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**Theories of migration:
Conceptual review and empirical testing in the context of the EU East-
West flows**

Lucia Kurekova

Central European University

Abstract

This paper offers a conceptual review of migration theories and empirical testing of the neoclassical theory of migration in the context of the EU East-West flows. In addition to outlining weaknesses of the dominant approaches, it synthesizes current suggestions on how to advance migration theorizing. The paper empirically tests the neoclassical paradigm, used widely in the pre-enlargement research, on the actual data of after-accession labor mobility from the EU8 countries to the UK and Ireland. It shows that the neoclassical theory struggles to account for significantly different rates of outmigration from CEE countries which share relatively similar living standards and wage differentials relative to Western Europe. The paper concludes with outlining suggestions for new analytical approach to studying migration processes, which needs to incorporate country-specific institutional and structural variables, give greater emphasis to sending countries and analyze migration as part of broader global processes and socio-economic changes. Such approach speaks directly to recent works concerned with migration theorizing which also call to study migration as related to and part of social change.

Key words: migration theories, East-West migration, socio-economic change

1. Introduction

Perhaps the last major instance when migration theories were put to use to provide policy recommendations was the enlargement of the European Union towards the eight Central and Eastern European countries in 2004. Prior to the enlargement, heated political debates took place in the West, largely driven by fears of welfare migration from East to West. Although these concerns were not substantiated in most research which attempted to predict East-West migration dynamics, the actual policy decisions resulted in selective liberalization of the Western EU labor markets with only three countries – the UK, Ireland and Sweden – fully liberalizing. Partly due to this selective liberalization, most of the pre-enlargement findings turned out to be very imprecise and did not manage to anticipate either the rates of migration or the differentiated dynamics at either the receiving or the sending end of the East-West flows. First, the sheer numbers of those who decided to migrate was much greater than anticipated. Even more importantly, the estimates were not able to predict different rates of out-migration from the eight CEE economies: by the end of 2007, the Baltic countries together with Poland and Slovakia had sent much more labor than the Czech Republic, Hungary and Slovenia.

With hindsight it is clear that the assumptions that most of the studies were using to quantify future flows were faulty and led to imprecise conclusions. In the case of some countries (e.g. the UK at the receiving end and Poland at the sending end) this resulted in a significant economic and social impact. Most of these works were anchored in the neoclassical theory of migration which proposes wage differentials as the most important determinant of migration. This paper argues that the assumptions that most of the studies used to estimate future flows were faulty and led to imprecise conclusions. While wage and income differentials arguably play a role in affecting migrant decisions, this paper will show that the neoclassical theory of migration struggles to account for significantly different rates of outmigration from CEE *countries* which share relatively similar living standards and wage differentials relative to Western Europe. In spite of the rigor that the neoclassical theory of migration offers, it is rather poorly equipped to provide reliable ways of analyzing and predicting migration in the context of EU East-West migration.

The paper has three parts. The first reviews the basic tenets of the theories of migration starting with the neoclassical migration paradigm and then moving on to the

theories which have emerged in the recent decades, evaluating their conceptual and analytical strengths and weaknesses. The second part offers empirical tests for the neoclassical approach using the data of after-accession mobility from the EU8 to the UK and Ireland. After empirically refuting the neoclassical theory of migration, the third part proposes a new way to understand and analyze the determinants of migration in Central and Eastern Europe and middle-income countries more generally. I propose a new approach that recognizes the importance of country-specific institutional variables and different transitional paths, which have been overlooked in East-West migration research to date. I argue that migration in Central and Eastern Europe needs to be studied within broader global processes and must be evaluated as part and parcel of the transition from socialism which brought about socio-economic change and economic restructuring. Such approach speaks directly to recent works concerned with migration theorizing which also call to study migration as part of global processes and social change (Castles 2008a, 2008b; de Haas 2008; Collinson 2009).

2. Current migration theorizing: critical summary

The research field of migration is multifaceted and offers multiple levels of analysis. Four different questions have been investigated in the field: the origins of migration; the directionality and continuity of migrant flows; the utilization of immigrant labor; and the socio-cultural adaptation of migrants (Portes 1999). Each of these areas can be analyzed at different levels and with different tools and requires individual attention. ‘Mid-range’ theories targeted on one or two of these areas have been more prevalent than an all-encompassing statement. However, devising a theory which can explain all these four aspects of migration remains the ultimate goal of migration theorizing (Arango 2000, Massey 1999). Most disciplinary assessments evaluate migration research as lacking theoretical advancement: while the empirical work is abundant, it is often either disconnected from the theories or used to confirm rather than to test, question or refine the existing theoretical propositions.

In the area of migration determinants research, there are currently a variety of theoretical models or perspectives which employ varying concepts, assumptions, frames and levels of analysis (Arango 2000). Because the majority of these theoretical models

were developed from specific empirical observations, they often grew in isolation and are separated by disciplinary boundaries (Arango 2000; Castles 2008a). Modern migration literature (Massey et al. 1993; Todaro and Smith 2006; Faist 2000; Portes 1999) contends that although these theoretical approaches offer different hypotheses, they need not be taken as mutually exclusive, but rather as complementary.

At present, the dominant theory in explaining causes of migration is the neoclassical theory with its underlying assumption that migration is stimulated primarily by rational economic considerations of relative benefits and costs, mostly financial but also psychological (Todaro and Smith 2006, 342). The theory has been subjected to criticism on conceptual (Arango 2000) as well as on empirical grounds (Massey et al. 1998). However, owing to its analytical rigor and its ability to propose a set of testable hypotheses and useful tools for analyzing not only the causes but also the effects of migration, it occupies a prominent position in current academic and policy-related research. The propositions of the neoclassical theory of migration were also used (almost exclusively) in the research which preceded the 2004 Eastern enlargement of the EU.

The newer theories of migration which reacted to the neoclassical theory arose as a response to the changing nature of the world. Since the 1960s a new form of post-industrial migration has emerged as a global phenomenon. While previously dominated by emigrants from Europe to former colonies, both the number and variety of sending and receiving countries increased and the global supply of emigration shifted from Europe to the developing world. Theories of migration, therefore, have to account for very complex migration regimes which encompass migration flows from industrializing to mature economies, reduced costs of transportation, cheaper and more rapid communication, increasing governmental intervention and a greater circularity of movements in an era of trade interdependence and globalization (Arango 2000; Massey 1999). Below I review the main propositions of the existing theories of migration determinants with the goal of identifying their basic tenets, problematic aspects and the way that they relate to each other.

2.1. Neoclassical theory of migration: macro and micro framework

The neoclassical theory understands migration to be driven by differences in returns to labor across markets. The most basic model originally developed to explain migration in the process of economic development in the works of Hicks (1932), Lewis (1954) and Harris and Todaro (1970) highlights that migration results from actual wage differentials across markets or countries that emerge from heterogeneous degrees of labor market tightness. According to this theory, migration is driven by geographic differences in labor supply and demand and the resulting differentials in wages between labor-rich versus capital-rich countries. The central argument of the neoclassical approach thus concentrates on wages. Under the assumption of full employment, it predicts a linear relationship between wage differentials and migration flows (Bauer and Zimmermann 1999; Massey et al. 1993; Borjas 2008). More than 30% wage differential has been set as necessary for the gains of migration to override its costs (Mansoor and Quillin 2006; Krieger and Maitre 2006).¹ In the extended neoclassical models, migration is determined by *expected* rather than actual earnings and the key variable is earnings weighted by the probability of employment (Bauer and Zimmermann 1999; Massey et al. 1993).

Other adjustments and empirical tests to the model found that the linearity relationship in the wages-migration tandem does not hold and that both the degree of wage differential and the level of the country income matter. Similarly, the ability to migrate is associated with costs and therefore it is not the poorest individuals who migrate, nor the poorest countries which send the most labor (Faist 2000; Dustmann et al. 2003; de Haas 2008; Massey et al. 1998). Observed migration patterns tend to be therefore hump-shaped: migration rates accelerate with the growth of country's wealth as more individuals or households are able to fund migration.² Then, as the country continues to develop, the emigration rates diminish and the incentives to migrate change. These points have been framed as a critique of the neoclassical theory but also as adjustments to the theory (that arguably better capture the reality of migration).

¹ Income differentials (measured as GDP per capita) between EU8 countries and the EU15 average at the time of EU accession were greater than 30%.

² Whether this is the case for the CEE migration too is essentially an empirical question. The testing of the pure neoclassical model that is presented later in this paper found that wage differentials squared (which models the hump shape relationship) is a significant predictor of after-accession migration patterns. More empirical testing is needed, however.

The neoclassical macro-level elaboration can be transferred to the micro-level model of individual choice and has been termed the human capital theory of migration (Todaro 1969). Introduced by Sjaadstad (1962), the human capital theory enriches the neoclassical framework by incorporating the socio-demographic characteristics of the individual as an important determinant of migration at the micro-level (Bauer and Zimmermann 1999). At the center of such analyses is a rational individual who migrates with the goal of maximizing his or her benefits and gains. Human capital endowments, skills, age, marital status, gender, occupation, and labor market status as well as preferences and expectations strongly affect who migrates and who does not. Heterogeneity between individuals is an important factor and different individuals in the same sending country demonstrate different propensities to migrate and would also choose different receiving countries (Bonin et al. 2008). It has been shown that the likelihood of migration decreases with age and normally increases with education level (Bauer and Zimmermann 1999). According to the human capital theory, therefore, migrants tend to be relatively (more) skilled because this, *ceteris paribus*, increases the chances of their success. Borjas (1987) investigated this assumption in respect to the immigrants in the US labor market and analyzed in particular the relationship between the income distribution and the skills of migrants. He found that immigrants from countries with a higher income inequality tend to be less skilled (negatively self-selected) than the average worker in both host and source countries. He argued that differences in earnings outcomes of immigrants with the same measurable skills but from different home countries are due to variations in political and economic conditions in the countries of origin at the time of migration (see also Chiswick 2000; Liebig and Sousa Pousa 2004; Fourage and Ester 2007).

Related to the neoclassical theory is the push-pull framework which continues to emphasize the economic context of the flow of workers (Bauer and Zimmermann 1999). Push-pull factors introduce relational aspects into thinking about migration and compose dyadic frames in which migration flows are studied empirically. As push and pull factors are largely a mirror-image of each other, the framework has been criticized for its inability to determine dominant factors (de Haas 2008).

The neoclassical theory of migration has been subject to a conceptual critique and rich empirical testing. While rigorous, it has been viewed as mechanically reducing migration determinants, ignoring market imperfections, homogenizing migrants and migrant societies and being ahistorical and static. It generally ignores the effects of home and host states and leaves out the importance of politics and policies, which are only considered as distortion factors or additional migration costs. Human capital theory has been criticized for presenting an overly optimistic view of migration which is not always a voluntary process to maximize gains. In their review of migration research within Europe by different theoretical approaches Massey et al. (1998) found that a positive relationship between wage differentials and migration flows – while generally sustained – was by no means the strongest predictor of migration levels (p.132). Widespread dissatisfaction with neoclassical economic explanations and the push-pull framework led to the emergence of new theoretical perspectives which seek to analyze “an interplay of individuals, motivations and contexts” better than the neo-classical framework (Massey et al. 1998, 16).

2.2 New economics theory of migration

The new economics of migration (NEM) theory has come to challenge some of the assumptions of the neoclassical approach, offering a new level of analysis and different nature of migration determinants and it shifted the focus of migration research from individual independence to mutual interdependence (Stark 1991). The key argument is that migration decisions are not made by isolated individual actors but typically by families or households. Further, the decisions of migrants are influenced by a comprehensive set of factors which are shaped by conditions in the home country. As such, migrant decisions are not based purely on individual utility-maximizing calculations but are rather a household response to both income risk and to the failures of a variety of markets – labor market, credit market, or insurance market (Massey et al. 1993). Hence, migration in the absence of meaningful wage differentials or the absence of migration in the presence of wage differentials, does not imply irrationality but rather compels us to consider a set of other variables related to relative deprivation (a household

performing relatively worse to other households will be readier to send a member abroad) and risk-aversion and risk-minimization of household income (Stark 1991; Stark 2003).

Introducing these concepts, Stark largely had in mind the risk aversion of poor households in developing countries where there are rarely institutional mechanisms present, such as government programs or private insurance markets, and therefore migration provides a meaningful strategy in dealing with different market failures.³ Remittances play an important and integral part in the new economics of migration research as they directly support the concept of household interconnectedness and the diversification of risk while analytically connecting the empirical study of the causes and consequences of migration (Taylor 1999). While being able to analyze in parallel the determinants and effects of migration, the NEM has been criticized for sending-side bias and for its limited applicability due to difficulties in isolating the effects of market imperfections and risks from other income and employment variables. Overall, the theory has not received much following or empirical testing. Essentially a social choice account, it has also been critiqued for overlooking dynamics within households (i.e. gender roles) and being too heavily future oriented (Faist 2000).

2.3 World systems theory

Historical-structural approaches to migration introduce very different concepts into understanding migration processes. Building on Wallerstein (1974), the world system theory links the determinants of migration to structural change in world markets and views migration as a function of globalization, the increased interdependence of economies and the emergence of new forms of production (Massey et al. 1993; Sassen 1988; Skeldon 1997; Silver 2003). The expansion of export manufacturing and export agriculture linked strongly to foreign direct investment flows from advanced economies to semi-developed or emerging economies has led to a disruption in traditional work structures and has mobilized new population segments into regional as well as long-distance migration. Capital mobility is hence a crucial factor for the world system

³ Risk aversion in the context of the NEM theory is conceptualized as the tendency of households to diversify their sources of income. Households (unlike individuals) are in a position to control risks to their economic well-being by diversifying the allocation of family labor. Sending a family member abroad, where wages and labor markets are weakly correlated with those in local markets, provides source of income when domestic conditions might be deteriorating (Massey et al. 1993).

theorists. The theory presents capital and labor mobility as interconnected and as two sides of one coin. While migration is a natural outgrowth of the disruptions and dislocations that inevitably occur in capitalist development and can be observed historically, the theory also brings in global political and economic inequalities.

Historical-structural approaches deny that individuals truly have free choice in making migration decisions and present them in more deterministic forms, as pressured into movement as an outcome of broader structural processes (de Haas 2008). The study of international migration in the recent years has lost a lot of the world systems or global development perspective that was present in the earlier works, perhaps also due to the fact that it is difficult to derive a set of testable hypotheses and the character of this framework is strongly descriptive because it emerged as *ex ante* formulation of empirical facts (Favell 2008a; Bijak 2006).

2.4 Dual labor market theory

Dual labor market theory, like world system theory, links migration to structural changes in the economy but explains migration dynamics with the demand side (Massey et al, 1993). Developed by Piore (1979), dual labor market theory posits a bifurcated occupational structure and a dual pattern of economic organization in advanced economies. Duality unfolds along the lines of two types of organization in the economy, namely capital-intensive where both skilled and unskilled labor is utilized, and labor intensive where unskilled labor prevails. The theory argues that migration is driven by conditions of labor demand rather than supply: the character of the economy in advanced countries creates a demand for low-skilled jobs which domestic workers refuse to take up due to, for example, status. As immigration becomes desirable and necessary to fill the jobs, policy choices in the form of active recruitment efforts follow the needs of the market (e.g. managed labor immigration in the 1960s Europe).

The theory excludes sending countries and overemphasizes formal recruitment practices. It is unable to account for differential immigration rates in countries with similar economic structures. Empirical estimates are contingent on the distinction between primary and secondary sector, which is usually arbitrary, and therefore can lead to instable results. On the other hand, it provides an intelligent explanation for the

coexistence of chronic labor demand for foreign nationals alongside structural unemployment in receiving countries (Arango 2000).

2.5 Network concepts – perpetuation of migration

The network theory of migration does not look at the determinants which initiate migration but rather at what perpetuates migration in time and space (Massey et al. 1993). Migrant networks which often evolve into institutional frameworks help to explain why migration continues even when wage differentials or recruitment policies cease to exist. The existence of a diaspora or networks is likely to influence the decisions of migrants when they choose their destinations (Vertovec 2002; Dustmann and Glitz 2005). The network theory also helps to explain the reasons why migration patterns are not evenly distributed across countries, but rather how they tend to form so-called migration regimes (Faist 2000).

Network theory is closely affiliated to another approach known as migration systems theory, pioneered by Magobunje (1970). This theory's main assumption posits that migration alters the social, cultural, economic, and institutional conditions at both the sending and receiving ends and that it forms an entire developmental space within which migration processes operate (de Haas 2009b). While migration systems theory has its roots in geography, migration network theory is of sociological and anthropological origin (Castles and Miller 2009). Whereas network theory mainly focuses on the vital role of personal relations between migrants and non-migrants, migration systems theory goes further and stresses that migration restructures the entire societal – or “developmental” – context of the concrete spaces in which it takes place, both at the receiving and at the sending end (de Haas 2008). It suggests that migratory movements arise in response to prior existence of links between sending and receiving states, such as colonial ties, trade or investment flows (Castles and Miller 2009).

Conceptually similar to migration systems theory is the concept of cumulative causation put forth by Myrdal and further developed by Massey. It argues that migration is a self-perpetuating and self-sustaining phenomenon and identifies factors that contribute to this dynamic. The most important factors are networks but also a culture of migration, a perverse distribution of human capital and the stigmatization of jobs

generally performed by migrants (Arango 2000; Massey 1999). While these theories can explain why migration perpetuates, they offer few insights into migration-undermining mechanisms and the decline of migration systems overtime (de Haas 2009b).

With the accelerating globalization of the last two decades, the above concepts have been further developed into the theory of transnational migration which conceptualizes the existence of transnational social spaces. It emphasizes multiple forms of migrant embedding who stay connected and actively participate in both home and host country political, economic, social and cultural environments (Bretell and Hollifield 2008; Portes 2001; Faist 2000). Rather than explaining the causes of migration, transnational migration research describes a new reality in the *modus* of migrating and integrating into host societies by proposing an emergence of dense networks across political borders created by migrants in search of economic and social advancement. The concepts of transnational migration have important implications for understanding forms of adaptation among ‘transnational’ migrants as well as the effects of migration on sending and receiving countries. Their novelty, however, has been questioned and the research within this framework also too often selects on the dependent variable.

2.6 Macro versus micro-explanations

Migration is the outcome of the behavior of individuals but equally it has an aggregate social form. Therefore, the levels of analysis of migration dynamics shifts from micro-level decision processes to forces operating on national or international levels (Table 1.1). The neoclassical theory of migration has both macro-level and micro-level elaborations but the main explanatory variable at both levels concentrates on wages and income differentials. The human capital theory of migration introduces heterogeneity into individual decision-making based on different predispositions and expectations. The new economics of migration, considered by some authors to be an elaboration of the neoclassical theory, brings in important conceptual and analytical modifications. Through its emphasis on households and family it highlights the importance of institutions and non-economic factors and hence brings in mezzo-level indicators and frames of reference. Dual labor market theory and world system theory offer a set of structural

variables, derived primarily from national or international levels. The network theories operate across different levels of analysis.

The main distinctions in research approaches that focus on migration determinants are not concerned with the differences in the level of analysis (these are more present when disciplinary specificities are taken into account) but rather relate to the understanding of agency and the degree of contextualization. These differences have also been framed as a division between functionalists and structuralists (de Haas 2008). First, the neoclassical framework is based on individual decision-making processes, while structuralists emphasize how agency is affected by the macro-level social and economic processes which constrain or enable international movement. As such, the former methodological and conceptual approaches have been criticized for using sets of unrealistic assumptions (e.g. full employment). The emphasis on structural factors, on the other hand, has been critiqued for postulating that individuals are ‘automatons’ responding to external stimuli (Skeldon 1997; de Haas 2008; Castles and Miller 2009). Second, while research in the neoclassical paradigm tends to homogenize, de-contextualize and is largely ahistorical, the other approaches emphasize the specificity of analyzed contexts. Table 1.1 summarizes different critiques that have been raised towards each theoretical approach and the concepts and variables that they propose for analyzing causes or perpetuation of migration.

The above review of theories shows that migration is a multifaceted, very complex and diverse phenomenon in which micro and macro-levels interact. This makes research conceptually as well as empirically challenging. The country dyads which emerge tend to create a unique matrix of macroeconomic, structural and policy elements. At the same time, micro-level factors vary according to a range of aspects, i.e. level of skills, occupation, social or marital status and age. The multifaceted nature of the phenomenon requires that the analyses are conducted on multiple levels and with methodological tools from more than one discipline (Massey et al. 1993; Mansoor and Quillin 2006; Castles 2008b; Collinson, 2009). A forceful separation of the levels of analysis and methodological paradigms has been seen as suboptimal, yet it has been the state of the art in current migration research. The presented theories are very rarely tested simultaneously and empirical applications shy away from setting down which factor is

the most important in explaining a given migration pattern.⁴ The existent research, prevalingly empirical, tends to be an ‘application’ of a theoretical approach with few attempts at theory development and theory building.

In addition to a range of critiques that have been raised in response to specific theories of migration, migration research as such suffers from a number of more general deficiencies. As the study of migration has advanced, the discipline has been challenged by a number of factors, some of which are inherent to its subject matter. First, the existent theories generally ignore immobility and cannot explain a lack of migration. Second, most of the theories suffer from a receiving country bias and generally fail to engage sufficiently with factors in sending countries and how these combine to produce different migration outcomes. Third, migration theories have been unable to account for change and to explain migration processes overtime. Similarly, they fail to explain simultaneously the origins of migration and the degree to which it perpetuates or mitigates. Fourth, very little theory testing has been embedded in quality comparative work (cf. Favell 2008b; Hollifield 2008). Lastly, scholars noted that efforts at theory-building have hardly been cumulative – the relatively short history of theorizing about migration takes the form of “a string of separate, generally unconnected theories, models or frameworks, rather than a cumulative sequence of contributions that build upon previous blocks” (Arango 2000, 283).

The weaknesses outlined above represent theoretical or conceptual gaps and signpost potential avenues for improvements in migration theorizing. A series of methodological and analytical proposals for overcoming the challenges of migration research have been put forward in some of the most recent works which I review in the next section.

⁴ Unsurprisingly then, Massey et al. (1998) in their review of the applications of individual theoretical approaches found that all theoretical paradigms received some degree of confirmation in the works that used them.

Table 1.1: Overview of theories of migration

Theory	Subject of analysis	Level of analysis	Pet variable(s)	Critique
Neoclassical theory of migration	<i>Determinants of migration</i>	Macro Micro	Wage and income differentials Probability of employment	Mechanically reduces migration determinants – exclusion of politics and policies. Assumes linearity – unable to explain differential migration, why people do not move, or why migration ceases before wage differentials equalize. Ignores market imperfections. Homogenization of migrants and societies. Static perspective.
Human capital theory of migration		Micro	Wages, economic benefits affected by individual characteristics	Overly optimistic (functionalist) view - migration is not always a voluntary process to maximize gains.
New economics theory of migration		Micro Mezzo	Wages and income distribution (relative deprivation) Institutional failures – credit market, labor market deficiencies	Critique of the neoclassical theory rather than a theory in its own right. Sending side bias. Limited applicability – difficult to isolate the effect of market imperfections and risk in migration decisions from other income and employment variables.
World system theory (historical-structural approaches)		Macro: global and international processes	Structural changes induced by the flow of capital	Only applicable at the global level. Explanation formulated <i>ex ante</i> , cannot be empirically tested.
Dual labor market theory		Macro: Nation state Mezzo	Labor demand Bifurcation of labor markets FDI State immigration policies and recruitment efforts	Receiving state bias – excludes push factors, formal recruitment practices overemphasized. Unable to account for differential immigration rates in different advanced economies with similar economic structures. Distinction between primary and secondary sector is usually arbitrary which leads to instability in empirical estimates.
Network theory	<i>Perpetuation of migration and/or directionality of flows</i>	Mezzo	Networks, diaspora	Conceptual framework rather than a theory. Networks can be exclusionary and undermine (not facilitate) migration.
Migration systems theory		Macro	Developmental space	Purely descriptive. Unable to account for decline of migration systems overtime.
Transnational migration		Transnational level	Transnational social spaces	Novelty of the concepts has been questioned. Research within this paradigm usually selects on dependent variable.

Source: Author. Based on Arango (2000), Massey et al. (1998) and de Haas (2008). See also Brettell and Hollifield (2008, 20) for a description of disciplinary differences in the levels of analysis.

3. New approaches and proposition for improvement

Proposals for advancing migration research theoretically have been put forward by different authors and range from propositions for interdisciplinary research and synthetic approaches to calls for connecting migration research to general social theory and analyzing it in the context of broader social processes and changes.

First, researchers have increasingly called for interdisciplinary dialogue (Massey et al. 1993; Favell 2008; Bretell and Hollifield 2000; Castles, 2008a) or greater interconnection between the analysis of the causes and consequences of migration (Stark 1991; de Haas 2008). ‘Political economy’ approaches to migration capable of such goals have multiplied in the recent past (Freeman and Kessler 2008; Collinson, 2009). The latest major interdisciplinary example is Menz’s political economy of managed migration approach, where he analyses the interaction of economic structures, policies, legacies and institutional determinants in producing certain migration outcomes (Menz 2009). In addition to considering national, supranational and sub-national levels and different forms of migration (asylum seeking as well as labor mobility), his work is also a comparative analysis of six countries in the East-West context.

Second, scholars have also suggested combining the existing theoretical lines of thinking in order to advance our conceptual and empirical understanding of migration (de Haas 2007, 2008; Skeldon 1997; for post-accession trends, World Bank 2007, 15). For example, Skeldon (1997, 22) proposed combining the new economics of migration and network theory concepts, pointing out that family risk minimizing strategies are inevitably linked to existing networks. Bringing the theories together, Massey (1999) has suggested a synthetic theoretical account advocating that different migration determinants prevail depending on the level of development of a country and a ‘phase’ of country’s migration cycle.⁵ In a similar light de Haas highlighted the work of Zelinsky (1971) who

⁵ Massey (1999, 50) suggest that: “During the initial phases of emigration from any sending country, the effects of capitalist penetration, market failure, social networks, and cumulative causation dominate in explaining the flows, but as the level of out-migration reaches high levels and the costs and risks of international movement drop, movement is increasingly determined by international wage differentials (neoclassical economics) and labor demand (dual labor market theory). As economic growth in sending regions occurs, international wage gaps gradually diminish and well-functioning markets for capital, credit, insurance and futures arise, progressively lowering the incentives for emigration. If these trends continue, the country ultimately becomes integrated into the international economy as a developed, capitalist nation, whereupon it undergoes a migration transition: net outmigration progressively winds down and the former

connected demographic transition to mobility transition, taking both as functions of the stages of development (in de Haas 2008; cf. Castles 2008a). Such ‘transitional models’ have been argued to be very useful in understanding how development processes are linked to specific forms of mobility and how mobility tends to rise rather than decline with development (de Haas 2007, 2009; Hammar et al. 1997).

Among the most recent reviews of migration theory and suggestions for innovation are the works of the Oxford school.⁶ Their major message is the need to integrate migration studies more closely not only with the issues of development but also with broader questions of change, social transformation and economic integration. Both for theoretical reasons but equally for policy-related concerns, it is important to acknowledge that “*migration is not just an (unwanted) by-product [of development], but an integral part of broader processes of social and economic change and should therefore be considered as an almost inevitable outgrowth of nations’ incorporation into the global economy*” (Massey 2000a in de Haas, 2007).

Castles has invited scholars to consider Polanyi’s concepts of social transformation and the embeddedness of the economy in society and integrate these into research on migration (Castles 2009a; Polanyi 2001). Globalization after the Cold War represents a major transformation which has resulted in different forms of social transformation in developed countries (erosion of the welfare state, the relocation of production) and developing countries (the intensification of agriculture, the erosion of local social orders, the emergence of shanty-towns within mega cities). The link between human mobility and global change can be established in the analysis of social transformations that are to be studied as “*local dimensions of global change*” (Castles 2008a). Migration research and any analyses of migration-development relations must be

sending nation itself becomes an importer of labor.” These propositions, in my view, require empirical testing. He seems to suggest, however, that there are similar types of institutions at similar levels of development which is far from being obvious as argued extensively by the varieties of capitalism literature (Hall and Soskice 2001). The synthetic framework also seems to have a limited applicability for middle-income countries with existent institutions, such as CEE. It is also unclear how the synthetic approach could be tested and falsified.

⁶ This is how I dub the research on theories of migration from the International Migration Institute (IMI) and the Centre for Migration, Policy and Society (COMPAS) based in Oxford and represented particularly by the works of Stephen Castles, Hein de Haas and Sara Collinson. These ideas and the articles cited in this work have been published in the Special Issue of the Journal of Ethnic and Migration Studies on Theories of Migration and Social Change (2010: 36 (10)).

anchored in broader inter-disciplinary analyses of social structures and relations in the context of globalization. This requires finding ways to understand and analyze the links between macro, mezzo and micro level factors of change while acknowledging that global factors have different effects at the local and national level, as these are mediated by the presence of historical experiences and cultural patterns. In its basic concepts and suggested methodologies the Oxford school echoes suggestions expressed by Massey a decade ago (1999, 50):

“[G]eneralizing across all theories I conclude that a satisfactory theoretical account of international migration must contain at least four elements: a treatment of the structural forces that promote emigration from developing countries, a characterization of the structural forces that attract immigrants into developed nations, a consideration of the motivations, goals and aspirations of the people who respond to these structural forces by becoming international migrants; and a treatment of the social and economic structures that arise to connect areas of out- and in-migration.”

The works of Castles (2008a, 2008b), de Haas (2007, 2008, 2009a, 2009b) and Collinson (2009) define desired characteristics of conceptual framework. The main objective of theory formation should be an elaboration of such conceptual frameworks which would be able to provide a theoretical and methodological grounding for social science researchers examining migratory processes of all kinds. It should be comprehensive, holistic, capable of contextualizing specific migration experiences, suitable for analyzing relations between various socio-spatial levels, able to incorporate both structure and agency, while being both historical and dynamic (Castles 2008b). Collinson suggests that this could be achieved by combining a livelihoods approach with a relational political economy approach. This will enable scholars to capture “*the interaction of local-level factors immediately influencing people’s migration decisions and strategies (linked to livelihoods) with a range of political, economic and social factors and processes affecting the agency of migrants (and non-migrants) that ultimately shape migration outcomes within specific contexts.*”

These approaches aim at offering a more holistic understanding of the migratory process. They seek to reconcile the old structure-agency dichotomy and to re-theorize the links between individual or group human action and broader processes of change. They point to a changed world and the altered rules of organization of markets and politics,

which in turn strongly affects the opportunities and risks people take in different parts of the world.

The newer theoretical approaches have not been systematically applied to migration dynamics in Central and Eastern Europe (nor the post-communist region more generally or other world regions or countries). Research on the region has been dominated by the neoclassical theory of migration which has meant that many of the specificities of Central and Eastern Europe have been overlooked. Yet the experience of political, economic and social change brought about by the fall of the Berlin Wall and the accession of CEE countries to the EU are contextual factors that make the analysis of migration in the region a fruitful area for research. In the next part, I test the propositions of the neoclassical theory of migration empirically and highlight the theory's limited capacity to account for the differentiated nature of migration after the EU accession. I then outline the factors that make the region specific and at the same time good empirical territory for the application of pluralist approaches.

4. Theories of migration and the East-West migration

4.1 The theoretical basis of CEE migration research

In research on expected migration propensity from CEE after enlargement, the prevailing conceptualizations were based on the neoclassical theory of migration in its basic specifications and looked at the economic factors – wages, income differentials and probability of employment – as the main predictors of the behavior of migrants (Bauer and Zimmermann 1999; Dustmann et al. 2003; Boeri and Bruecker 2001; Layard et al. 1992). Alternatively they referred to individual-level surveys and framed their analysis with personal characteristics and intentions (Krieger 2004; IOM 1998; Bauer and Zimmermann 1999). In contrast to political debates which anticipated a flood of “guest workers and poverty refugees” into Western Europe (Sinn 2002), many estimates which were based either on micro surveys of the anticipated migration or on the extrapolations of economic and demographic data based on the experience from Southern enlargement in the 1980s argued otherwise and predicted moderate volumes of East-West labor mobility (IOM 1998; Kraus and Swager 2000; Bauer and Zimmermann 1999). Generally, however, the earlier a study was produced, the higher rates of migration from the CEE

were anticipated and the predictions were relatively diverse (for overview see World Bank 2007, 6-7). With the notable exception of an IOM study based on original survey data collected in late 1990s (IOM 1998), none of the studies were able to anticipate differentiated rates of outflows from different CEE sending countries. The estimates were imprecise in both estimating the real number of migrants and in anticipating significantly different outmigration rates from the eight CEE countries that joined the EU in 2004.

There are many reasons that make forecasting migration trends difficult. The first is the quality of migration data as well as the quality of other data (wages, income, forecasts of GDP growth, etc.) used in the analyses. Unlike in other demographic phenomena (e.g. fertility), shocks in migration are common. Migration patterns are volatile and potentially subject to fast changes which are then difficult to predict or forecast (Bijak 2006). The second major reason is related to the theoretical framework applied; the neoclassical framework omits non-economic variables – demographic, sociological or political elements which play an important role in affecting the heterogeneity of migration processes (for more see World Bank 2007, 8). As outlined in the previous sections, the theory has been subjected to wide conceptual critique and empirical testing that have pointed out its limits.

While the objective difficulty (data quality) of migration forecasting is acknowledged, this work proposes that the pre-enlargement estimates failed also due to conceptual deficiencies of the theoretical approach on which they were based. Importantly, the figures of the after-accession labor mobility allow testing the neoclassical framework *ex post*, relying on the actual numbers about migration, wages and other important variables. The accession of the CEE countries to the EU in 2004 and the following migration flows approximate a natural experiment in the equalization of factors of production arguably more than other cases of migration dynamics. EU accession led to the cancellation of (labor) borders to EU3 and the relaxation of previous administrative barriers to the remaining EU15 countries. In the next section I test the ability of the neoclassical theory of migration to account for the after-accession migration dynamics from EU8 countries to two major receivers of the East-West flows, the UK and Ireland.

4.2 Testing the neoclassical theory

The primary goal of this analysis is to test statistically the significance of wage differentials between the individual EU8 countries and the UK and Ireland (EU2) in explaining migration patterns at the country level after enlargement in 2004. I consider this analysis an easy test for the neoclassical theory of migration which would predict equalization of the factors of production. The EU8 2004 accession allows testing the explanatory power of wage differentials in a cross-country context, controlling for the host country effect: administrative and legal conditions and economic factors for the entry of EU8 migrants to the UK and Ireland were identical and their relative distance to EU2 comparable. The EU8 countries joined the EU at a time of favorable economic environment and strong labor demand in the economies of EU2.

I propose two models that capture conceptual differences argued in this work: (1) a pure neoclassical model and (2) a country effect model. Under the assumption of full employment, the neoclassical theory predicts a linear relationship between wage differentials and the size of migration flows. In the extended neoclassical models, migration is determined by *expected* rather than actual earnings and the key variable is earnings weighted by the probability of employment. The neoclassical model can be written as:

$$(1) \textit{Migration rate} = f(\textit{wage differentials}, \textit{probability of employment})$$

In my work I argue that analysis based on the neoclassical theory of migration is de-contextualized and oversimplified and that, while wages are a good predictor of individual choices for migration, wage differentials cannot explain migration dynamics after the EU accession across the EU8 countries which share relatively similar levels of living standards. The pre-enlargement estimates of migration potentials often erred in failing to take into account differences in structural and institutional variation forming distinct socio-economic ‘models’ across the CEE countries. Alongside the neoclassical model I propose to test an extended country-effect model which introduces country dummies into the regression and aims at capturing the specific impact of different socio-

economic regimes or the ‘country effect’ in the analysis. The extended country effect model can be generally specified as:

$$(2) \textit{Migration rate} = f(\textit{wage differentials}, \textit{probability of employment}, \textit{country characteristics})$$

4.2.1 Data

My dependent variable is measured as outflows of migrants from a EU8 country to the UK or Ireland in each quarter since June 2004 until December 2007. Migration data is based on information from the registration schemes in the UK (WRS) and Ireland (PPSNs) which give information about the flows of EU8 nationals who have come to these countries and registered on a quarterly basis. Such data sources are valuable as they correct measurement problems present in other migration data which are flawed due to different conceptualization and definitions of a ‘migrant’ (Bahna 2008). In order to control for the size of the country, migrant stock is corrected by the size of economically active population of a given country in a given year.⁷ Log transformation of the dependent variables was conducted to achieve normal distribution.

Wage differentials are the main independent variable to be tested in the models. Wage data represent the quarterly average gross manufacturing wage collected from the national Labor Force Surveys, accessible through the LABORSTA database in national currencies for both sending and receiving countries.⁸ In order to calculate wage differentials between a EU8 country and Ireland or Britain, wages were first re-calculated into Euros using the ECB official exchange rate at the end of a given quarter. This transformation allows endogenizing the potential influence of exchange rates which is argued to be one of the intervening variables in migrant decisions. In order to control for inflation and to correct for price differences, wages in Euro were also corrected by the PPS index (Eurostat) to achieve comparative wages across all the analyzed countries. Wage differentials for each EU8-EU2 country pair and each quarter were then calculated as a quarterly average wage of a EU8 country as a proportion of the wage in Britain and Ireland in the same quarter. In order to simulate causality, data on wage differentials start

⁷ I follow Zimmermann (1994) or Dustman et al. (2003).

⁸ “Statistics of wages usually relate to average gross money wages per wage earner expressed as average earnings. The series cover wage earners of both sexes, without distinction as to age.” (LABORSTA)

a year earlier. As such, wage differentials in the third quarter of 2003 correspond to migration rate in the third quarter in 2004 and so on. My observations are pairs of countries (or dyads) by quarters which were used in order to increase the number of observation and gain more statistical power for the analysis.

Most neoclassical estimations of migration tend to use income/GDP per capita differentials (Dustmann et al. 2003) or real growth (Zimmermann 1994). While income per capita is normally strongly correlated with wages, I use wages differentials for two important reasons. First, they capture better both micro- and the macro-level economic dynamics in the sending countries and represent a more accurate measure of immediate disposable income. Second, wages are arguably a more tangible comparator for migrants when they compare benefits of migration. Gathering information about destination countries, migrants are interested in their potential earnings (and probability of employment) rather than in per capita income of that country.⁹ While growth rates are an important signal of probability of employment in host country, the implications of high growth in sending countries on migration is dubious generally but also in the particular context of the after-accession flows tested here: the EU8 countries with the higher growth were sending more migrants rather than less.¹⁰

Quarterly observations do not make possible the testing of other theoretically relevant variables which would capture the effect of structural or institutional factors in sending countries. This is due to the lack of sufficient variation in a studied time period or the unavailability of measurements on a quarterly basis. I therefore test the country effect by introducing country dummies and additional controls to deal with data dependencies (quarter dummies, target country and source country dummies). In order to deal with the serial autocorrelation problem resulting from having overtime data, I entered a lagged dependent variable which corrected the problem (see reported Durbin-Watson index). Following Zimmermann (1994, 91), the lagged migration variable also represents a “measure of persistence and network migration.” The two models were run with and without time trend following a similar model specification in Zimmermann

⁹ GDP per capita, which measures economic production, has been criticized also more generally for not capturing well-being and not measuring inequalities within a country.

¹⁰ Unlike GDP per capita, growth rates are available on quarterly basis and therefore could be tested empirically in the future, also perhaps incorporating data during the period of recent economic crisis.

(1994).¹¹ An alternative method for dealing with autocorrelation based on re-conceptualizing dependent variable as change in migration from the previous quarter (first order differences) was also tested. The results and their interpretation are presented and discussed in the annex for a comparison.

In addition to the above variables, unemployment differentials were also entered into model specifications. Unemployment differentials between EU8 and EU2 are a measure of labor market difficulties in the sending countries. This variable would not appear in the pure neoclassical model specifications as these conceptually rather incorporate the probability of employment in the receiving country; in practice it is however often included as a substitute of employment probability or as a measure of labor market distortions.

The probability of employment in this particular analysis is controlled for by design: the legal access of all EU8 migrants to the UK and Irish labor market was the same. Even more importantly, using *ex ante* insights we know that the probability of employment was strong in both receiving countries. High labor demand in the target economies combined with clear motives to work on the part of the EU8 migrants have resulted in the fact that 84% of EU8 migrants who registered in the UK in the analyzed period were employed (Pollard et al. 2008, 30).¹²

4.2.2 *Expectations and predictions of models*

I propose two main specifications of the model which are summarized in Table 1.2. The first specification is based on the propositions of the pure neoclassical model. I regressed wage differentials on migration, while controlling for data dependencies and autocorrelation (lagged DV variable). The neoclassical model expects that wage differentials will be statistically significant predictor of migration. The sign of the B-coefficient for wages should be negative: as the wage in EU8 country as a share of EU2 country rises (which means that the gap in the wages between the sending and receiving country becomes smaller), migration should fall. The second specification of the model

¹¹ Zimmerman (1994, 91) runs OLS regression analysis exploring the relationship between immigration from each recruitment-targeted country to Germany between 1960 and 1991. In addition to real GNP growth, he enters lagged DV as a “measure of persistence and network migration” and the time trend as “a proxy of unobserved variables operating in the sending and receiving countries”.

¹² The figures are based on Labor Force Survey, not Workers Registration Scheme. See also: AMR (2008).

adds country dummies into the regression. Following my theoretical expectations, in the models where the countries are included wages should be statistically less, partly or not at all significant. While wage gaps explain why people in general migrate, it should not be significant variable in explaining the variation in migration dynamics from the EU8 countries. Both model specifications are also estimated with and without time trend and unemployment differentials.

Table 1.2: Model specifications

	Dependent variable	Independent variable	Control variables	Country effect
<i>Model 1: Neoclassical model</i>	Migration outflows from EU8 countries to the UK and Ireland	<i>Wage differentials</i> (Unemployment differentials)	Target country Source country Quarters (Time trend)	-
<i>Model 2: Country effect model</i>	Migration outflows from a EU8 countries to the UK and Ireland	<i>Wage differentials</i> (Unemployment differentials)	Target country Quarters (Time trend)	<i>EU8 country dummies</i>

4.2.3 Results and discussion

I ran the OLS linear regression to test the effect of wage differentials on migration from the eight new accession states to Britain and Ireland (EU2) from June 2004 accession until December 2007. The results of the analysis, presented in Tables 1.3 and 1.4, confirm the predictions phrased above.

Table 1.3 presents the neoclassical specifications with and without time trend (Model 1A-1B) and unemployment differentials (Models 1C-1D). Results are relatively consistent across different models and show that wage differentials are a significant predictor of migration rate in the simple neoclassical model specifications (except in Model 1B). The additional significant predictors in all models are the lagged dependent variable which proxies the network effect and quarter dummies (April-September). In Models 1A and 1B, source country dummy shows a significant effect. This effect disappears when unemployment differentials are entered in Models 1C and 1D. Model 1B stands out due to the insignificance of wage differentials. Its results suggest that over time (and not taking into account the existent unemployment differentials) they are a less significant predictor, other things being equal to the previous specification.

The neoclassical models were also tested with wage differentials squared (instead of wage differentials) to model the non-linear relationship: the significance levels for all

variables remained similar to the ones presented in Table 1.3 below and therefore are not presented.

Table 1.3: Neoclassical models

	Model 1(A)	Model 1(B)	Model 1(C)	Model 1(D)
Constant	-0,028	-0,018	-0,123*	-0,115
Wage differentials	-0,852*	-0,529	-1,001**	-0,914*
Unemployment differentials			0,062***	0,059**
DV lag	0,930***	0,947***	0,898***	0,904***
Target country	0,012	0,009	-0,022	-0,015
Source country	0,016**	0,013*	0,004	0,006
Quarter 2	0,133***	0,139**	0,144***	0,145***
Quarter 3	0,150**	0,161**	0,179***	0,180***
Quarter 4	-0,054	-0,054	-0,032	-0,033
Time trend	-	-0,007*		-0,001
R ² adjusted	0,982	0,983	0,983	0,983
N	208	208	208	208
Durbin-Watson	1,946	1,988	2,015	1,992

Note: * - significant at 90% level, ** - significant at 95% level, ***- significant at 99% level. All the controls except source country were entered as dummy variables. Target country: 0 –UK, 1 – Ireland; Quarters: relative to Quarter 1.

The country effect specifications are presented in Table 1.4. As expected, wage differentials lose statistical significance when country dummies are entered into models (with the exception of Model 2A) and also coefficient changes its sign.¹³ Similarly to the above models, there is a network effect and seasonal effect across all specifications. In Model 2C and 2D, unemployment differentials and target countries are also significant. The country dummies in these models attain significance at 95% or 90% level. In sum, wage differentials as a predictor of migration dynamics from EU8 countries to the UK and Ireland after the accession lose significance when we enter country dummies which proxy country differences that explain different migration outcomes. Model 2A is an exception as wage differentials gain statistical significance at 90% and none of the country dummies are significant. This is, however, a model that does not control for time or differences in labor market inefficiencies.

¹³ This is against the predictions of the neoclassical model but is in line with the literature based on pluralist approaches discussed earlier which have pointed out reversed relations between migration and development and argue that more development (higher or growing wages) can lead to more rather than less migration (Haas 2007; Castles 2008a, 2008b).

Table 1.4: Country effect models

	Model 2(A)	Model 2(B)	Model 2(C)	Model 2(D)
Constant	0,000	-0,675	-0,955**	-1,090**
Wage differentials	-1,493*	0,523	0,424	0,962
Unemployment differentials			0,126**	0,109**
DV lag	0,846***	0,856***	0,835***	0,841***
Target country	-0,010	-0,078	-0,117**	-0,129**
Quarter 2	0,131***	0,132***	0,145***	0,144***
Quarter 3	0,157***	0,162***	0,196***	0,192***
Quarter 4	-0,036	-0,060	-0,033	-0,043
Time trend		-0,011**		-0,004
<i>CR</i>	0,024	0,340*	0,309*	0,395*
<i>ES</i>	-0,005	0,402	0,375*	0,484*
<i>HU</i>	0,064	0,401*	0,393**	0,481**
<i>LA</i>	0,090	0,623*	0,582**	0,725**
<i>LI</i>	0,181	0,665**	0,644**	0,772**
<i>PO</i>	0,273	0,611**	0,357*	0,478*
<i>SK</i>	0,188	0,612**	0,383*	0,523*
R ² adjusted	0,984	0,984	0,984	0,984
N	208	208	208	208
Durbin-Watson	2,012	2,021	2,058	2,057

Note: * - significant at 90% level, ** - significant at 95% level, ***- significant at 99% level. All the controls except source country were entered as dummy variables. Country dummies: relative to Slovenia. Target country: 0 –UK, 1 – Ireland; Quarters: relative to Quarter 1.

All the regression assumptions were met in the performed analyses. In all country effect models, high collinearity (measured by VIF index) of country dummy variables and wage differentials appeared that was caused by adding the country dummies (there was no collinearity problem in any of the neoclassical models). In spite of the high collinearity, however, the country dummies were able to achieve statistical significance while wage differentials were not and consistently so across three different model specifications (Models 2B-C).¹⁴ All the specifications were also tested with dependent variable measured as a share of overall population rather than economically active population to correct for potential biases in the composition of population across the countries in the region and the results are consistent with those presented in Table 1.3 and Table 1.4.

The results of the regression which tested the importance of wages in explaining migration dynamics from the EU8 to the EU2 have shown in the country effect

¹⁴ Collinearity can lead to inefficient estimators and Type II error (failure to reject the no relationship (null) hypothesis). Collinearity problem can typically be remedied by excluding one of the variables or getting more data. None of these are applicable for this particular analysis. First, the model is defined theoretically and none of the variables can be taken out. If we take out the country dummies (which cause the collinearity), we end up at the neoclassical model. Second, more data would mean extending regression into the period of economic crisis which alters the research design and research question.

specifications that wages are not a statistically significant predictor of migration dynamics in the cross-country comparative framework. Instead of wage differentials, migration dynamic from EU8 to the UK and Ireland after the accession is better predicted by unemployment differentials which signal labor market difficulties in home markets, network effects and seasonal effects. The EU8 individual country dummies are statistically robust predictors of migration rates to the West after the accession. These findings should encourage us to further investigate unique factors within the EU8 countries which can explain uneven migration patterns across the region.

4.3 Addressing other factors: proximity, networks and recruitment agencies

The above analysis has tested the neoclassical framework as the dominant approach applied to study and to predict East-West migration. There are three additional factors potentially contributing to explaining the cross-country variation in migration rates that I would like to address briefly. First, the neoclassical theory takes into account the costs of migration (monetary and psychological) into the analysis. One aspect through which this is factored in is by incorporating the geographical proximity between the developed and developing country as an additional variable. The distance between the EU8 countries and the UK and Ireland, however, are relatively similar and have been equalized by easy and more affordable access to cheap flights across Europe. Proximity to other EU15 countries that could substitute migration to other destinations also cannot be considered as an important explanatory factor: almost all high outmigration countries (as well as the low outmigration countries) border a EU15 country.

Second, the cross-country differences in migration rates may be due to the pre-existent networks that facilitated the coming of new migrants. It is important to emphasize that the after-accession migration to UK and Ireland was not network induced and these destinations were new destinations (EC, 2008). Prior to 2004, visas were required in order to enter these countries and were mostly used by au-pairs whose stay in those countries was, by definition, time-limited and controlled. While illegal migration was taking place, there is no reason to expect that it was taking place to a significantly different extent across the sending countries. With the exception of Poland, there was no sizeable diaspora from the CEE countries in the UK or Ireland either. Even in the Polish

case, there is little evidence that the diaspora would facilitate the inflow of the new after-accession workers. The network effect that was established in the empirical analysis should therefore be conceived in the after-accession perspective when high initial inflows in the aftermath of labor markets liberalization contributed to higher subsequent flows.

Third, recruitment and temporary employment agencies have become important players at the labor market over the last decade. The mushrooming of actors who would facilitate also cross-border employment in the region of CEE from the mid-2000s is notable.¹⁵ Their role in greasing the wheels of migration is important especially for migrants in certain professions (for example, where the recognition of qualifications is more important) or with limited language proficiency (Currie 2007). Their emergence, however, is a response to increasing migration flows rather than their cause (Castles and Miller 2009). The surveys that investigated the sources of migrants' information also noted that employment agencies or other private mediators represented only a small share (Líška, Prušová, and Srnaková 2001). During the time of labor shortages that hit the CEE region after the EU enlargement, labor recruitment agencies, hired by big employers, were facilitators of the incoming migration to the CEE countries. Although these actors have not significantly affected migration rates, more research about their impact on migration flows and working conditions is needed (cf. Meardi 2007; Coe, Johns, and Ward 2008).

5. Conclusion: A new approach for studying CEE migration

The empirical analysis has shown that while wage differentials are a good *first* indicator through which to understand migration decisions at the *individual* level, they are clearly an insufficient factor for explaining the dynamics we have seen after Eastern enlargement at the *country* level. This is an important postulate *vis-à-vis* the theoretical approaches which were prevalingly used in the studies estimating migration potential from Central and Eastern Europe. This is imperative also in light of the policy debates which fuelled the fear of worker inflows from CEE above all over significant gaps in wages and income levels. The limited predictive or descriptive ability of neoclassical theory of migration to

¹⁵ The country that legalized temporary employment agencies first was the Czech Republic and did so only in 2004 (Coe, Johns, and Ward, 2008).

explain migration dynamics in Central and Eastern Europe and developments in theory discussed earlier invite us to search out a new approach to studying migration processes in the post-communist region. The existence of certain specific features of the CEE region further substantiates this need.

The CEE region is at present simultaneously a global economic semi-periphery and a regional political core (EU membership) with strong industrial foundations and well-educated and trained labor force. As such it offers a fertile ground for migration research not only in respect to testing the already established theories but also perhaps for advancing migration theorizing. The East-West migration processes also enable us to study labor movements in a comparative cross-country framework which facilitates to investigate broader systemic and international factors. It also makes possible to tease out the difference across the CEE countries and acknowledge diversity in the region that have been missed out from the CEE migration research almost completely.¹⁶

Importantly, East-West migration takes place within a specific legal and institutional framework of the creation of the European single market for labor. Migration in the EU cannot be regulated or controlled, once labor markets at the national level have been liberalized. The administrative and political barriers fail to exist and movement of labor can take place freely. Migration flows from the new accession states tend to be temporary, pendulum or circular rather than permanent (Dustmann et al. 2003; AMR 2008; Drinkwater and Eade 2007) which is a distinct characteristic of these flows.

A broader analytical approach seems to offer a better way of hypothesizing about the factors which can drive or inhibit migration in Central and Eastern Europe. Any new approach to researching migration in the region should view migration as *endogenous* and accept that migration dynamics play out according to a broader set of elements, epitomized in the socio-economic constellation of a particular country, such as job availability, skill structure, social welfare and working conditions. Such an approach would introduce a series of variables related to structural change and the impact of welfare systems on migration patterns in the CEE region. These two factors are important elements that set the CEE region apart from the contexts in which migration theory has been traditionally developed and studied. The existence of these two specific factors also

¹⁶ Here Galgoczi, Leschke, and Watt 2009 are a rare exception.

raises question over the appropriateness of the application of theories developed in the framework of migration from developing to developed countries where wage differentials are likely to be more significant while other, institutional and structural variables, of lesser importance.

First, the process of transition from state planning to a market economy took place with great speed and required complex economic restructuring that led to substantial labor reallocation across state and private sectors and across industries. The speed and comprehensiveness of the process was unprecedented. The challenge was even greater as the transition took place simultaneously with increasing world-wide interconnection in the markets, technological change and globalization. I suggest that the experience of such dramatic structural change produced a new empirical reality to be studied by migration theories which were developed in very different contexts.¹⁷ The effect of structural change can be best understood through the analysis of labor market dynamics and different forms of risks and opportunities that transition has produced. Focus on labor market imbalances and mismatches between newly-emerged employment opportunities and skill structures inherited from the old regime can provide useful analytical tools for identifying the profiles of people affected by the processes who represent a potential pool of labor migrants.

Second, the CEE countries inherited institutionally developed welfare systems. While the state in Central and Eastern Europe during transition retreated massively from the economy and the polity, the welfare state played an important role in the transition, not least as a mechanism to off set the negative consequences of transitional recessions (Boeri 2000). States generally have been active drivers and intermediaries of change, not only in welfare but also in industrial policy or in the approach to out-migration. Welfare provisions can be perceived as ‘investment’ into opportunity structures and into human capital, affecting broader quality of life and thus shaping the rationale of migration

¹⁷ Saying this, I partly echo Favell’s urge that the US migration research tools and theories need to be completely rethought in the European context, which is specific due to “scale of these societies, the historical nature of nation building and migration, and the transnational context of the European Union” which ensures that European national cases are not directly amenable to the habits of analysis that work well in the US (Favell 2008, 264). Yet, I see the CEE countries as a distinct category within the European migration context due to the factors outlined above.

decisions. Determinants such as passive and active labor market policies, family support or good access to health care substantively affect everyday lives of people. Their accessibility or generosity can be considered as important institutional determinants of migration both in a direct form but also as tools for mediating the impact of transition.¹⁸

These variables have interacted in complex ways across countries in the region. Considering them analytically implies a new conceptual and methodological approach. It can provide interesting insights into understanding how different transitional paths – essentially an outcome of the interaction of policy choices and economic and structural constraints of partly historical origin – have affected the behavior of individuals once the administrative barriers, such as visas and work permits, ceased to exist. These factors could be studied jointly through the investigation of migrant profiles *embedded* in their home environments and affected in their decisions to migrate (or to stay) by structural and institutional variables in home societies. A new approach to studying East-West migration is better equipped to explain migration (and non-migration) dynamics because it is able to treat migrant decisions as endogenous to broader structural and institutional changes which arise from the socio-economic environments of home countries.

¹⁸ This conceptualization of state responds to Hollifield's (2008, 194) contention that "[W]hat is missing from [the accounts of economist and sociologists] is a theory of the state and the way in which it influences population movements."

Annex

Table 1.1A below presents the results of the analysis that tests the pure neoclassical (Model 1A and 1B) and the competing country-effect models (Model 2A and 2B) with the dependent variable measured as the migration rate *change* quarter on quarter (first order differentials) and replicating the models presented earlier. The analysis was done to establish an alternative way to deal with the autocorrelation problem. Due to the change in the measurement of the dependent variable, the key independent variables were then also entered as change, that is change in unemployment differential and change in wage differentials quarter on quarter (q.o.q).

Overall, the neoclassical model results are consistent with the results presented in Table 1.3 and change in wage differentials is a significant predictor of change in migration share q.o.q. In the country effect models, wage differentials change remains a significant predictor and only two country dummies (Latvia and Lithuania) attain significance levels too. These results are different from those presented in Table 1.4 and provide less evidence for the argument presented earlier. Across all specifications, time trend and quarter four dummy (October-December) are significant. Unemployment differentials change are significant only in the country effect model but not in the neoclassical model.

The models, however, explain relatively small portion of the variance and residual plots signal heteroscedasticity. This points to the fact that the theories and variables proposed by the theories of migration and tested in the previous models aim at explaining differences in the levels of migration rather than differences in the change of rates of migration (especially in such short time periods as quarters). The models as presented here are therefore underspecified. Thus, although the re-conceptualization of dependent (and independent) variable helped to deal with the autocorrelation problem (see Durbin-Watson index) and also with the collinearity problem encountered before in the country effect models, it is not a suitable conceptualization for the study of the causes of migration as presented in this work. However, fine-tuning the analysis and engaging with the conceptual and theoretical implications of different measurements of dependent variable could be an interesting future project.

Table 1.1A: OLS results: dependent variable as change in migration

	Model 1A	Model 1B	Model 2A	Model 2B
Constant	0,031	0,049	0,066	0,092**
Wage differentials change	2,064**	2,102**	1,894*	1,940**
Unemployment differentials change	-	-0,077	-	-0,114*
Target country	0,008	0,010	0,008	0,011
Source country	0,003	0,002	-	-
Quarter 2	0,056*	0,003	0,059*	0,025
Quarter 3	-0,011	-0,026	0,001	- 0,035
Quarter 4	-0,147***	-0,146***	-0,143***	-0,141***
Time trend	-0,005**	-0,007**	- 0,005**	-0,007**
<i>CR</i>			-0,013	-0,013
<i>ES</i>			-0,034	0,038
<i>HU</i>			0,005	0,011
<i>LA</i>			-0,068*	-0,073*
<i>LI</i>			0,090**	-0,098**
<i>PO</i>			0,012	0,005
<i>SK</i>			-0,007	-0,011
R ² adjusted	0,218	0,221	0,245	0,256
N	208	208	208	208
Durbin-Watson	2,081	2,055	2,193	2,172

Note: * - significant at 90% level, ** - significant at 95% level, ***- significant at 99% level. All the controls except source country were entered as dummy variables. Country dummies: relative to Slovenia. Target country: 0 –UK, 1 – Ireland; Quarters: relative to Quarter 1.

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