.125	2.492	0.366	0.900
Slovenia	20.357	14.519	0.000	9.423	7.697	0.006	32.691	3.448	0.024	24.714	3.766	0.001
Poland	19.057	12.432	0.001	2.005	0.907	0.350	135.523	14.011	0.000	24.882	1.740	0.269
Russia	5.580	4.135	0.046	2.550	1.282	0.268	7.046	0.749	0.614	32.240	1.647	0.342
Slovakia	1.451	1.422	0.233	1.445	0.969	0.328	8.562	0.970	0.460	11.641	1.711	0.121
Latvia	---	---	---	0.228	0.114	0.736	---	---	---	2.599	0.230	0.964
Australia	4.298	2.581	0.118	0.229	0.083	0.773	5.600	0.515	0.791	2.249	0.240	0.962
New Zeeland	0.211	0.121	0.728	0.670	0.464	0.497	15.635	2.387	0.028	4.009	0.532	0.783
USA	0.526	0.394	0.530	0.220	0.141	0.707	14.810	1.841	0.114	4.530	0.341	0.905
Canada	---	---	---	3.261	2.061	0.158	---	---	---	13.123	1.809	0.108
W Germany	0.537	0.337	0.562	1.911	0.745	0.399	10.259	1.450	0.199	13.075	1.534	0.206
France	---	---	---	4.728	3.378	0.071	---	---	---	21.938	2.212	0.113
Norway	2.427	2.283	0.131	5.521	5.217	0.022	3.378	0.470	0.830	6.914	1.058	0.387
Sweden	---	---	---	0.815	0.395	0.532	---	---	---	9.859	1.551	0.159
Cyprus	---	---	---	0.189	0.133	0.715	---	---	---	13.074	1.890	0.087
Portugal	---	---	---	2.967	2.781	0.096	---	---	---	62.824	10.282	0.000
Spain	---	---	---	5.758	3.602	0.066	---	---	---	23.071	3.531	0.002

Notes: Entire sample, weighted, imputed. The chi-square difference tests ($\Delta\chi^2$) for the measurement weights model use the unconstrained model as reference, providing a test of the hypothesis that $m_{1\,(urban)}=m_{1\,(rural)}$; the chi-square difference tests for the structural weights model used the measurement weights model as reference (providing a test of the hypothesis that $s_{i\,(urban)}=s_{i\,(rural)}$ where $i=(1,...,6)$ (see Figure 3-3). F test used for combining chi square statistics across imputations. P is the significance level associated with $\Delta\chi^2$. Shaded cells denote statistically significant differences (at .1 significance level) between subsamples.

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Table A-7 Diagnostic Tests for Sample Selection – Males and Females

| | Measurement weights model (Δdf=1) | | | | | | Structural weights model (Δdf=6) | | | | | |
| | 1992 | | | 1999 | | | 1992 | | | 1999 | | |
	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p
E Germany	0.964	0.732	0.393	0.712	0.280	0.599	15.761	1.795	0.139	3.168	0.305	0.931
Hungary	0.247	0.220	0.639	4.075	3.587	0.059	5.947	0.568	0.752	7.341	0.873	0.523
Czech Rep.	0.360	0.326	0.568	1.431	1.219	0.270	7.926	1.184	0.314	25.601	3.403	0.008
Slovenia	3.716	3.400	0.066	0.321	0.207	0.650	7.753	0.877	0.521	4.167	0.448	0.838
Poland	6.166	3.715	0.063	1.224	0.491	0.489	6.819	0.749	0.614	13.010	0.630	0.707
Russia	3.734	3.065	0.082	1.535	0.587	0.452	7.089	0.490	0.803	28.508	1.449	0.385
Slovakia	3.430	2.872	0.092	0.408	0.285	0.594	8.775	1.095	0.376	4.773	0.484	0.815
Latvia	---	---	---	0.877	0.670	0.414	---	---	---	10.293	0.881	0.539
Australia	12.462	9.531	0.003	3.944	3.049	0.084	7.743	0.893	0.509	16.724	2.185	0.062
New Zeeland	0.562	0.381	0.538	1.303	1.129	0.288	10.811	1.383	0.236	9.298	0.665	0.681
USA	0.136	0.084	0.771	7.593	7.076	0.008	2.123	0.267	0.952	9.391	1.398	0.216
Canada	---	---	---	6.140	3.324	0.081	---	---	---	8.018	0.873	0.528
W Germany	0.222	0.118	0.732	0.380	0.258	0.612	17.416	2.044	0.092	6.138	0.849	0.534
France	---	---	---	1.127	0.750	0.389	---	---	---	32.125	3.985	0.006
Norway	12.485	9.415	0.003	0.150	0.083	0.773	11.898	1.813	0.095	2.810	0.398	0.880
Sweden	---	---	---	0.713	0.598	0.440	---	---	---	12.163	1.282	0.315
Cyprus	---	---	---	0.280	0.182	0.670	---	---	---	11.276	1.398	0.241
Portugal	---	---	---	1.682	1.592	0.207	---	---	---	1.271	0.013	1.000
Spain	---	---	---	0.448	0.241	0.624	---	---	---	11.603	1.398	0.246

Notes: Entire sample, weighted, imputed. The chi-square difference tests ($\Delta\chi^2$) for the measurement weights model use the unconstrained model as reference, providing a test of the hypothesis that $m_{1\,(male)}=m_{1\,(female)}$; the chi-square difference tests for the structural weights model used the measurement weights model as reference (providing a test of the hypothesis that $s_{i\,(male)}=s_{i\,(female)}$ where $i=(1,…,6)$ (see Figure 3-3). F test used for combining chi square statistics across imputations. P is the significance level associated with $\Delta\chi^2$. Shaded cells denote statistically significant differences (at .1 significance level) between subsamples.

Table A-8 Diagnostic Tests for Sample Selection – Employed and Unemployed

| | Measurement weights model (Δdf=1) | | | | | | Structural weights model (Δdf=6) | | | | | |
| | 1992 | | | 1999 | | | 1992 | | | 1999 | | |
	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p
E Germany	2.492	2.107	0.148	2.045	0.958	0.337	10.749	1.340	0.257	7.359	0.289	0.920
Hungary	14.837	13.626	0.000	42.517	36.515	0.000	14.916	2.300	0.034	11.212	1.551	0.171
Czech Rep.	1.593	0.826	0.370	4.257	4.164	0.041	8.136	1.058	0.395	24.991	4.012	0.001
Slovenia	50.242	40.910	0.000	14.404	7.054	0.017	38.038	4.418	0.004	17.617	2.061	0.098
Poland	29.355	24.207	0.000	1.135	0.607	0.440	22.967	2.090	0.145	14.283	1.311	0.329
Russia	17.249	7.859	0.014	33.956	4.760	0.075	12.194	1.813	0.097	22.175	0.898	0.580
Slovakia	1.350	1.042	0.309	7.312	5.727	0.019	7.892	1.138	0.341	40.789	6.247	0.000
Latvia	---	---	---	6.852	3.463	0.078	---	---	---	28.826	4.126	0.001
Australia	0.284	0.139	0.709	23.729	9.486	0.010	9.812	1.503	0.175	17.480	1.574	0.253
New Zeeland	1.519	0.915	0.343	4.306	3.131	0.081	15.598	2.307	0.035	25.662	1.503	0.352
USA	8.606	8.003	0.005	0.560	0.447	0.504	22.895	0.878	0.594	10.334	0.986	0.470
Canada	---	---	---	0.405	0.147	0.702	---	---	---	18.318	2.039	0.112
W Germany	1.278	0.577	0.453	1.345	0.375	0.548	14.177	1.759	0.131	18.369	1.595	0.256
France	---	---	---	3.941	2.904	0.092	---	---	---	7.481	0.495	0.797
Norway	5.617	2.567	0.128	3.581	2.998	0.085	24.380	3.388	0.005	6.774	0.643	0.695
Sweden	---	---	---	0.307	0.238	0.626	---	---	---	6.542	0.788	0.584
Cyprus	---	---	---	5.638	4.481	0.036	---	---	---	28.187	3.311	0.019
Portugal	---	---	---	0.141	0.084	0.772	---	---	---	40.177	5.637	0.000
Spain	---	---	---	9.317	7.950	0.005	---	---	---	30.489	4.210	0.001

Notes: Entire sample, weighted, imputed. The chi-square difference tests ($\Delta\chi^2$) for the measurement weights model use the unconstrained model as reference, providing a test of the hypothesis that $m_{1\,(empl.)}=m_{1\,(unempl.)}$; the chi-square difference tests for the structural weights model used the measurement weights model as reference (providing a test of the hypothesis that $s_{i\,(empl.)}=s_{i\,(unempl.)}$ where $i=(1,…,6)$ (see Figure 3-3). F test used for combining chi square statistics across imputations. P is the significance level associated with $\Delta\chi^2$. Shaded cells denote statistically significant differences (at .1 significance level) between subsamples.

Table A-9 Descriptives

	1992 N	1999 N	Residence (urban), Min=0, Max=1 1992 % Miss	Mean	SD	1999 % Miss	Mean	SD	Age, Min=17, Max=92 1992 % Miss	Mean	SD	1999 % Miss	Mean	SD	Married, Min=0, Max=1 1992 % Miss	Mean	SD	1999 % Miss	Mean	SD
E. Germany	603	269	0.00	0.68	0.47	0.00	0.73	0.44	0.17	38.51	10.69	0.00	41.06	11.02	0.00	0.71	0.45	0.00	0.68	0.47
Hungary	666	569	0.00	0.65	0.48	0.00	0.68	0.47	0.00	38.44	11.03	0.00	38.09	11.35	0.00	0.72	0.45	0.00	0.60	0.49
Czech Rep.	470	975	0.00	0.76	0.43	0.00	0.83	0.38	0.21	38.53	10.62	0.51	42.48	11.57	0.21	0.76	0.43	0.21	0.65	0.48
Slovenia	580	539	0.00	0.59	0.49	0.37	0.58	0.49	0.00	36.22	10.01	0.00	37.36	9.54	0.00	0.74	0.44	0.00	0.76	0.43
Poland	853	555	0.00	0.62	0.48	0.00	0.66	0.47	0.00	38.35	10.69	0.00	38.59	11.28	0.05	0.77	0.42	0.00	0.75	0.43
Russia	1271	729	0.00	0.73	0.44	0.00	0.76	0.43	0.00	38.78	11.61	0.00	38.56	11.46	0.00	0.71	0.45	0.00	0.69	0.46
Slovakia	287	626	0.00	0.51	0.50	0.00	0.58	0.49	0.00	37.40	10.59	0.00	39.11	10.60	0.00	0.76	0.43	0.16	0.71	0.46
Latvia	---	693	---	---	---	0.00	0.69	0.46	---	---	---	0.14	39.58	11.33	---	---	---	0.14	0.64	0.48
Australia	1358	864	2.72	0.90	0.30	3.94	0.89	0.32	2.28	43.28	11.66	1.50	39.14	11.37	0.52	0.77	0.42	5.90	0.68	0.47
New Zealand	742	749	1.75	0.74	0.44	5.87	0.74	0.44	1.21	39.66	11.74	3.20	43.21	12.38	0.27	0.71	0.45	0.27	0.67	0.47
USA	761	846	0.00	0.82	0.39	0.00	0.83	0.38	0.00	39.83	12.85	0.59	40.63	12.80	0.16	0.58	0.49	0.12	0.49	0.50
Canada	---	695	---	---	---	0.77	0.83	0.38	---	---	---	1.51	36.18	11.02	---	---	---	0.85	0.65	0.48
W. Germany	1148	493	0.00	0.85	0.36	0.00	0.89	0.31	0.00	38.61	11.39	0.00	41.28	12.07	0.00	0.61	0.49	0.00	0.60	0.49
France	---	931	---	---	---	1.95	0.65	0.48	---	---	---	0.00	39.57	9.83	---	---	---	1.34	0.66	0.47
Norway	845	818	0.00	0.47	0.50	0.86	0.60	0.49	0.00	40.23	11.93	0.00	40.74	11.06	0.00	0.80	0.40	0.00	0.57	0.49
Sweden	---	729	---	---	---	0.00	0.89	0.31	---	---	---	0.69	42.25	12.21	---	---	---	0.41	0.51	0.50
Cyprus	---	739	---	---	---	0.00	0.64	0.48	---	---	---	0.00	39.28	11.27	---	---	---	0.00	0.68	0.47
Portugal	---	665	---	---	---	0.00	0.75	0.43	---	---	---	0.00	39.08	12.64	---	---	---	0.00	0.67	0.47
Spain	---	529	---	---	---	0.00	0.76	0.42	---	---	---	0.00	37.37	11.93	---	---	---	0.19	0.65	0.48

	1992 N	1999 N	Gender (male), Min=0, Max=1 1992 % Miss	Mean	SD	1999 % Miss	Mean	SD	Education (years), Min=1, Max=29 1992 % Miss	Mean	SD	1999 % Miss	Mean	SD	Education (eps), Min=-42.98, Max=0 1992 % Miss	Mean	SD	1999 % Miss	Mean	SD
E. Germany	603	269	0.00	0.51	0.50	0.00	0.55	0.50	6.97	10.99	2.94	0.00	11.58	2.71	0.17	-16.65	8.06	0.00	-17.20	6.87
Hungary	666	569	0.00	0.51	0.50	0.00	0.61	0.49	0.00	11.43	2.82	0.00	11.55	2.37	0.00	-22.14	8.58	0.00	-17.66	7.89
Czech Rep.	470	975	0.43	0.54	0.50	0.00	0.53	0.50	0.43	12.72	2.82	1.85	13.20	2.98	0.00	-16.68	7.86	0.00	-17.18	8.43
Slovenia	580	539	0.00	0.54	0.50	0.00	0.54	0.50	0.17	10.80	3.09	2.41	12.09	2.63	0.17	-20.19	9.23	0.00	-15.75	8.99
Poland	853	555	0.00	0.56	0.50	0.00	0.58	0.49	0.19	10.58	2.64	9.85	12.53	3.06	0.00	-18.49	7.21	0.00	-14.96	7.71
Russia	1271	729	0.00	0.51	0.50	0.00	0.49	0.50	1.71	11.59	3.20	0.40	11.94	2.68	0.00	-15.66	8.07	0.00	-12.50	8.14
Slovakia	287	626	0.00	0.52	0.50	0.00	0.49	0.50	1.74	12.61	3.05	3.99	12.97	2.74	0.00	-19.43	9.34	0.00	-17.56	8.74
Latvia	---	693	---	---	---	0.00	0.51	0.50	---	---	---	6.78	13.16	2.77	---	---	---	0.14	-16.80	9.96
Australia	1358	864	0.29	0.61	0.49	1.04	0.50	0.50	1.25	11.60	2.80	20.49	12.90	2.94	0.00	-11.23	6.36	15.97	-7.72	6.12
New Zealand	742	749	0.54	0.58	0.49	3.07	0.53	0.50	1.35	12.44	3.42	0.53	13.50	2.79	0.67	-14.95	7.44	0.53	-9.50	4.85
USA	761	846	0.00	0.47	0.50	0.00	0.48	0.50	0.24	13.63	2.75	0.12	13.82	2.59	0.35	-10.26	6.73	0.35	-10.40	6.74
Canada	---	695	---	---	---	0.99	0.54	0.50	---	---	---	5.95	14.54	3.40	---	---	---	0.28	-9.47	6.48
W. Germany	1148	493	0.00	0.59	0.49	0.00	0.62	0.49	8.36	11.00	3.38	0.81	10.68	3.11	0.35	-19.69	8.62	0.61	-17.51	7.13
France	---	931	---	---	---	0.00	0.50	0.50	---	---	---	3.72	20.02	3.34	---	---	---	0.41	-6.32	5.75
Norway	845	818	0.00	0.54	0.50	0.00	0.53	0.50	5.80	12.51	3.13	8.07	12.95	2.88	1.32	-13.47	8.02	0.49	-9.44	8.01
Sweden	---	729	---	---	---	0.00	0.49	0.50	---	---	---	4.39	12.10	3.42	---	---	---	2.19	-11.34	6.89
Cyprus	---	739	---	---	---	0.00	0.56	0.50	---	---	---	1.89	12.43	3.38	---	---	---	0.00	-11.69	8.16
Portugal	---	665	---	---	---	0.00	0.56	0.50	---	---	---	3.85	8.56	4.51	---	---	---	0.00	-18.53	6.96
Spain	---	529	---	---	---	0.00	0.66	0.47	---	---	---	2.81	12.34	4.62	---	---	---	0.19	-15.25	7.49

| | 1992 N | 1999 N | R's occupation (SIOPS), Min=12, Max=82 | | | | | | F's occupation (SIOPS), Min=6, Max=78 | | | | | | R's earning decile, Min=1, Max=10 | | | | | |
| | | | 1992 | | | 1999 | | | 1992 | | | 1999 | | | 1992 | | | 1999 | | |
			% Miss	Mean	SD	% Miss	Mean	SD	% Miss	Mean	SD	% Miss	Mean	SD	% Miss	Mean	SD	% Miss	Mean	SD
E. Germany	603	269	14.93	41.95	12.99	5.95	43.45	12.29	28.36	39.20	12.11	21.93	40.92	11.62	34.66	7.03	2.37	15.24	6.44	2.60
Hungary	666	569	4.89	38.30	13.04	2.32	40.67	12.34	7.45	36.17	13.44	9.48	37.78	12.32	3.38	6.44	2.63	22.56	7.15	2.38
Czech Rep.	470	975	4.89	38.58	12.34	4.41	41.99	12.29	8.94	35.78	12.40	11.59	39.58	11.80	8.94	6.34	2.59	17.95	7.12	2.38
Slovenia	580	539	3.97	39.81	13.94	4.08	41.54	12.22	2.24	29.06	13.36	8.16	38.24	11.48	8.97	6.43	2.55	16.33	6.51	2.54
Poland	853	555	1.69	38.91	11.28	1.22	40.23	12.48	8.82	37.14	8.42	7.02	38.76	10.55	3.87	5.46	2.86	8.95	5.67	2.80
Russia	1271	729	6.02	41.58	14.03	13.66	41.49	14.09	25.25	38.50	12.49	28.86	40.16	12.73	2.21	6.43	2.39	16.58	5.33	2.72
Slovakia	287	626	4.18	38.90	12.97	12.30	41.00	12.88	12.54	34.37	12.40	22.04	37.53	12.96	13.24	6.48	2.53	1.60	7.04	2.32
Latvia	---	693				3.03	42.54	14.53	---	---	---	16.59	40.27	13.89	---	---	---	4.18	6.55	2.61
Australia	1358	864	5.60	44.76	13.50	1.74	45.96	13.59	7.88	42.06	13.61	8.22	42.83	13.64	5.82	6.43	2.47	6.94	6.11	2.49
New Zealand	742	749	6.06	43.57	13.61	8.54	44.66	13.61	10.38	41.79	13.89	13.62	42.56	13.87	1.89	6.62	2.61	2.94	6.35	2.47
USA	761	846	3.09	43.78	14.00	0.83	43.83	14.26	17.62	43.95	14.48	21.87	41.96	13.79	15.79	5.56	2.69	12.53	5.72	2.70
Canada	---	695	---	---	---	4.96	44.03	14.38	---	---	---	7.67	42.51	14.60	---	---	---	3.12	5.67	2.80
W. Germany	1148	493	16.64	42.19	12.73	5.07	43.20	11.64	29.01	40.65	12.08	20.69	40.18	11.95	40.77	6.47	2.46	17.04	6.29	2.53
France	---	931	---	---	---	0.76	42.23	11.26	---	---	---	8.11	41.17	12.33	---	---	---	1.48	4.32	2.63
Norway	845	818	4.62	45.12	13.94	17.48	46.23	14.37	14.41	42.43	13.69	18.09	42.23	14.80	1.45	6.90	2.17	2.69	6.65	2.40
Sweden	---	729	---	---	---	3.70	41.64	13.61	---	---	---	10.70	39.08	14.50	---	---	---	11.93	6.14	2.54
Cyprus	---	739	---	---	---	9.88	42.67	13.70	---	---	---	19.08	37.12	11.68	---	---	---	4.33	6.68	2.06
Portugal	---	665	---	---	---	0.86	37.99	11.69	---	---	---	3.10	36.42	9.57	---	---	---	2.43	6.56	2.19
Spain	---	529	---	---	---	1.13	39.30	13.63	---	---	---	5.29	37.36	12.13	---	---	---	20.70	6.47	2.20

Note: Employed subsample, weighted, imputed; % missing computed in the original, unimputed data.

Table A-10 Status Attainment Model Estimates - 1992 (Standardized Estimates)

	E. Germany Estimate	R^2	Hungary Estimate	R^2	Czech Rep. Estimate	R^2	Slovenia Estimate	R^2	Poland Estimate	R^2	Russia Estimate	R^2
Fath. Occup. → R. Educ.	0.322 ***	0.12	0.383 **	0.23	0.324 ***	0.16	0.356 ***	0.19	0.197 ***	0.26	0.211 ***	0.13
Fath. Occup → R. Occup	0.097 +	0.41	0.033	0.48	0.057	0.47	0.077 *	0.50	0.066 *	0.41	0.031	0.35
R. Educ. → R. Occup.	0.592 ***		0.677 ***		0.663 ***		0.656 ***		0.671 ***		0.568 ***	
Fath. Occup → R. Earn.	-0.029	0.22	0.058	0.36	0.044	0.37	0.050	0.28	0.091 **	0.27	-0.026	0.15
R. Educ.→ R. Earn.	0.186 *		0.170 ***		0.323 ***		0.398 ***		0.153 ***		0.157 ***	
R. Occup. → R. Earn.	0.238 ***		0.246 ***		0.004		0.089		0.058		0.061	

	Slovakia Estimate	R^2	Australia Estimate	R^2	New Zealand Estimate	R^2	USA Estimate	R^2	W. Germany Estimate	R^2	Norway Estimate	R^2
Fath. Occup. → R. Educ.	0.340 ***	0.15	0.304 ***	0.14	0.261 ***	0.08	0.240 **	0.11	0.407 ***	0.19	0.418 ***	0.20
Fath. Occup. → R. Occup	0.041	0.61	0.033	0.31	0.088 **	0.41	0.055	0.30	0.047	0.49	0.056	0.41
R. Educ. → R. Occup.	0.739 ***		0.556 ***		0.606 ***		0.528 ***		0.681 ***		0.602 ***	
Fath. Occup → R. Earn.	0.051	0.25	-0.002	0.35	0.027	0.32	-0.030	0.38	0.020	0.37	-0.045	0.37
R. Educ.→ R. Earn.	0.237 **		0.084 **		0.127 **		0.224 ***		0.111		0.255 ***	
R. Occup. → R. Earn.	0.022		0.311 ***		0.316 ***		0.280 ***		0.215 **		0.152 ***	

Notes: Employed subsample, weighted, imputed. Standard errors in parentheses.
Chi-square=562.473 (df=72), F (for combining chi square tests across imputations) =7.249(p=0.000); RMSEA=0.027
Significance levels (computed for unstandardized coefficients): *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.

Table A-11 Status Attainment Direct, Indirect and Total Effects - 1992 (Standardized Estimates)

	E. Germany Direct Eff.	Indir. Eff.	Total Eff.	Hungary Direct Eff.	Indir. Eff.	Total Eff.	Czech Republic Direct Eff.	Indir. Eff.	Total Eff.	Slovenia Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.097 +	0.190 ***	0.287 ***	0.033	0.259 **	0.292 **	0.057	0.214 ***	0.272 ***	0.077 *	0.233 ***	0.310 ***
F. Occup. → R. Earn.	-0.029	0.129 ***	0.100 *	0.058	0.137 ***	0.195 ***	0.044	0.106 ***	0.150 ***	0.050	0.169 ***	0.219 ***
R. Educ. → R. Earn.	0.186 *	0.141 ***	0.327 ***	0.170 ***	0.167 ***	0.336 ***	0.323 ***	0.002	0.326 ***	0.398 ***	0.058	0.456 ***

	Poland Direct Eff.	Indir. Eff.	Total Eff.	Russia Direct Eff.	Indir. Eff.	Total Eff.	Slovakia Direct Eff.	Indir. Eff.	Total Eff.	Australia Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.066 *	0.132 ***	0.199 ***	0.031	0.120 ***	0.150 ***	0.041	0.251 ***	0.292 ***	0.033	0.169 ***	0.202 ***
F. Occup. → R. Earn.	0.091 **	0.042 ***	0.133 ***	-0.026	0.042 ***	0.016	0.051	0.087 ***	0.138 *	-0.002	0.089 ***	0.087 ***
R. Educ. → R. Earn.	0.153 ***	0.039	0.192 ***	0.157 ***	0.035	0.192 ***	0.237 *	0.016	0.254 ***	0.084 **	0.173 ***	0.257 ***

	New Zealand Direct Eff.	Indir. Eff.	Total Eff.	USA Direct Eff.	Indir. Eff.	Total Eff.	W. Germany Direct Eff.	Indir. Eff.	Total Eff.	Norway Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.088 *	0.158 ***	0.246 ***	0.055	0.127 **	0.183 ***	0.047	0.277 ***	0.325 ***	0.056	0.252 ***	0.308 ***
F. Occup. → R. Earn.	0.027	0.111 ***	0.138 ***	-0.030	0.105 **	0.076 +	0.020	0.115 ***	0.136 ***	-0.045	0.153 ***	0.109 ***
R. Educ. → R. Earn.	0.127 *	0.192 ***	0.318 ***	0.224 ***	0.148 ***	0.372 ***	0.111	0.146 **	0.257 ***	0.255 ***	0.092 ***	0.347 ***

Notes: Employed subsample, weighted, imputed. Bootstrapped standard errors and significance levels. Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1

Table A-12 Similarity of Status Attainment Model Parameters within Regions, 1992

	Correlations of standardized parameters between pairs of countries												Similarity index
	E.Germ.	Hungary	Czech Rep.	Slovenia	Poland	Russia	Slovakia	Australia	New Zealand	USA	W.Germany	Norway	
E.Germany	1.000												
Hungary	0.971	1.000											
Czech Rep.	0.856	0.865	1.000										
Slovenia	0.869	0.863	0.990	1.000									
Poland	0.872	0.905	0.927	0.889	1.000								
Russia	0.951	0.949	0.959	0.948	0.971	1.000							
Slovakia	0.897	0.923	0.984	0.960	0.968	0.983	1.000						**0.929**
Australia								1.000					
New Zealand								0.985	1.000				
USA								0.941	0.957	1.000			**0.961**
W.Germany											1.000		---
Norway												1.000	---

Table A-13 Similarity of Status Attainment Model Parameters across All Countries, 1992

	Correlations of standardized parameters between pairs of countries												Similarity index
	E.Germ.	Hungary	Czech Rep.	Slovenia	Poland	Russia	Slovakia	Australia	New Zealand	USA	W.Germany	Norway	
E.Germany	1.000												
Hungary	0.971	1.000											
Czech Rep.	0.856	0.865	1.000										
Slovenia	0.869	0.863	0.990	1.000									
Poland	0.872	0.905	0.927	0.889	1.000								
Russia	0.951	0.949	0.959	0.948	0.971	1.000							
Slovakia	0.897	0.923	0.984	0.960	0.968	0.983	1.000						
Australia	0.957	0.962	0.712	0.724	0.799	0.861	0.794	1.000					
New Zealand	0.963	0.955	0.745	0.751	0.855	0.897	0.821	0.985	1.000				
USA	0.971	0.932	0.802	0.841	0.818	0.906	0.830	0.941	0.957	1.000			
W.Germany	0.970	0.993	0.850	0.839	0.893	0.940	0.916	0.959	0.946	0.906	1.000		
Norway	0.961	0.946	0.924	0.940	0.850	0.946	0.933	0.873	0.861	0.911	0.945	1.000	**0.903**

Table A-14 Balance between Ascription and Achievement, 1992 and 1999

	Total Variance in R's Occupation									
	% explained by father's occupation		% explained by R's education				% explained by other factors		Balance Index	
	1992	1999	1992	1999			1992	1999	1992	1999
E.Germany	7.78	5.18	30.88	26.80			61.34	68.02	3.97	5.17
Hungary	8.26	6.88	35.56	31.16			56.18	61.96	4.31	4.53
Czech Rep.	7.14	8.04	36.94	38.02			55.92	53.94	5.17	4.73
Slovenia	9.08	8.48	34.34	45.84			56.58	45.68	3.78	5.41
Poland	3.86	2.76	32.80	37.02			63.34	60.22	8.50	13.41
Russia	2.24	1.74	28.06	25.44			69.70	72.82	12.53	14.62
Slovakia	8.24	6.20	46.10	43.38			45.66	50.42	5.59	7.00
Latvia	---	4.84	---	42.64			---	52.52	---	8.81
Australia	4.10	2.58	26.56	22.54			69.34	74.88	6.48	8.74
New Zealand	5.86	3.32	33.66	13.64			60.48	83.04	5.74	4.11
USA	3.26	4.12	24.84	19.54			71.90	76.34	7.62	4.74
Canada	---	4.18	---	24.74			---	71.08	---	5.92
W.Germany	10.42	18.78	37.60	24.34			51.98	56.88	3.61	1.30
France	---	4.32	---	30.58			---	65.10	---	7.08
Norway	9.00	3.94	28.90	32.08			62.10	63.98	3.21	8.14
Sweden	---	2.48	---	28.50			---	69.02	---	11.49
Cyprus	---	4.42	---	36.86			---	58.72	---	8.34
Portugal	---	13.76	---	34.32			---	51.92	---	2.49
Spain	---	11.32	---	26.76			---	61.92	---	2.36

	Total Variance in R's Earnings									
	% explained by father's occupation		% explained by R's education		% explained by R's education and occ.		% explained by other factors		Balance Index	
	1992	1999	1992	1999	1992	1999	1992	1999	1992	1999
E.Germany	0.98	1.72	9.74	5.28	12.9	9.48	86.12	88.80	13.16	5.51
Hungary	3.66	1.22	8.62	7.34	11.88	7.90	84.46	90.88	3.25	6.48
Czech Rep.	2.24	1.38	8.96	10.52	8.88	12.82	88.88	85.80	3.96	9.29
Slovenia	4.50	4.32	16.60	29.90	17.26	31.40	78.24	64.28	3.84	7.27
Poland	1.76	1.00	0.42	8.70	2.9	11.70	95.34	87.30	1.65	11.70
Russia	0.02	1.24	3.56	5.70	3.46	5.92	96.52	92.84	173.00	4.77
Slovakia	1.86	4.68	6.64	8.88	5.56	13.66	92.58	81.66	2.99	2.92
Latvia	---	2.64	---	11.44	---	13.04	---	84.32	---	4.94
Australia	0.74	0.12	5.62	5.40	12.34	18.04	86.92	81.84	16.68	150.33
New Zealand	1.84	2.26	9.80	6.08	15.22	15.58	82.94	82.16	8.27	6.89
USA	0.60	0.90	12.48	6.26	17.84	9.58	81.56	89.52	29.73	10.64
Canada	---	0.72	---	6.52	---	9.70	---	89.58	---	13.47
W.Germany	1.80	2.98	5.12	2.56	7.82	7.82	90.38	89.20	4.34	2.62
France	---	2.16	---	13.28	---	20.88	---	76.96	---	9.67
Norway	1.16	0.58	9.10	8.66	10.94	13.08	87.90	86.34	9.43	22.55
Sweden	---	1.32	---	15.24	---	19.90	---	78.78	---	15.08
Cyprus	---	0.78	---	13.84	---	13.86	---	85.36	---	17.77
Portugal	---	2.64	---	26.92	---	28.52	---	68.84	---	10.80
Spain	---	4.92	---	11.86	---	15.16	---	79.92	---	3.08

Notes: % explained by education and occupation are calculated net of the influence of father's occupation. For the upper panel of the table (total variance in R's occupation) the balance index is computed as % explained by R's education divided by % explained by father's occupation. For the second panel of the table (total variance in R's earnings) the balance index is computed as % explained by R's education and occupation divided by % explained by father's occupation.

Table A-15 Status Attainment Model Estimates - 1999 (Standardized Estimates)

	E. Germany		Hungary		Czech Rep.		Slovenia		Poland		Russia		Slovakia	
	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²
F. Occup. → R. Educ.	0.300 ***	0.12	0.271 ***	0.15	0.354 ***	0.14	0.336 ***	0.19	0.156 ***	0.19	0.237 ***	0.12	0.308 ***	0.11
F. Occup. → R. Occup.	0.062	0.40	0.102 **	0.42	0.054 +	0.48	0.042	0.59	0.065 +	0.47	0.005	0.30	0.038	0.52
R. Educ. → R. Occup.	0.552 ***		0.610 ***		0.666 ***		0.756 ***		0.674 ***		0.537 ***		0.697 ***	
F. Occup → R. Earn.	0.043	0.23	0.024	0.16	-0.017	0.32	0.000	0.42	0.034	0.25	0.051	0.28	0.110 **	0.37
R. Educ. → R. Earn.	0.088		0.204 ***		0.228 ***		0.426 ***		0.170 *		0.221 ***		0.092 +	
R. Occup. → R. Earn.	0.271 **		0.129 +		0.192 ***		0.231 ***		0.234 ***		0.058		0.318 ***	

	Latvia		Australia		New Zealand		USA		Canada		W. Germany		France	
	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²
F. Occup. → R. Educ.	0.259 ***	0.11	0.254 ***	0.10	0.243 ***	0.14	0.369 ***	0.16	0.274 ***	0.12	0.463 ***	0.23	0.356 ***	0.26
F. Occup. → R. Occup.	0.042	0.50	0.035	0.28	0.088 *	0.18	0.025	0.27	0.061	0.31	0.173 ***	0.46	-0.015	0.40
R. Educ. → R. Occup.	0.693 ***		0.501 ***		0.397 ***		0.483 ***		0.532 ***		0.564 ***		0.645 ***	
F. Occup → R. Earn.	0.063	0.29	-0.046 +	0.38	0.057 +	0.29	-0.012	0.28	-0.004	0.29	0.031	0.30	0.007	0.47
R. Educ. → R. Earn.	0.222 ***		0.042		0.136 ***		0.171 ***		0.160 **		0.019		0.194 ***	
R. Occup. → R. Earn.	0.191 ***		0.415 ***		0.337 ***		0.213 ***		0.214 ***		0.305 ***		0.357 ***	

	Norway		Sweden		Cyprus		Portugal		Spain	
	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²	Estimate	R²
F. Occup. → R. Educ.	0.265 ***	0.13	0.212 **	0.07	0.177 ***	0.34	0.374 ***	0.33	0.444 ***	0.29
F. Occup. → R. Occup.	0.040	0.43	0.040	0.34	0.083 *	0.50	0.108 ***	0.52	0.067	0.42
R. Educ. → R. Occup.	0.608 ***		0.554 ***		0.745 ***		0.714 ***		0.615 ***	
F. Occup → R. Earn.	-0.021	0.35	0.021	0.40	0.004	0.35	-0.087 *	0.45	0.026	0.33
R. Educ. → R. Earn.	0.147 ***		0.250 ***		0.411 ***		0.580 ***		0.261 ***	
R. Occup. → R. Earn.	0.278 ***		0.272 ***		0.057		0.093 *		0.240 ***	

Notes: Employed subsample, weighted, imputed. Standard errors in parentheses.

Chi-square=528.072 (df=114), F (for combining chi square tests across imputations) =4.257(p=0.000); RMSEA=0.017

*Significance levels (computed for unstandardized coefficients): *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.*

Table A-16 Status Consistency, 1992 and 1999

	Status Consistency	
	1992	**1999**
East Germany	63.17 %	60.66 %
Hungary	65.49 %	61.00 %
Czech Republic	62.02 %	64.52 %
Slovenia	68.30 %	74.83 %
Poland	58.16 %	64.64 %
Russia	54.60 %	55.08 %
Slovakia	62.33 %	65.15 %
Latvia	---	63.96 %
Australia	58.37 %	58.33 %
New Zealand	62.13 %	55.77 %
USA	62.22 %	58.30 %
Canada	---	56.74 %
West Germany	62.63 %	60.52 %
France	---	63.62 %
Norway	61.90 %	62.71 %
Sweden	---	63.18 %
Cyprus	---	62.03 %
Portugal	---	69.60 %
Spain	---	64.25 %

Note: Status consistency is the % of explained variance in respondent's education, occupation,
and income by the first common factor (results from a principal components analysis.

Table A-17 Status Attainment Direct, Indirect and Total Effects - 1999 (Standardized Estimates)

	E. Germany			Hungary			Czech Republic			Slovenia		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.062	0.166 ***	0.228 **	0.102 **	0.165 ***	0.267 ***	0.054 +	0.236 ***	0.290 ***	0.042	0.254 ***	0.296 ***
F. Occup. → R. Earn.	0.043	0.089 **	0.132 *	0.024	0.090 ***	0.114 **	-0.017	0.136 ***	0.119 ***	0.000	0.212 ***	0.212 ***
R. Educ. → R. Earn.	0.088	0.149 **	0.238 ***	0.204 **	0.079 +	0.283 ***	0.228 ***	0.127 ***	0.356 ***	0.426 ***	0.174 **	0.600 ***

	Poland			Russia			Slovakia			Latvia		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.065 +	0.105 ***	0.171 ***	0.005	0.127 ***	0.132 *	0.038	0.215 ***	0.253 ***	0.042	0.179 ***	0.221 ***
F. Occup. → R. Earn.	0.034	0.067 ***	0.100 *	0.051	0.060 ***	0.111 *	0.110 **	0.109 ***	0.219 ***	0.063	0.100 ***	0.163 ***
R. Educ. → R. Earn.	0.170 *	0.158 ***	0.328 ***	0.221 ***	0.031	0.252 ***	0.092 +	0.222 ***	0.314 ***	0.222 ***	0.132 ***	0.355 ***

	Australia			New Zealand			USA			Canada		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.035	0.128 ***	0.162 ***	0.088 *	0.097 ***	0.184 ***	0.025	0.178 ***	0.203 ***	0.061	0.145 ***	0.207 ***
F. Occup. → R. Earn.	-0.046 +	0.078 ***	0.032	0.057 +	0.095 ***	0.152 ***	-0.012	0.106 ***	0.094 *	-0.004	0.088 ***	0.084 *
R. Educ. → R. Earn.	0.042	0.208 ***	0.250 ***	0.136 ***	0.134 ***	0.270 ***	0.171 ***	0.103 ***	0.273 ***	0.160 **	0.113 ***	0.274 ***

	W. Germany			France			Norway			Sweden		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.173 ***	0.261 ***	0.434 ***	-0.015	0.229 ***	0.214 ***	0.040	0.161 ***	0.200 *	0.040	0.117 **	0.158 *
F. Occup. → R. Earn.	0.031	0.142 ***	0.172 ***	0.007	0.146 ***	0.153 ***	-0.021	0.095 **	0.073	0.021	0.096 **	0.117 **
R. Educ. → R. Earn.	0.019	0.172 ***	0.191 ***	0.194 ***	0.230 ***	0.424 ***	0.147 ***	0.169 ***	0.316 ***	0.250 ***	0.151 ***	0.401 ***

	Cyprus			Portugal			Spain		
	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.	Direct Eff.	Indir. Eff.	Total Eff.
F. Occup. → R. Occup.	0.083 *	0.132 ***	0.214 ***	0.108 ***	0.267 ***	0.375 ***	0.067	0.273 ***	0.340 ***
F. Occup. → R. Earn.	0.004	0.085 ***	0.089 *	-0.087 *	0.252 ***	0.164 ***	0.026	0.197 ***	0.223 ***
R. Educ. → R. Earn.	0.411 ***	0.043	0.453 ***	0.580 ***	0.066 *	0.646 ***	0.261 ***	0.147 ***	0.408 ***

Notes: Employed subsample, weighted, imputed. Standard errors in parentheses.
Bootstrapped standard errors and significance levels.
Significance levels: *** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.1.

Table A-18 Similarity of Status Attainment Model Parameters within and across Regions, 1999

| | Correlations of standardized parameters between pairs of countries | | | | | | | | Similarity index |
	E.Germ.	Hungary	Czech Rep.	Slovenia	Poland	Russia	Slovakia	Latvia	
E.Germany	1.000								
Hungary	0.905	1.000							
Czech Rep.	0.938	0.983	1.000						
Slovenia	0.835	0.947	0.960	1.000					
Poland	0.919	0.943	0.924	0.905	1.000				
Russia	0.837	0.969	0.955	0.957	0.895	1.000			
Slovakia	0.985	0.893	0.911	0.821	0.940	0.845	1.000		
Latvia	0.925	0.981	0.972	0.952	0.975	0.968	0.937	1.000	**0.928**
	Australia	New Zealand	USA	Canada					
Australia	1.000								
New Zealand	0.995	1.000							
USA	0.846	0.872	1.000						
Canada	0.879	0.898	0.964	1.000					**0.909**
	W.Germany	France							
W.Germany	1.000								
France	0.849	1.000							**0.849**
	Norway	Sweden							
Norway	1.000								
Sweden	0.970	1.000							**0.970**
	Cyprus	Portugal	Spain						
Cyprus	1.000								
Portugal	0.933	1.000							
Spain	0.808	0.840	1.000						**0.860**
Similarity across all countries									**0.871**

Note: Matrix of correlations across all countries not shown.

Table A-19 Similarity of Status Attainment Model Parameters across Time

		Standardized status attaiment model parameters						Similarity index
		F.occup → R.educ	F.occup → R.occup	R.educ → R.occup	F.occup → R.earn	R.educ → R.earn	R.occup → R.earn	
E. Germany								**0.961**
	1992	0.322	0.097	0.592	-0.029	0.186	0.238	
	1999	0.300	0.062	0.552	0.043	0.088	0.271	
Hungary								**0.952**
	1992	0.383	0.033	0.677	0.058	0.170	0.246	
	1999	0.271	0.102	0.610	0.024	0.204	0.129	
Czech Rep.								**0.922**
	1992	0.324	0.057	0.663	0.044	0.323	0.004	
	1999	0.354	0.054	0.666	-0.017	0.228	0.192	
Slovenia								**0.965**
	1992	0.356	0.077	0.656	0.050	0.398	0.089	
	1999	0.336	0.042	0.756	0.000	0.426	0.231	
Poland								**0.936**
	1992	0.197	0.066	0.671	0.091	0.153	0.058	
	1999	0.156	0.065	0.674	0.034	0.170	0.234	
Russia								**0.979**
	1992	0.211	0.031	0.568	-0.026	0.157	0.061	
	1999	0.237	0.005	0.537	0.051	0.221	0.058	
Slovakia								**0.842**
	1992	0.340	0.041	0.739	0.051	0.237	0.022	
	1999	0.308	0.038	0.697	0.110	0.092	0.318	
Australia								**0.962**
	1992	0.304	0.033	0.556	-0.002	0.084	0.311	
	1999	0.254	0.035	0.501	-0.046	0.042	0.415	
New Zealand								**0.949**
	1992	0.261	0.088	0.606	0.027	0.127	0.316	
	1999	0.243	0.088	0.397	0.057	0.136	0.337	
USA								**0.928**
	1992	0.240	0.055	0.528	-0.030	0.224	0.280	
	1999	0.369	0.025	0.483	-0.012	0.171	0.213	
W. Germany								**0.923**
	1992	0.407	0.047	0.681	0.020	0.111	0.215	
	1999	0.463	0.173	0.564	0.031	0.019	0.305	
Norway								**0.910**
	1992	0.418	0.056	0.602	-0.045	0.255	0.152	
	1999	0.265	0.040	0.608	-0.021	0.147	0.278	

Table A-20 Diagnostic Tests – Equality of Parameters within Cohorts across Time, 1992 and 1999

	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p	$\Delta\chi^2$	F	p
	E. Germany			Hungary			Czech Rep.			Slovenia			Poland			Russia			Slovakia		
Equalities across time for cohort 1 (df=1)																					
F. Occup. → R. Educ.	0.107	0.087	0.768	0.368	0.300	0.584	1.363	1.339	0.247	0.316	0.191	0.662	0.073	0.034	0.854	1.045	0.443	0.510	0.127	0.119	0.730
F. Occup. → R. Occup.	0.370	0.142	0.707	0.287	0.246	0.620	0.228	0.125	0.724	3.566	3.085	0.080	0.895	0.785	0.376	0.767	0.370	0.546	0.290	0.145	0.704
R. Educ. → R. Occup.	0.551	0.445	0.505	0.082	0.069	0.793	0.072	0.056	0.813	0.087	0.061	0.805	1.315	1.238	0.266	0.382	0.202	0.654	0.086	0.065	0.798
F. Occup. → R. Earn.	0.923	0.492	0.486	2.307	2.152	0.143	1.304	0.846	0.361	1.243	1.118	0.291	1.233	1.062	0.303	0.873	0.442	0.509	0.421	0.223	0.638
R. Educ. → R. Earn.	0.451	0.220	0.640	3.234	2.784	0.096	3.967	3.252	0.073	3.707	3.355	0.067	0.484	0.266	0.607	0.157	0.086	0.769	0.210	0.121	0.729
R. Occup. → R. Earn.	0.113	0.080	0.777	7.312	6.639	0.010	3.803	2.933	0.090	0.132	0.121	0.728	1.619	1.144	0.287	0.131	0.067	0.796	0.129	0.093	0.760
Equalities across time for cohort 2 (df=1)																					
F. Occup. → R. Educ.	0.170	0.125	0.723	3.427	2.575	0.112	0.429	0.389	0.533	0.041	0.025	0.874	7.805	7.443	0.006	0.764	0.449	0.505	0.054	0.037	0.848
F. Occup. → R. Occup.	0.150	0.113	0.737	1.587	1.323	0.251	0.492	0.312	0.577	8.287	8.036	0.005	0.855	0.659	0.418	0.890	0.553	0.459	0.165	0.072	0.789
R. Educ. → R. Occup.	1.104	0.804	0.372	0.315	0.241	0.624	0.241	0.158	0.691	9.229	8.861	0.003	0.028	0.018	0.894	0.099	0.087	0.769	0.991	0.809	0.369
F. Occup. → R. Earn.	1.300	0.473	0.498	0.242	0.159	0.690	1.230	0.734	0.395	0.683	0.442	0.507	2.103	1.733	0.189	1.162	0.469	0.499	0.120	0.091	0.763
R. Educ. → R. Earn.	0.617	0.408	0.524	3.242	2.112	0.153	2.290	2.175	0.140	0.481	0.312	0.577	0.615	0.408	0.524	8.954	7.661	0.006	3.992	3.704	0.055
R. Occup. → R. Earn.	1.136	0.574	0.453	4.891	2.768	0.108	8.477	7.651	0.006	1.722	1.071	0.305	2.236	1.807	0.181	0.122	0.081	0.775	9.624	8.939	0.003
Equalities across time for cohort 3 (df=1)																					
F. Occup. → R. Educ.	0.208	0.121	0.729	2.038	1.502	0.223	0.032	0.025	0.875	0.110	0.045	0.832	0.207	0.116	0.734	3.631	2.025	0.166	1.448	1.184	0.278
F. Occup. → R. Occup.	0.774	0.732	0.392	0.086	0.051	0.822	0.890	0.862	0.353	0.231	0.151	0.698	0.084	0.063	0.803	0.744	0.562	0.454	0.047	0.027	0.869
R. Educ. → R. Occup.	3.679	3.262	0.072	0.798	0.721	0.396	0.701	0.655	0.418	2.901	2.331	0.129	1.096	0.930	0.335	0.549	0.277	0.600	0.227	0.160	0.689
F. Occup. → R. Earn.	1.092	0.480	0.493	0.682	0.427	0.515	2.314	2.204	0.138	0.555	0.362	0.548	0.739	0.696	0.404	1.574	1.354	0.245	0.904	0.801	0.371
R. Educ. → R. Earn.	0.390	0.196	0.659	0.494	0.283	0.596	7.571	7.120	0.008	1.946	1.788	0.181	0.078	0.053	0.818	0.272	0.244	0.621	0.953	0.775	0.379
R. Occup. → R. Earn.	0.173	0.119	0.730	0.987	0.704	0.403	3.269	2.608	0.109	4.418	3.513	0.063	9.545	9.472	0.002	1.118	0.399	0.534	2.325	1.887	0.171

Notes: Employed subsample, weighted, imputed. The chi-square difference tests use the unconstrained model as a reference model. F test used for combining chi square statistics across imputations. P is the significance level associated with $\Delta\chi^2$. Shaded cells denote statistically significant differences (at .1 significance level) across time. Cohort 1 – born before 1950, Cohort 2 – born between 1950 and 1964, Cohort 3 – born after 1964.

Table A-21 Country Level Industrialization Indicators

	Electricity consumption (1977)	Electricity consumption (1999)	Energy consumption change	Tertiary enrollment (1977)	Tertiary enrollment (1999)	Tertiary enrollment change	Employment in services (1977)	Employment in services (1999)	Change in employment in services
E. Germany	5.52 a	5.69	3.01	28.51	47.00 f	64.85	42.76	63.32	48.08
Hungary	2.12	2.87	35.63	12.14	24.00 e	97.69	35.50	58.81	65.68
Czech	3.46	4.68	35.18	14.50	24.00 f	65.52	37.28	54.88	47.22
Slovenia	2.41 b	5.22	116.60	21.49	36.00 f	67.52	45.03	51.23	13.77
Poland	2.24	2.39	6.46	17.77	25.00 e	40.69	31.66	48.70	53.80
Russia	4.40 b	4.05	-7.85	21.58	43.00 g	99.26	40.34	58.80	45.75
Slovakia	2.97	4.22	42.10	14.50	22.00 f	51.72	37.28	54.07	45.06
Latvia	4.40 b	1.87	-57.52	21.58	33.00 f	52.92	40.34	58.31	44.55
Australia	4.83	8.88	83.97	25.31	80.00 c	216.08	60.89	73.53	20.77
New Zealand	6.05	8.43	39.20	28.20	63.00 c	123.40	54.17	66.96	23.60
USA	8.57	12.09	41.16	56.03	81.00 e	44.57	62.31	74.15	19.01
Canada	11.36	15.28	34.48	37.66	88.00 e	133.67	65.44	73.30	12.00
W. Germany	4.57	5.69	24.62	24.70	47.00 f	90.28	47.95	63.32	32.04
France	3.40	6.39	88.06	25.73	51.00 f	98.21	52.78	71.50 h	35.46
Norway	16.22	24.50	51.09	24.12	62.00 f	157.05	58.61	73.16	24.83
Sweden	9.43	14.29	51.50	34.82	50.00 f	43.60	59.58	72.22	21.23
Cyprus	1.24	3.67	195.57	1.82	23.00 f	1163.74	43.20	62.96	45.74
Portugal	1.19	3.62	204.63	10.77	39.00 e	262.12	34.38	47.77	38.95
Spain	2.08	4.41	111.87	21.54 d	51.00 f	136.77	41.72	59.08	41.61

Notes:

Electricity (1977) = Electricity consumption in thousands of kwh per capita. Source: World Development Indicators 2003 CD-ROM

Electricity (1999) = Electricity consumption in thousands of kwh per capita. Source: World Development Indicators 2003 CD-ROM

Tertiary (1977) = Gross tertiary enrollment rate. Source: UNESCO Statistical Yearbook

Tertiary (1999) = Gross tertiary enrollment rate. Source: UNESCO Statistical Yearbook

Services (1977) = % of labor force employed in services. Source: Yearbook of Labor Statistics

Services (1999) = % of labor force employed in services. Source: Yearbook of Labor Statistics

a Data for 1980. Source: International Energy Annual 2004

b Data for 1980. Source: Energy Balances of Non-OECD countries, 2001-2003

c Data for 1997. Source: Cross National Time Series Data Archive, Arthur Banks, 2005

d Data for 1976

e Data for 1995

f Data for 1996

g Data for 1994

h Source: Labor Force Statistics 1983-2003, OECD, 2004

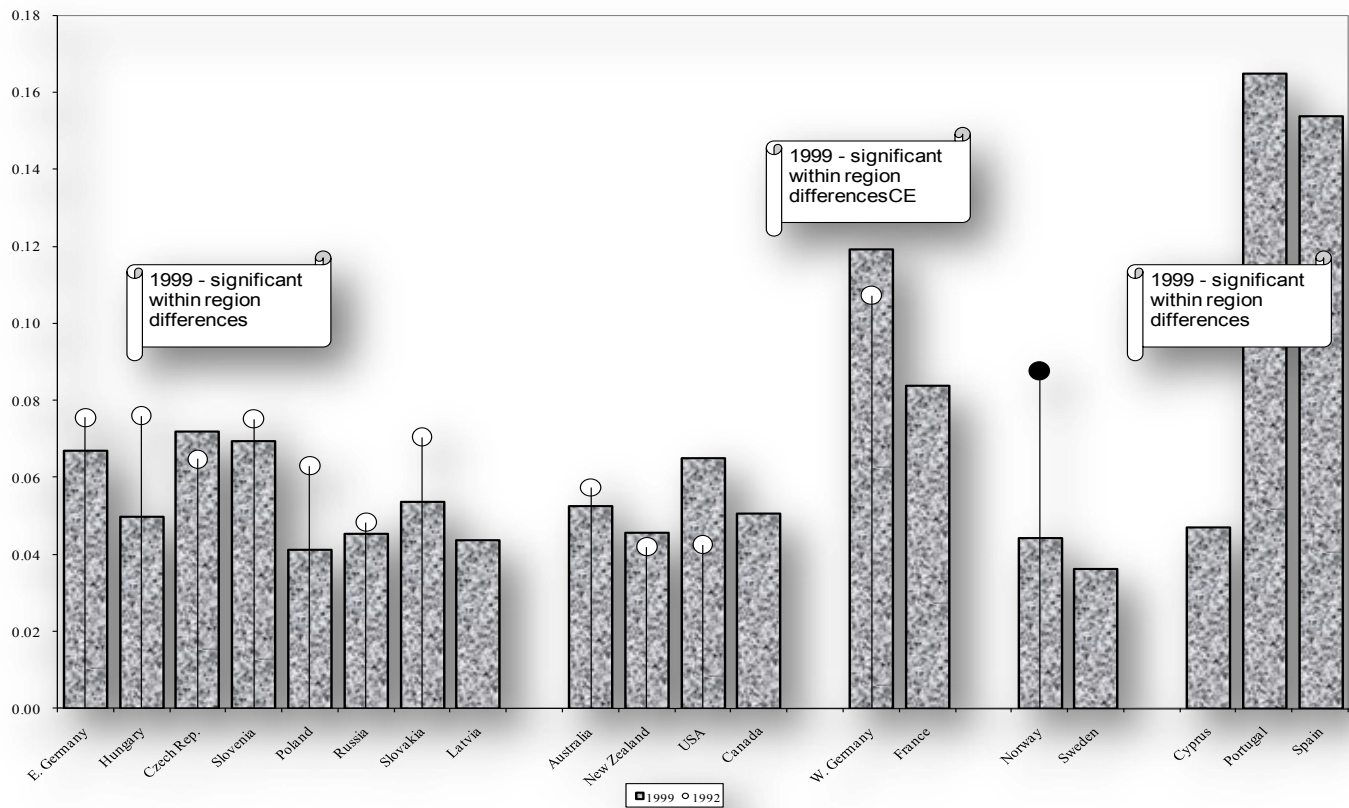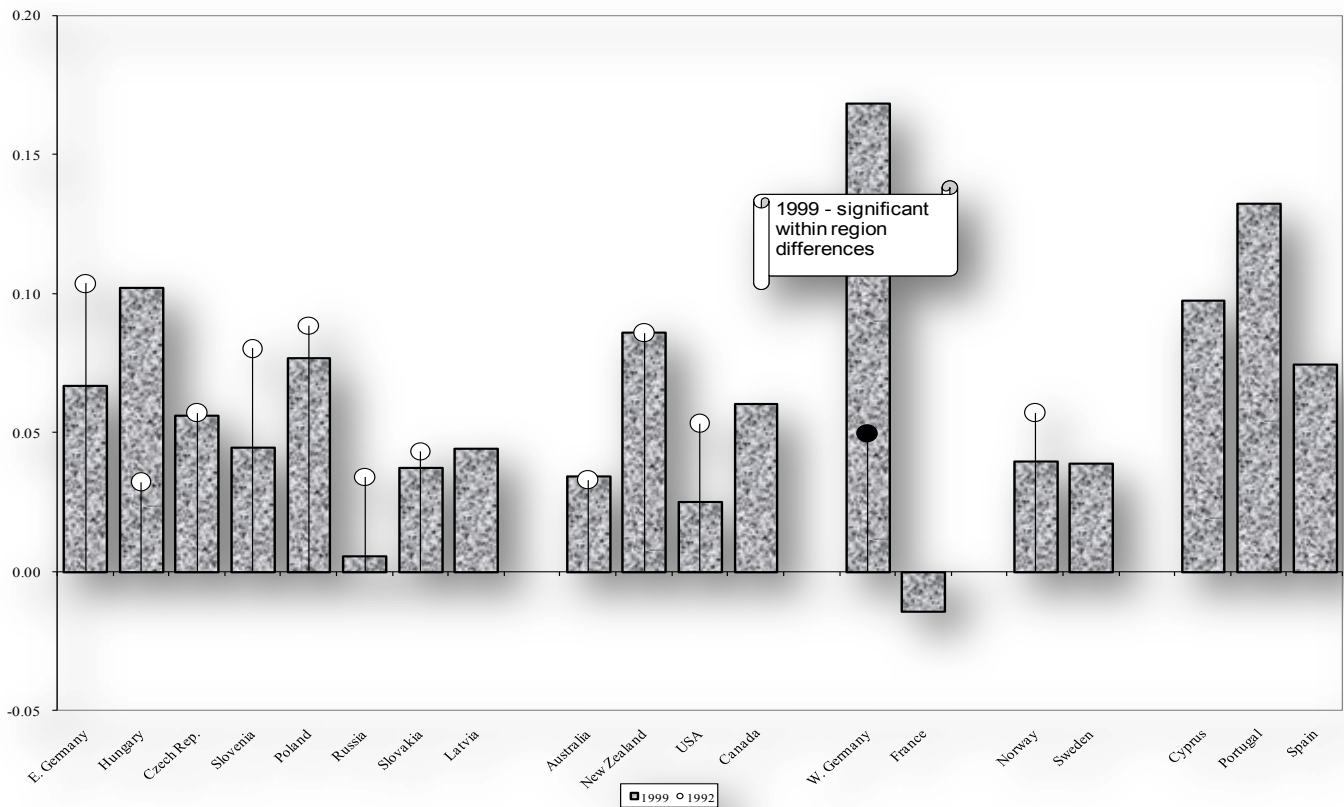**Figure A-1 Unstandardized Direct Effects of Father's Occupation on Respondent's Education[34]**

Figure A-2 Unstandardized Direct Effects of Father's Occupation on Respondent's Occupation

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[34] In Figure A-1 through Figure A-6 black dots represent countries in which there are statistically significant differences across time in sizes of effects.

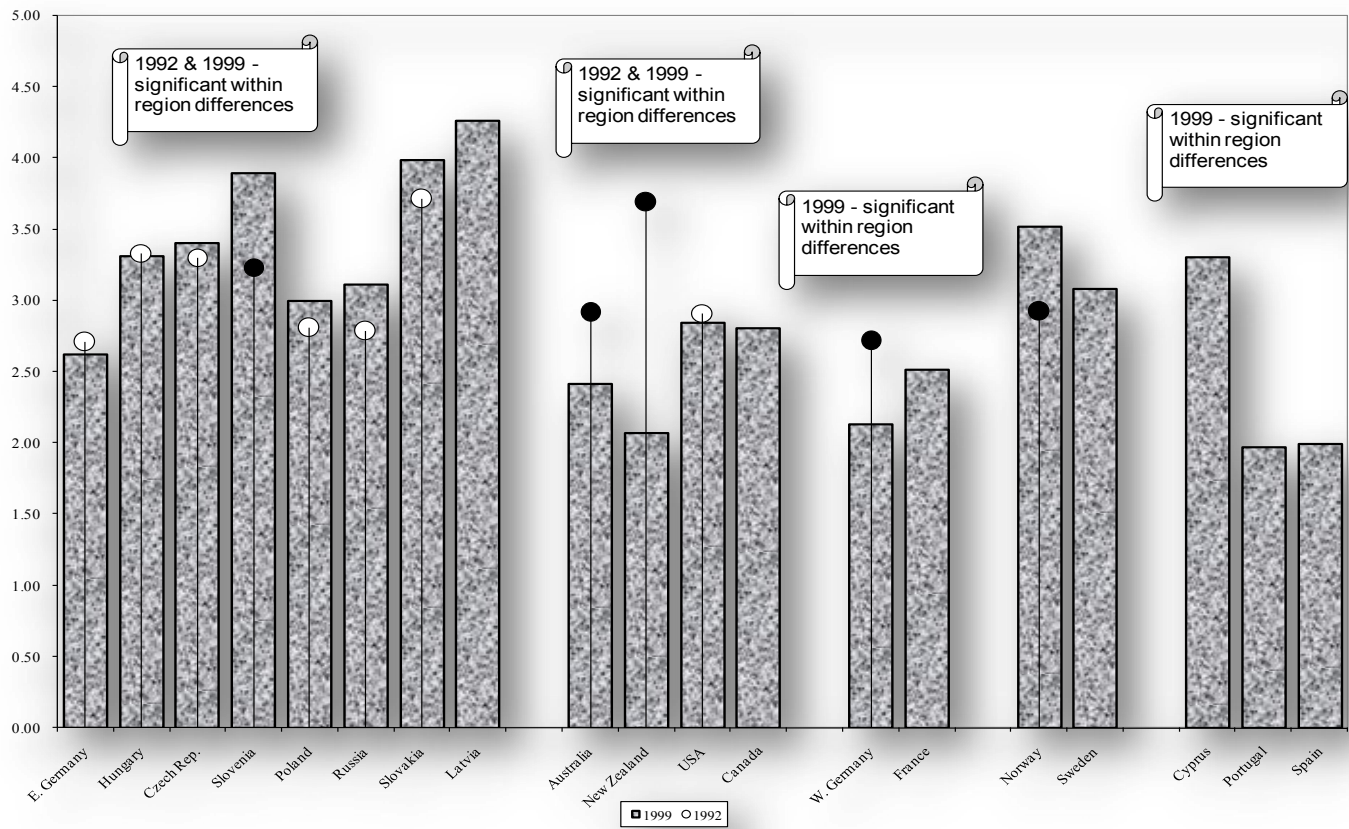**Figure A-3 Unstandardized Direct Effects of Respondent's Education on Respondent's Occupation**

Figure A-4 Unstandardized Direct Effects of Father's Occupation on Respondent's Earnings
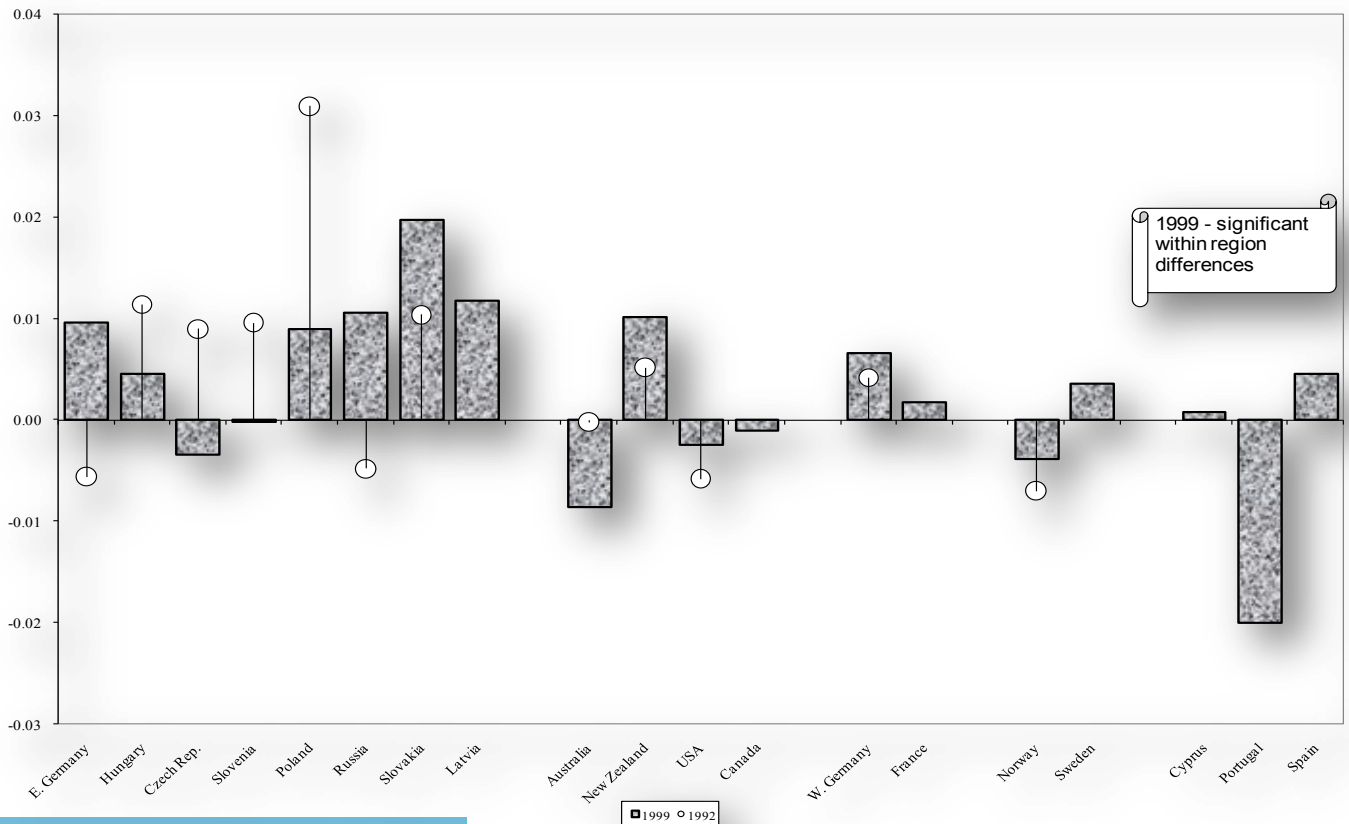
Figure A-5 Unstandardized Direct Effects of Respondent's Education on Respondent's Earnings

1992 & 1999 - significant within region differences

1992 & 1999 - significant within region differences

1999 - significant within region differences

1999 - significant within region differences

1999 - significant within region differences

■1999 ○1992
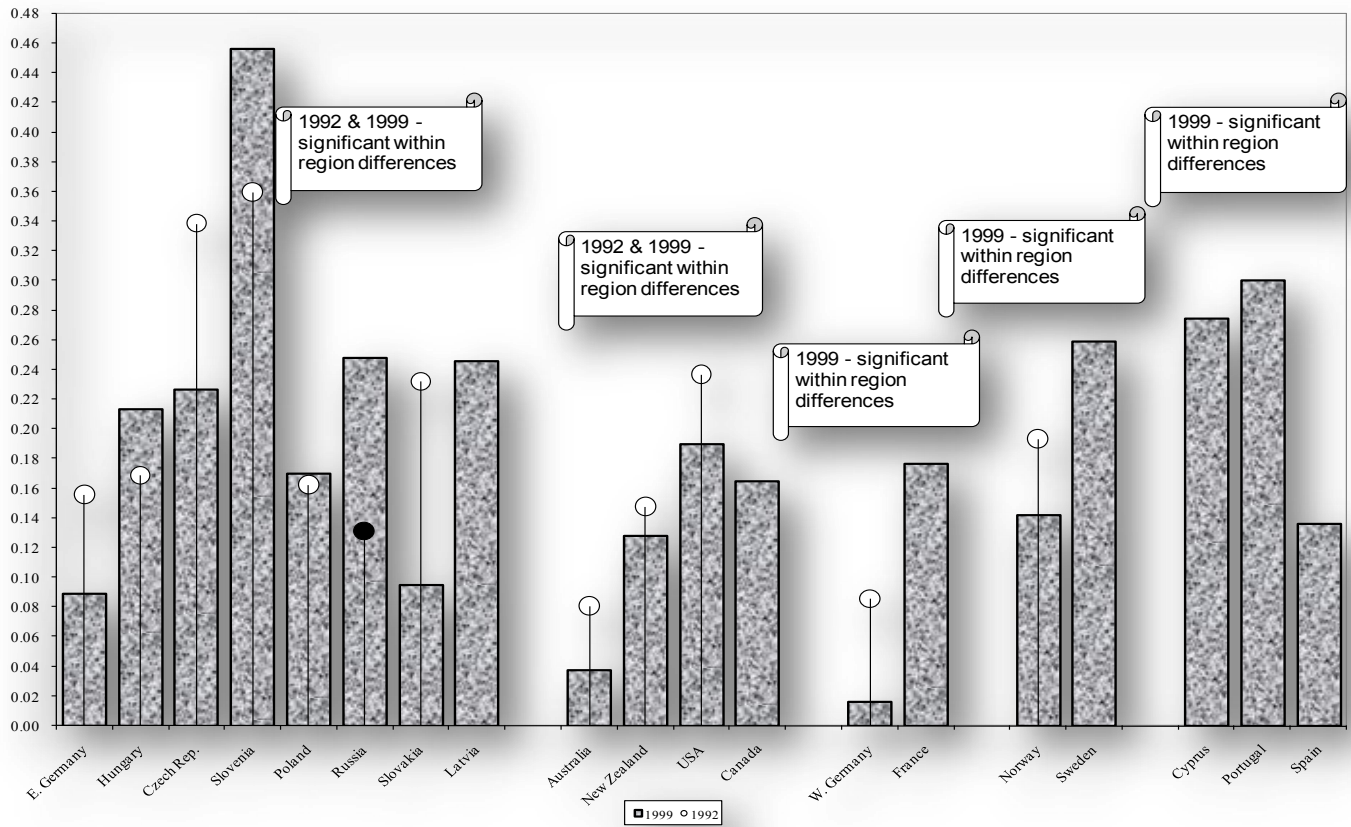
Figure A-6 Unstandardized Direct Effects of Respondent's Occupation on Respondent's Earnings

1992 & 1999 - significant within region differences

1999 - significant within region differences

1999 - significant within region differences

■1999 ○1992
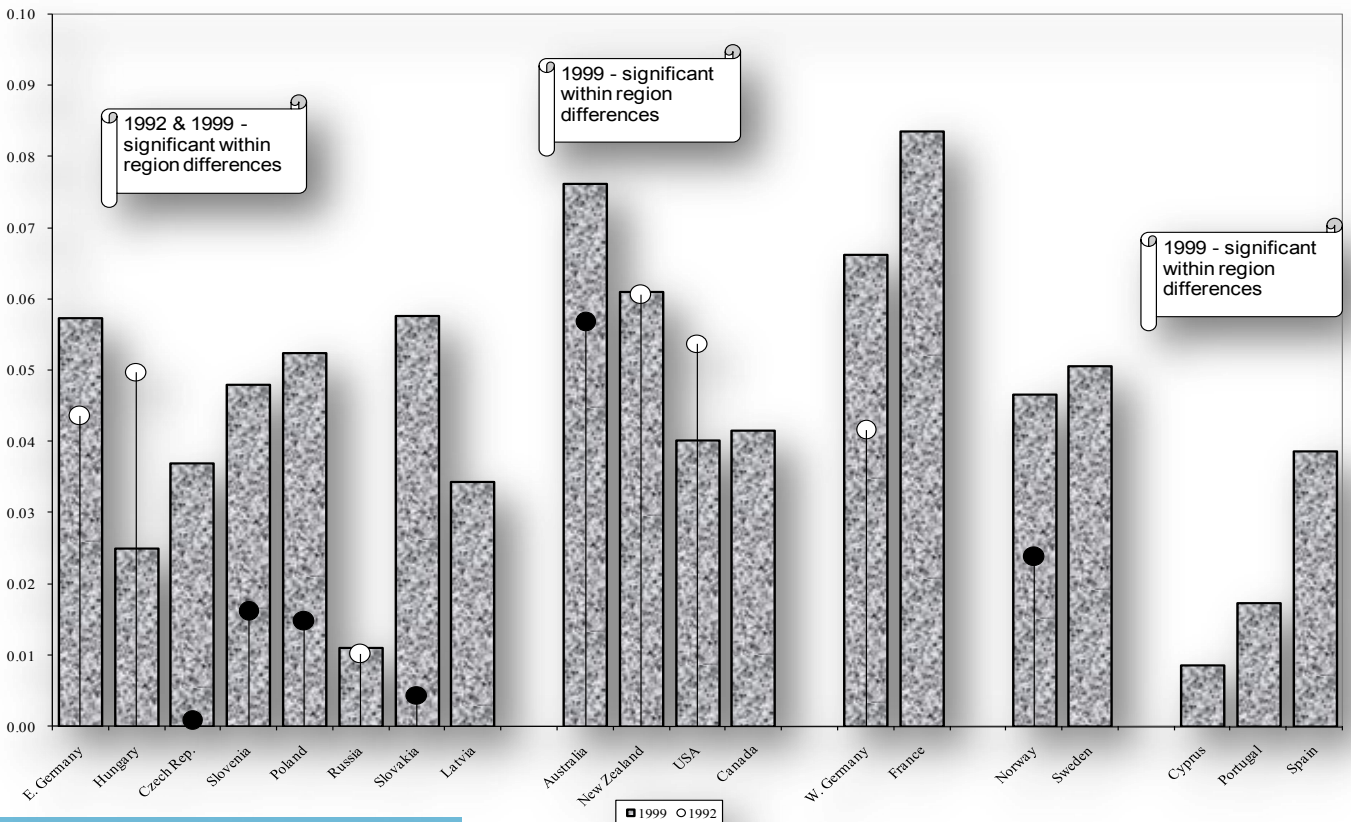
Figure A-7 Standardized Direct and Indirect Effects of Father's Occupation on Respondent's Occupation[35]

Legend: ☐ Indirect effect 1999 ☐ Direct effect 1999 ■ Indirect effect 1992 ○ Direct effect 1992

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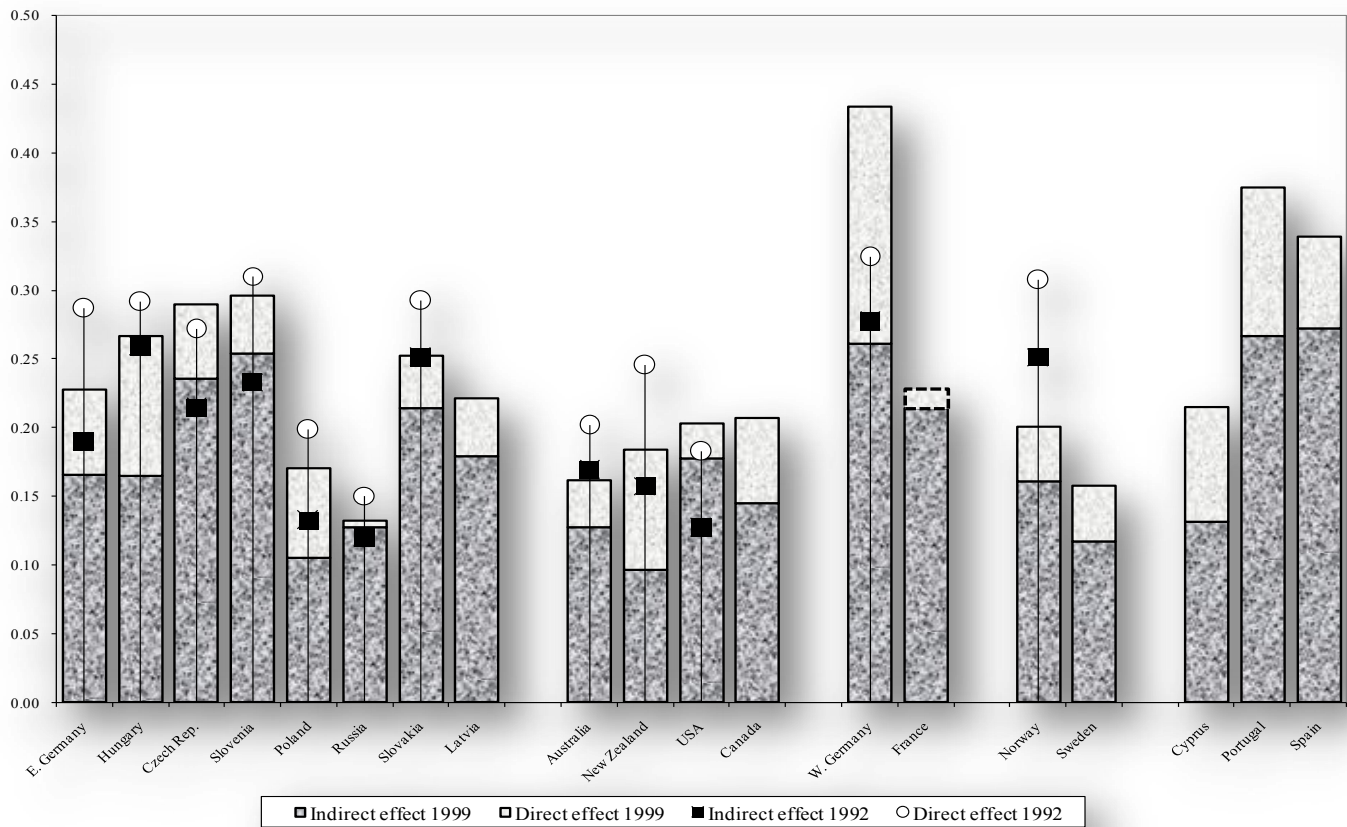
[35] For the 1992 data, in cases where the white dot (representing the direct effect) is placed under the black rectangle (representing the indirect effect), the direct effect is negative and the total effect is represented by the length of the drop-line from the white dot. For the 1999 data, bars surrounded by dashed lines represent negative direct effects. In these cases the indirect effect is represented by the full length of the bar, and the total effect is represented by the dark shaded bar.

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Figure A-8 Standardized Direct and Indirect Effects of Father's Occupation on Respondent's Earnings

Indirect effect 1999 □ Direct effect 1999 ■ Indirect effect 1992 ○ Direct effect 1992
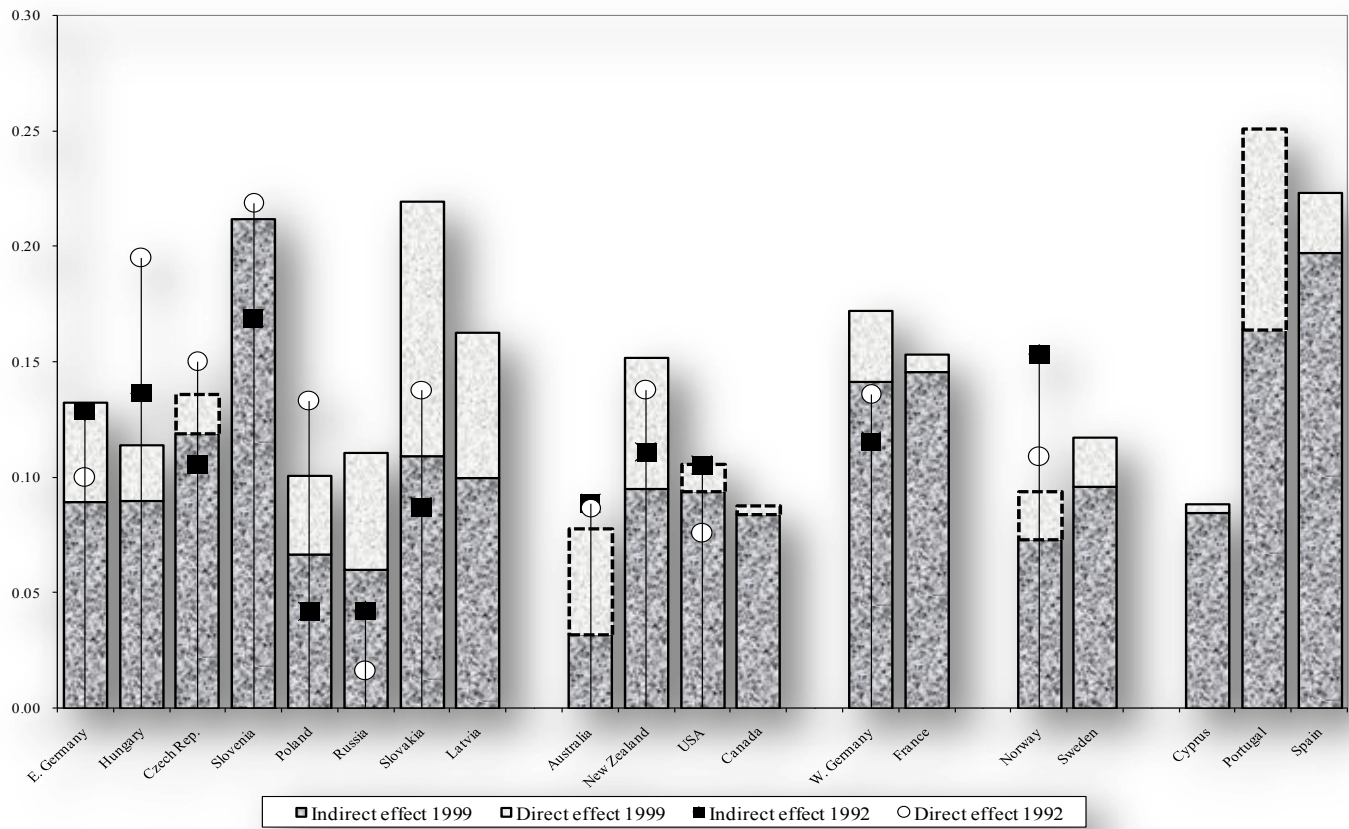
Figure A-9 Standardized Direct and Indirect Effects of Respondent's Education on Respondent's Earnings

Indirect effect 1999 □ Direct effect 1999 ■ Indirect effect 1992 ○ Direct effect 1992
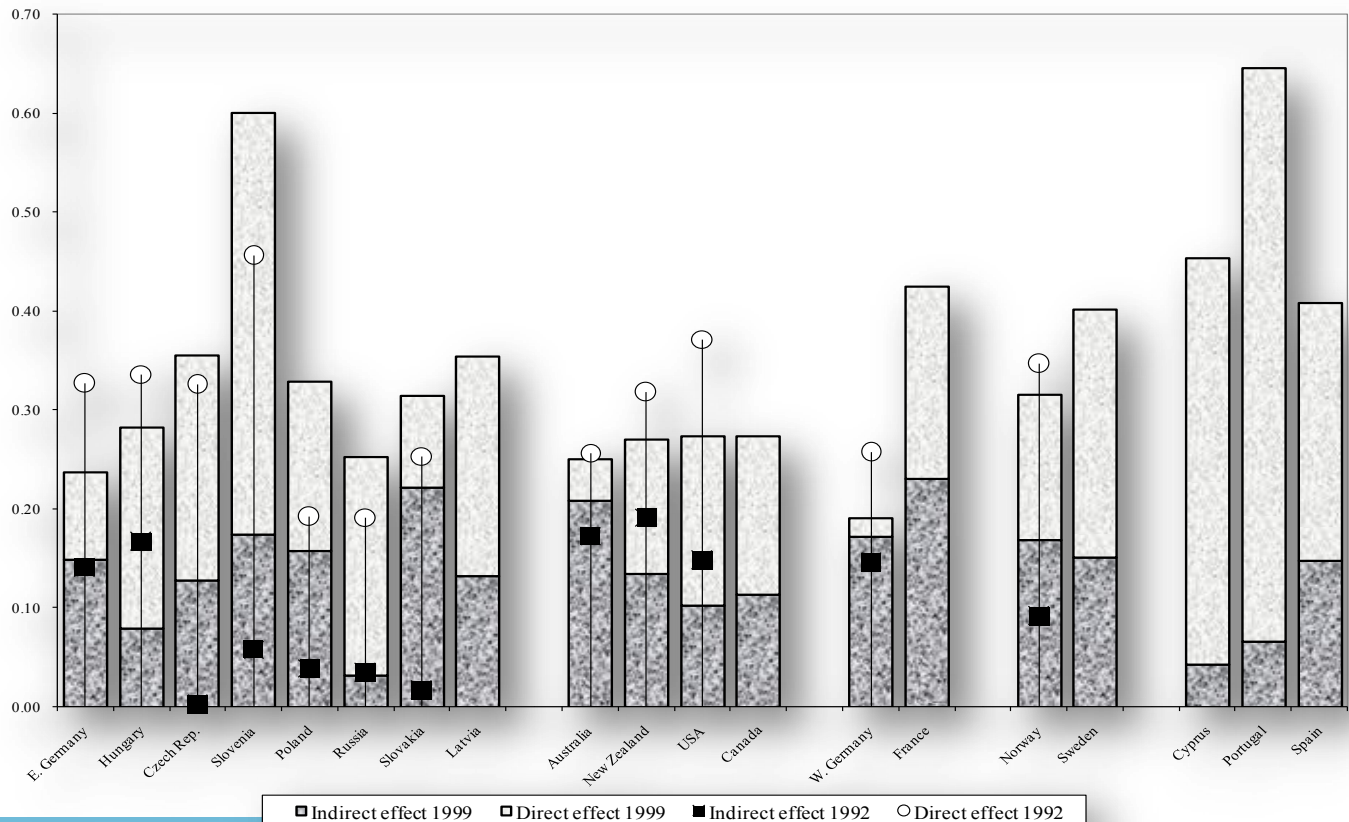
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