Unravelling the Global City Debate

Economic inequality and ethnocentrism in contemporary Dutch cities

Het global city debat ontrafeld

Economische ongelijkheid en etnocentrisme in hedendaagse Nederlandse steden

Proefschrift

ter verkrijging van de graad van doctor aan de
Erasmus Universiteit Rotterdam
op gezag van de
rector magnificus

Prof.dr. H.G. Schmidt

en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op
vrijdag 4 juni 2010 om 11:30 uur

door
Jeroen van der Waal
geboren te Sliedrecht

Promotiecommissie:

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Coverdesign: Jeroen van der Waal

Printed in the Netherlands
Printed on FSC paper

ISBN 978-90-9025442-5
NUR 758

For my beloved mother Janny Bambacht

Acknowledgments

Doing sociological research is anything but an individual endeavor. It therefore feels like a privilege that during my PhD-research I have been surrounded by people that combine great sociological imagination and outstanding research skills with much enthusiasm for what we do.

Some of these people deserve special mention for their valuable contributions related to this thesis. Jack Burgers, who gave me the opportunity to become a PhD candidate, was always ready for discussion and advice, and introduced me to the blessings of Catholic pragmatism for post-Protestant fundamentalists like me. Jack, I sincerely appreciate both, just as I do your good company. Dick Houtman's dazzling enthusiasm for sociological research has inspired me from the first day I met him, and so do his sociological imagination and analytical strength. Dick, it has been more than a pleasure working with you. Peter Achterberg, who can produce the analyses for every research problem within minutes after its conception, has taught me many of the tricks of the trade that a quantitative researcher needs. Thank you for that, Peter, and of course for your good companionship. The value of Willem de Koster's daily advice on practically everything sociological research entails is hard to overestimate, just as his friendship is. Willem, thank you very much for both. You are the very best (and the very worst)!

The intellectual climate that has been so helpful in doing my research can, of course, not be narrowed down to a mere four people. Next to the quartet just mentioned, I therefore would like to thank all colleagues who were somehow related to my research, be it as fellow authors and/or advisors, especially my fellow LOBOCOPs and/or paper-weekend companions: Stef Aupers, Samira van Bohemen, Roy Kemmers, Katerina Manevska, Peter Mascini, Ineke Noomen and Johan Roeland. Thanks to you my work feels like play and will never make me a dull boy, and I look forward to doing research together in the years to come. As you all know that really makes me tick.

Yet, there is more to life than work. And I therefore would like to use the last few lines to acknowledge all those who make me aware of this – and make that life worth living. These include numerous friends who provide good company at *Elektra* and *Ardenner weekends* – many, many thanks for that and let's keep on rocking in a free

world! My family, whose warmth and support leave me greatly indebted, for I have not been able to give them the attention they deserve in recent years. But most of all: Amy, for all her love and patience. I love you, and let's keep the good times rolling!

Sliedrecht,
April 2010

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1 Introduction

Economic globalization (…) has profoundly altered the social, economic, and political reality of (…) cities. Through the study of the city as one particular site in which global processes take place, I seek to define new concepts useful to understand the intersection of the global and the local in today's world (Sassen 1994: xiii, preface to Cities in a World Economy*)*

1.1 The global city debate reconsidered

This study addresses the global city debate, in which much has been said but little is known. This debate revolves around the impact of economic globalisation on urban labour markets in the advanced economies and was spawned by Sassen's global city theoretical framework. This framework was initially published in *The Global City. New York, London, Tokyo* in 1991, but the arguments from which it is built can be found in earlier works on this subject (Sassen-Koob 1984a, 1984b, 1985, 1986, Sassen 1988) – and remained unchanged to the present (Sassen 2001, 2006a, 2007). Sassen deemed the integration of these arguments into an all-encompassing framework necessary because, as the quote above reveals, the old concepts by which 'sociologists have tended to study cities (…) are no longer sufficient' (Sassen 1994: xiii) for understanding the impact of the current phase of economic globalisation on the social, economic and political reality of cities.

Although this framework was initially formulated to explain how the current phase of economic globalisation alters the economic base and labour markets of New York, London and Tokyo as the subtitle reveals, its scope has widened considerably, to say the least. In the first place the number of global cities has increased from this initial triad to 'about 40' nowadays (2006a: 142, 2006c: 315). In the second place, and more important for the issue addressed in this study, the global city theoretical framework has

by now evolved to 'an *analytical construct* that allows one to detect the global as it is filtered through the specifics of a place' (Sassen 2006c: x; italics added). As such, it inspired dozens of studies on the impact of economic globalisation on hundreds of urban labour markets in the advanced economies, which range from the usual suspects such as New York to cities much lower in the urban hierarchy. Although the global city theoretical framework touches on a wide range of issues, these studies, which are part of and consequently will be referred to in what follows as 'the global city debate', primarily revolve around these central subjects: 1) the impact of the alleged urban manifestation of this globalisation – deindustrialisation and the clustering of advanced producer services – on labour demand, and 2) the role that immigration plays in that process. Yet, more than two decades after their initial formulation, these topics are still disputed. For at closer scrutiny, most of the studies in the global city debate actually do not so much assess the empirical validity of the global city theory, but rather interpret recent urban developments in terms of the theoretical framework of the global city and attribute them to economic globalisation.

As we will see, this research practice is highly problematic, for it boils down to simply reproducing Sassen's global city theory. Even worse, several studies in the global city debate caused confusion as to how economic globalisation exactly affects urban labour markets by introducing new interpretations derived from the global city theoretical framework. As a result, we do not as yet know whether the global city theoretical framework really allows one to understand the impact of economic globalisation on the social, economic and political reality of cities as its author claims. The same goes, of course, for new interpretations of the arguments in this framework that permeate the global city debate – some of which have even evolved to become practically undisputed assumptions.

Although problematic, it is quite understandable that the standard research practice in the global city debate evolved to merely interpreting urban changes in cities in the advanced economies on the basis of arguments in the global city theoretical framework. For this framework is not formulated as a middle range theory in the Mertonian sense (Merton 1959) and does therefore not allow rigorous empirical testing. With this observation, I do not side with scholars such as Smith (1984, 1998, 2001) who

claim the global city theoretical framework is a grand narrative that merely functions as a vessel for legitimising neo-liberal economic policies that are more or less rendered inevitable due to global economic restructuring. I will nevertheless deal with that argument in the concluding chapter of this study. My claim is that the global city theoretical framework is not such a grand narrative, but rather a 'grand hotchpotch': it is a vast framework constructed out of a mix of theories, propositions and expectations. As a result, the empirical validity of the global city theoretical framework as a whole cannot be assessed. That is why in the global city debate much has been said, but little is learned about the very issue it addresses: the impact of economic globalisation on the social, economic and political reality of cities. Looked at in this way, the fact that the global city theoretical framework has been used to interpret developments in dozens of cities is not so much an indicator of its fruitfulness, but the result of its greatest flaw: being a grand hotchpotch instead of a middle range theory. That these studies have not thus far led to much understanding of the impact of economic globalisation on urban labour markets points in that direction as well.

Yet, the theories, propositions and expectations the global city theoretical framework is made of can often be tested on their empirical validity, and the same goes for several of their alternative interpretations introduced by other scholars in the global city debate. This study will therefore unravel the global city theoretical framework and hence the global city debate it initiated into these theoretical notions from which it is made and consequently test their empirical validity. This is all the more relevant as these theoretical notions often assume one another to be empirically valid. As a result, if one of these notions does not hold empirically, this almost by definition invalidates the others.

The central aim of this unravelling is to assess whether these theoretical notions help us to understand the impact of the current phase of economic globalisation on the social, economic and political reality of cities as Sassen has claimed. To achieve this aim, seven research questions call for an answer. The first five address central questions in the global city debate that will be dealt with in section 1.2. Yet more needs to be done to understand the impact of the current phase of economic globalisation on the social, economic and political reality of cities. In the globalisation literature at large there are two debates that revolve around these issues that have been overlooked in the global city

theoretical framework and consequently remain un-assessed in the global city debate. However, as we will see, both are highly relevant for a debate that revolves around the impact of economic globalisation on urban labour markets, and will therefore be addressed in section 1.3.

1.2 Scrutinising the global city debate: major issues

1.2.1 The changing economic base of cities: research questions 1 and 2

The global city theoretical framework asserts that the 'new international division of labour' is largely responsible for the changing economic base of cities in the advanced economies (Sassen-Koob 1984a, 1984b, 1985, 1986, Sassen 1988, 1991, 2001, 2006a). It claims that, with the help of the deregulation of international markets and information and communication technology, previously vertically integrated firms in the advanced economies fragmented their production process. The purpose of this 'vertical disintegration' was to relocate parts of the production process to places where production costs can be minimised. It goes without saying that for many parts of the production process, such conditions can be found outside of the advanced economies – in so-called low-wage countries, also referred to as newly industrialising countries.

According to the global city theoretical framework, this outsourcing led to global production chains, hence 'the new international division of labour', which induced a twofold change in the economic base of cities of the advanced economies, especially global cities: deindustrialisation and the clustering of advanced producer services. Concerning the first, until the 1970s a large part of urban employment was industrial, but since then the employment shares in industry steadily declined due to the outsourcing of industrial production to low-wage countries. Concerning the second, the global production chains that resulted from this outsourcing need to be centrally managed by the headquarters of multinational corporations that are still located in or near cities in the advanced economies.

As the management of a globally dispersed production process is too complex to be handled by these headquarters, they need financial specialists, legal services and all kinds of management support such as accounting, consulting and training that cannot be

produced in-house. Consequently, the new international division of labour leads to the clustering of advanced producer services in global cities that produce 'the capabilities for servicing, managing, and financing the global operations of firms and markets' (Sassen 2001: 359, compare: Sassen 1991, 2006a, 2006c). Global cities are therefore considered 'strategic sites for the management of the global economy and the production of the most advanced services and financial operations that have become key inputs for that work of managing global economic operations' (Sassen 2006a: 32).

Although initially formulated for global cities, Sassen claims that the clustering argument is valid for cities lower in the urban hierarchy as well, because '[p]arallel developments exist in cities that function as regional nodes – that is, at smaller geographical scales and lower levels of complexity than global cities' (Sassen, 2006a: 193, cf. Sassen 2000: 139, 2006c: x). This claim is probably responsible for the widely held idea in the global city debate that global cities as New York wear the future guise of cities lower in the urban hierarchy (e.g. inter alia, Burgers 1996, Mollenkopf 2009, Mollenkopf & Castells 1992, Vaattovaara & Kortteinen 2003) and is often used to validate assessments of cities in the advanced economies *in general* according to the *global city* theoretical framework.

This might be a too rigid interpretation of that argument, however, and is problematic for two reasons. In the first place, from the beginning onwards Sassen argued that the deindustrialisation of archetypical industrial cities such as Detroit does not lead to the clustering of advanced producer services in such cities, but in service-oriented urban economies such as New York (Sassen-Koob 1986: 88, Sassen 1988: 23, 2001: 361, 2006a: 33). Consequently it is not very likely that the economic base of all cities in the advanced economies will become similar to that of global cities. On the contrary, the examples of Detroit and New York imply that the economic bases of cities become less similar. Furthermore, some even argue that the clustering of advanced producer services in the most service-oriented cities not only feeds on the deindustrialisation of former industrial strongholds, but also on the de-clustering of these services in other service-oriented cities (Hoyler, Kloosterman & Sokol 2008, Sassen 1995: 70, 2006a: 130-1). In short, it is not clear at all whether the widely held assumption in the global city debate that the economic base of cities will become similar to the economic base of global cities

is correct, for the global city theoretical framework asserts the exact opposite. Chapter 2 will therefore first address the question: *does the economic base of cities increasingly resemble the economic base of global cities?*

Assuming that global cities wear the future guise of cities lower in the urban hierarchy is in the second place problematic, because international outsourcing, and the new international division of labour that stems from it, indeed might induce part of the clustering of advanced producer services that occurs in global cities. However, this does not mean that it drives this clustering in cities in the advanced economies in general. This assumption, just as the assumption that deindustrialisation is the result of international outsourcing, is widely held in the global city debate. Yet, the bulk of research findings on this matter suggest that both assumptions are invalid. Findings of assessments on the impact of international outsourcing on urban labour markets in general *according to the global city theoretical framework* – read: findings of assessments on the impact of deindustrialisation and the clustering of advanced producer services – might therefore be falsely attributed to economic globalisation. The second research question that will be addressed in chapter 2 therefore reads: *does international outsourcing drive deindustrialisation and the clustering of advanced producer services in cities?*

1.2.2 Polarisation, professionalisation and mismatch: research question 3

The basic claim in the global city theoretical framework concerning the impact of the clustering of advanced producer services on labour demand is laid down in the polarisation thesis. This thesis asserts that the clustering of advanced producer services in cities yields high labour demand for both the highest and lowest occupational strata (Sassen-Koob 1984b, 1986, Sassen 1991, 2001, 2006a). The former are the professionals who work in the producer services: accountants, consultants, financial specialists and the like. The latter are the clerks, cleaners, and security workers who work in the producer services, employees in consumer services such as the hotel and catering industry, and service workers such as nannies, housekeepers and dog-walkers who cater to the life-styles of the professionals employed in the advanced producer services (Sassen-Koob 1984a, 1984b, 1985, Sassen, 1988, 2001, 2006a). Consequently, it can be expected that in

cities with the highest share of employment in the advanced producer services the occupational hierarchy will be most polarised and that the unemployment level of lower-educated urbanites will be lowest.

The polarisation thesis is not undisputed, however, as Chris Hamnett claimed that the clustering of advanced producer services leads to a professionalised, instead of polarised, occupational hierarchy (1994a, 1994b, 1996a, 1996b, 2004, Hamnett & Cross 1998). The crucial difference with the polarisation thesis is that the professionalisation thesis asserts that this clustering leads to low instead of high labour demand for the lowest occupational stratum. What is important to emphasise here is that this is more than mere theoretical hairsplitting, for according to the professionalisation thesis there will be a mismatch (i.e., high unemployment) between labour demand and labour supply at the bottom of urban labour markets with the *highest* employment share in the advanced producer services. On the basis of the polarisation thesis, it can on the other hand be expected that there will be a mismatch at the bottom of urban labour markets in cities with the *lowest* employment share in the advanced producer services.

Hamnett's critiques spurred the polarisation versus professionalisation dispute that currently rages through the global city debate. This resulted in a substantial number of studies with scattered results. As almost all of these studies assess one or a limited number of cities, and some find polarisation of the occupational hierarchy, while others find professionalisation, the exact impact of the clustering of advanced producer services on labour demand remains as yet unclear. Several research findings even suggest that the occupational hierarchy in some cities will be polarised, while it will be professionalised in others due to this clustering. Furthermore, the question of whether polarisation and/or professionalisation is indeed driven by the clustering of advanced producer services remains as yet unanswered. Chapter 3 therefore revolves around the following research question: *what is the impact of the clustering of advanced producer services on the unemployment level of less educated urbanites?*

1.2.3 The new international division of labour and immigration: research questions 4 and 5

In the global city theoretical framework immigration plays a vital role. In fact, the intellectual roots of this framework can be found in its arguments concerning the causes of immigration from newly industrialising countries (Sassen-Koob 1984b, 1985, 1986). It asserts that the push factor of this immigration to cities in the advanced economies in general and to global cities in particular is driven by so-called foreign direct investments. These investments concern the outsourcing of parts of the production process to newly industrialising countries in the form of production sites often referred to as export processing zones.

According to the global city theoretical framework, the 'disruption of traditional work structures' due to 'the transformation of subsistence workers into wage-labor' induced by foreign direct investments is what drives immigration from newly industrialising countries to cities in the advanced economies (Sassen 1988: 18, cf. Sassen-Koob 1984b, 1985, 1986, Sassen 2006a). It is claimed that due to the cultural links induced by these investment flows between sending and receiving countries, this migration often flows in the exact opposite direction: from the country invested in to the country where these investments come from. It needs to be emphasised that this argument is not intended to replace classical migration theories that revolve around underdevelopment and population pressures. Instead it is intended as an additional theory to explain *new* migration flows. It argues that migration flows driven according to the logic of classical migration theories are in the current phase of economic globalisation accompanied by migration flows that are driven by foreign direct investment. As such, both theories can be valid, but for different migration flows. This has yet to be empirically substantiated, and the first research question addressed in chapter 4 therefore concerns: *can the new immigration to cities in the advanced economies be explained by foreign direct investments?*

The global city theoretical framework further argues that economic globalisation is also a pull factor for immigration from newly industrialising countries to cities in the advanced economies in general and global cities in particular. The theoretical rationale of this pull factor has been elaborated upon in the previous section. It is asserted in the

polarisation thesis that the clustering of advanced producer services induced by the new international division of labour drives demand for low-skilled service workers (Sassen-Koob 1984a, 1984b, 1986, Sassen 1988, 1991, 2001, 2006a). According to the global city theoretical framework, this labour demand is partly met by immigrants from newly industrialised countries. This is a widely held assumption in the global city debate, but, just like the push factor of immigration addressed above, it has not yet been systematically assessed. This might be problematic for there are other theories that do not revolve around labour demand that can account for immigrant settlement in cities in the advanced economies – for instance theories that revolve around ethnic ties. The second research question that will be addressed in chapter 4 therefore reads: *does the clustering of advanced producer services attract immigrant labour from newly industrialising countries?*

1.3 Scrutinising the global city debate: blind spots

1.3.1 The impact of immigration on urban labour markets: research question 6

The sixth research question pertains to a blind spot concerning the impact of economic globalisation on the social reality of cities in the global city theoretical framework. More specifically, it revolves around the impact of immigration on urban labour markets. Such a blind spot does not surprise, because in the global city theoretical framework, immigration is primarily considered a consequence instead of a constitutive element of economic globalisation: it assumes that immigration is driven by foreign direct investment and the increased demand for low-skilled service workers this induces. In the globalisation literature at large, however, immigration is considered one of economic globalisation's constituting elements: the globalisation of labour.

Several scholars therefore criticised the narrow focus of the global city theoretical framework on the clustering of advanced producer services as an indicator of economic globalisation of an urban economy (Benton-Short et al. 2005, Malecki & Ewers 2007, Samers 2002). Benton-Short et al (2005) therefore recommend to 'expand the range of criteria used to assess the "globalness" of cities, to (…) include immigration in world city

research and to call attention to cities experiencing dramatic social and demographic change due to immigration' (2005: 945). Their critique, in short, boils down to acknowledging that immigration is one of economic globalisation's constituting forces and calling for it to be treated accordingly. Although, very ironically, the very author of the global city theoretical framework claims that '[i]mmigration is one of the constitutive processes of globalization today' (Sassen 2006d: 315, cf. Sassen 1998: xxi) as well, it is not treated as such in that framework, and it is consequently overlooked in the global city debate. As this debate aims to assess the impact of economic globalisation on the economic and social reality of cities, this blind spot needs to be eliminated, and this study will do so.

Besides assessing whether immigration from newly industrialising countries is driven by 1) foreign direct investment and 2) demand for low-skilled labour in services, it will therefore also assess the impact of immigration on urban labour markets on the basis of the substitution thesis. This thesis applies neo-classical economic logic to the market for labour in which immigrants are considered substitutes for natives and former waves of immigrants (Chiswick 1982, Johnson 1980). As most immigrants in the advanced economies come from less-developed countries and are low skilled, this substitution manifests itself at the bottom of urban labour markets. Consequently, on the basis of the substitution thesis, immigration, i.e., a supply shock in labour, leads to a downward pressure on the wages of lower-educated urbanites and ultimately to their unemployment.

Looked at it that way, the question of whether immigration leads to labour market substitution is a crucial one for the central aim of this study. For if migration flows to cities in the advanced economies do not lead to labour market substitution, this would point in the direction that the current phase of economic globalisation calls for a new conceptual framework to understand its impact on cities as Sassen claims. It would suggest that the global city theoretical framework allows us to understand the impact of the current phase of economic globalisation on urban labour markets better than the old concepts (in this case substitution) by which sociologists have tended to study cities did – the very reason why Sassen formulated that framework in the first place. For in this framework, migration flows to cities in the advanced economies are supposed to be absorbed by high demand for low-skilled labour in services. As a result, the theoretical

logic of the global city theoretical framework simply does not allow labour market substitution to exist.

However, as argued above, the question of whether the clustering of advanced producer services leads to polarisation (i.e. high labour demand for lower-educated urbanites) is still an empirical one (research question 3). The same goes for the question of whether the settlement of immigrants in cities is completely determined by market logic (research questions 4 and 5). As a consequence, the question of whether or not immigration leads to labour market substitution is also an empirical one. Looked at it that way, the rejection of the substitution thesis would be a vital step in validating the empirical validity of crucial arguments in the global city theoretical framework on labour demand in, and immigration to, cities in the advanced economies. Its corroboration, on the other hand, would point in the direction that these arguments are flawed. The validity of the substitution thesis for contemporary cities will therefore be assessed on the basis of research question six which reads *what is the impact of immigration on wages and unemployment among lower-educated urbanites?*

1.3.2 Immigration, job opportunities and ethnocentrism: research question 7

Even though the global city theoretical framework was formulated to understand the impact of the current phase of economic globalisation on the political reality of cities, it nowhere refers to the ethnic animosities that clearly have risen in salience in recent decades in many cities in the advanced economies. As this framework claims that immigration is absorbed by high labour demand due to the clustering of advanced producer services, this seems not surprising: ethnic animosities are often regarded as the result of competition over scarce economic resources and will hence not emerge without the latter. However, as argued above, it remains to be seen whether 1) urban labour markets polarise instead of professionalise, 2) a mismatch occurs between labour demand and labour supply at the bottom of urban labour markets and, consequently, whether 3) immigration leads to labour market substitution.

In urban studies at large, several scholars do expect that global economic restructuring does lead to a mismatch between labour demand and labour supply at the

bottom of the labour market. Unsurprisingly, they often predict that this restructuring in combination with immigration spurs racial antagonism in cities in the advanced economies. In *Divided Cities*, Fainstein et al. for instance claim that 'prospects for the bottom grouping remain grim (…) [and] "race" [is a] particularly important basis for fragmentation at this end of the urban socio-spatial structure. It may be that individualistic "survival strategies" or ethnic (…) divisions may have more salience as a basis for social action than economic and urban locations' (1992: 263, cf. King 1990: 29-30). Similar arguments can be found in *Urban Outcasts: A Comparative Sociology of Advanced Marginality*, in which Loïc Wacquant argues that the combination of immigration and declining job opportunities for lower-educated urbanites in the advanced economies did give rise to an 'ethnonational exclusivism'. He defined this 'ethnonational exclusivism' as 'a nativist reaction to the individual and collective downward mobility experienced by families of the autochthonous working class made all the more intolerable by the concurrent advances of rival populations of postcolonial origin' (Wacquant 2008: 276).

This idea that competition over scarce resources underlies ethnocentrism is however neither unique to urban studies, nor as recent as the debate on the impact of global economic restructuring on urban labour markets. For it is a common argument in the social sciences at large, in which it is mostly referred to as the ethnic competition theory (cf. Olzak 1992), and it can already be found in *Introduction to the Science of Sociology* published in 1921 by Park and Burgess. If this ethnic competition theory is empirically valid, it points in the direction that, contrary to what can be expected on the basis of the global city theoretical framework, immigration has led to labour market competition and ethnic animosities. This is not a mere theoretical possibility, for immigration has become highly politicised in many European countries in recent decades (Achterberg 2006a, 2006b; Ignazi 2003, Van der Waal & Achterberg 2006) and it is especially the less educated who support anti-immigrant parties (Achterberg 2006a, Achterberg & Houtman 2006, Van der Waal, Achterberg & Houtman 2007).

However, even if, contrary to what the global city theoretical framework asserts, immigration leads to labour market competition, this competition does not necessarily underlie this politicisation of immigration in recent decades. For the economic

explanation of the ethnic competition theory is challenged by a cultural one that revolves around differences in cultural capital instead of competition over scarce resources. The often-found resistance to ethnic minorities among less educated natives might therefore not be driven by this competition, but by a cultural rationale. If so, the rising salience of ethnic animosities in contemporary cities is not irreconcilable with the central arguments concerning immigration and labour demand in the global city theoretical framework. To find out, the seventh and last research question addressed this study reads: *is the ethnocentrism of lower-educated urbanites driven by ethnic competition?*

1.4 Research questions

Figure 1.1: Research questions

		Chapter
1	*Does the economic base of cities increasingly resemble that of global cities?*	2
2	*Does international outsourcing drive deindustrialisation and the clustering of advanced producer services in cities?*	2
3	*What is the impact of the clustering of advanced producer services on the unemployment level of less educated urbanites?*	3
4	*Can new immigration to cities in the advanced economies be explained by foreign direct investment?*	4
5	*Does the clustering of advanced producer services attract immigrant labour from newly industrialising countries?*	4
6	*What is the impact of immigration on wages and unemployment among less educated urbanites*?	5
7	*Is the ethnocentrism of less educated urbanites driven by ethnic competition?*	6

1.5 Research framework

To answer the research questions outlined above, there is need for a comparative framework that satisfies three conditions. In the first place, it needs to compare a substantial number of cities in an advanced economy, while controlling for state-led intervention in the labour market. As these interventions are responsible for differences among urban labour markets, failing to control for it will make it very difficult to uncover to what extent the findings can really be attributed to the clustering of advanced producer services, immigration and the combination of those processes as argued in the global city theoretical framework and global city debate in the chapters that follow (cf. Burgers & Musterd 2002, Vaattovaara & Kortteinen 2003).

In the second place, these cities need to be situated in a country with foreign investment flows towards newly industrialising countries to uncover whether these investments indeed spur new immigration flows. In the third place, there is need for at least one global city, so as to compare it to cities lower in the urban hierarchy. After all, several theoretical expectations in the global city theoretical framework are especially formulated for global cities, but are expected to be valid for cities lower in the urban hierarchy as well, albeit in attenuated form. Furthermore, it needs to be assessed whether the economic base of cities increasingly resembles the economic base of a global city.

The first condition, a substantial number of cities in an advanced economy while controlling for state-led labour market intervention, renders the most obvious advanced economy, the United States, highly problematic. Although the United States, and in particular New York, is the intellectual homeland of the global city theoretical framework, the cities there are located in different states which differ widely in type and extent of labour market intervention and welfare state arrangements – especially since the devolution of these policies from federal level to the level of individual states in the 1980s. The extent of these differences has inspired Harvard-based public policy researcher John Donahue to label the United States as the ‘Disunited States’ (1997) and has been found to lead to great differences in the extent to which states integrate ethnic minorities into local labour markets (Lieberman 2005). As a result, the impact of

economic globalisation on the social, economic and political reality of New York is very difficult to compare with that impact on other cities in the United States, while such a comparative framework is a necessary condition for rigorously testing the arguments in the global city theoretical framework and global city debate. An identical problem arises for most European countries, especially since the 1980s when most of them decentralised many (financial) responsibilities to local governments as well (cf. Burgers & Musterd 2001, Musterd, Ostendorf & Breebaart 1998, Newman & Thornley 1996, Parkinson et al. 1988). Some European countries have far more centralised welfare policies than others do, however. This will be taken into account after narrowing down the number of potential candidates by means of the second condition that needs to be met: a substantial flow of outward foreign direct investments.

To my knowledge, the best indicator for outward FDI flows is the *Outward FDI Performance Index of the UNCTAD*.[1] Table 1.2 shows the score on this index for the top ten between 1995 and 2007. Several countries simply do not qualify for the comparative framework needed in this study as they essentially have just one city: Bahrain, Hong Kong, Iceland, Kuwait, Luxembourg and Singapore. Others can clearly not be considered as advanced economies: Azerbaijan, Ethiopia and Panama.

The countries that remain, arranged according to their total score on the index between 1995 and 2007, are 1) Belgium and Luxembourg (82.01), 2) the Netherlands (28.51), 3) Switzerland (23.99), 4) Sweden (11.28), 5) United Kingdom (10.01), 6) Finland (6.42), 7) France (5.21), 8) Ireland (3.74), 9) Denmark (3.62), and 10) Norway (2.25). Of these ten countries, Sweden, Finland, Ireland, Denmark and Norway do not have a substantial number of cities, so that, in order of outward FDI performance, Belgium and Luxembourg, the Netherlands, Switzerland, United Kingdom and France remain. Of these five countries, the Netherlands and France are the best candidates on the basis of the first condition to compare the impact of economic globalisation on the social, economic and political reality of cities: a highly centralised welfare state. The divergence in welfare policies and labour market interference among cities in other European

1 $OND_i = (FDI_i / FDI_w)/(GDP_i/GDP_w)$, where OND_i = *The Outward FDI Performance Index of the* i^{th} *country*; FDI_i = *The FDI outflows in the* i^{th} *country*; FDI_w = *World FDI outflows*; GDP_i = *GDP in the* i^{th} *country*; and GDP_w = *World GDP*

countries is largely absent in those countries (cf. Burgers & Musterd 2001, Musterd, Ostendorf & Breebaart 1998, Newman & Thornley 1996, Parkinson et al. 1988). Belgium and Switzerland, on the other hand, are more or less the antipode of the Netherlands and France on this matter, while the United Kingdom ranges somewhere in between. On the basis of the combination of the first condition – a substantial number of cities embedded in a centralist welfare state – and the second condition – substantial outward FDI flows – then, I need to choose between France and the Netherlands. The only objective measure I have to make this choice is the score on the *Outward FDI Performance Index*, on which the Netherlands scores substantially higher than France. On the basis of the first and second conditions, then, The Netherlands proves the ideal case for answering the research questions in this study.

This brings us to the third and last condition that needs to be met to unravel the the global city debate: the presence of a global city. Despite the conceptual confusion over what the global city concept exactly means and how this relates to the world city concepts of Friedmann (1986, cf. Friedmann & Wolff 1982) and Braudel (1984), the most important feature of such cities for the research at hand is undisputed (Taylor 2004): the clustering of globally interconnected advanced producer services (Sassen 2001, 2006a, cf. Taylor 2004). The idea behind this clustering is that due to the new international division of labour there is need for the production of control capacity for the management of globally dispersed production chains. Advanced producer services produce these 'capabilities for servicing, managing, and financing the global operations of firms and markets' (Sassen 2001: 359). To do so these services 'need to provide a global service which [means] a global network of affiliates or some other form of partnership' (Sassen 2001: xxi). The clustering of these services is the pivot on which everything hinges in the arguments concerning the labour market changes about to be assessed.

Table 1.2: Top 10 ranking of the *Outward FDI Performance Index* (UNCTAD), (1995 – 2007)

Rank	1995-1997		1997-1999		1999-2001		2001-2003		2003-2005		2005-2007	
1	Panama	12.50	Belgium & Luxembourg	7.95	Belgium & Luxembourg	12.62	Belgium & Luxembourg	22.74	Iceland	13.99	Luxembourg	18.07
2	Hong Kong	11.67	Panama	7.18	Hong Kong	5.76	Panama	6.55	Luxembourg	8.83	Iceland	16.58
3	Singapore	6.53	Hong Kong	4.90	Netherlands	4.90	Singapore	5.10	Hong Kong	8.58	Hong Kong	7.80
4	Netherlands	4.62	Netherlands	4.09	Switzerland	4.04	Netherlands	4.64	Panama	8.47	Switzerland	5.20
5	Switzerland	3.89	United Kingdom	3.69	Denmark	3.62	Azerbaijan	3.76	Azerbaijan	6.90	Panama	4.29
6	United Kingdom	2.76	Switzerland	3.62	Singapore	3.58	Hong Kong	3.48	Netherlands	6.56	Belgium	4.05
7	Ethiopia	2.74	Singapore	3.55	United Kingdom	3.56	Sweden	2.33	Belgium	5.44	Netherlands	3.70
8	Sweden	2.73	Finland	3.24	Finland	3.18	Bahrain	2.31	Switzerland	4.94	Kuwait	3.36
9	Belgium & Luxembourg	2.31	Sweden	3.18	Sweden	3.04	Switzerland	2.30	Bahrain	4.63	Bahrain	2.75
10	Norway	2.25	Azerbaijan	2.20	France	3.00	France	2.21	Ireland	3.74	Singapore	2.69

Source: UNCTAD

The Netherlands, which proved to be the ideal case for the research at hand on the basis of the combination of the first condition – a substantial number of cities in a centralist welfare state – and the second condition – substantial outward FDI-flows –also meets the third condition. For according to Sassen, Amsterdam is a global city (1991, 1994, 2000, 2001, 2006a, 2006d, 2007). In one of her recent studies on this matter (2006a: 89), Amsterdam scores high on an important indicator for global city status: globally oriented financial services, in which it ranks 8th worldwide. Many studies that have been devoted to mapping the presence of globally interconnected advanced producer services in general in cities have validated Amsterdam's global city status with this indicator (Alderson & Beckfield 2004, Beaverstock et al. 1999, Derudder et al. 2003, Derudder & Taylor 2005, Neal, 2008; Taylor 2002, 2004, Taylor & Aranya 2008). In these studies, which without exception find that New York and London are the most globally interconnected cities just as Sassen claims, Amsterdam scores very high – almost without exception as one of the top ten most globally connected cities. Clearly, then, Amsterdam belongs to the approximately 40 global cities that exist according to Sassen (2006a: 142, 2006d: 315). No other Dutch city even comes close to such a global city status.

The Netherlands, in short, proves to be the most strategic case for assessing the empirical validity of the theoretical reasonings in the global city theoretical framework and the global city debate, because it is the only advanced economy that combines 1) a substantial number of cities, among which is a global city, Amsterdam, in a highly centralised institutional setting, with 2) large outward FDI flows. It does however share one shortcoming with all the other countries in the world for the research questions at hand: relevant data are without exception state level instead of urban level. Consequently, considerable efforts were made to construct city-level datasets out of state-level datasets (see appendix B for a detailed description of all the datasets used in this study and the operationalisation of all variables). This is of course a necessary condition for answering the research questions, but it should be emphasised that it did yield some limitations, which will be addressed each time they occur in the analyses that follow.

Statistics Netherlands (CBS) discerns 22 metropolitan agglomerations in the Netherlands for which most necessary data could be retrieved for the period 1993 – 2009.

Some analyses are however made on a smaller range of years due to data limitations. The time span addressed in this book therefore ranges from the mid-1990s up to the financial crisis following the bankruptcy of Lehman Brothers in September 2008.

2 The changing economic base of cities

The geographical dispersal of economic activities that marks globalization (...), is a key factor feeding the growth and importance of central corporate functions (...), that is the work of managing, coordinating, servicing, financing a firm's network of operations. [These] become so complex that increasingly the headquarters of large global firms outsource them [to] highly specialized service firms: accounting, legal, public relations (...) and other such services [which] are subject to agglomeration economies (Sassen 2001: xx)

2.1 Introduction

The aim of this chapter is to assess the central claims in the global city debate concerning the impact of the new international division of labour on the economic base of cities in the advanced economies. According to the global city theoretical framework, this division of labour manifests itself as the combination of deindustrialisation and the clustering of advanced producer services in global cities. This does not in any way imply that the economic base of all cities in the advanced economies becomes roughly identical to the economic base of global cities. Yet, this assumption clearly underlies the standard research practice in the global city debate to assess the impact of the new international division of labour on urban labour markets *in general* on the basis of the global city theoretical framework. Such practice boils down to assuming that the economic base of global cities shows the future guise of cities lower in the urban hierarchy (e.g. inter alia, Burgers 1996, Mollenkopf 2009, Mollenkopf & Castells 1992, Vaattovaara & Kortteinen 2003).

This might be problematic for at least two reasons. In the first place the global city theoretical framework asserts another scenario. That industrial employment declined

in all cities in the advanced economies is undisputed. When it comes to the essential aspect of global city formation – the clustering of advanced producer services – the global city theoretical framework however makes a clear distinction between global cities or service-oriented cities in general on the one hand and former industrial strongholds on the other. It claims that the growth in employment in the advanced producer services in the former cities is much stronger than in the latter. Consequently, it can be expected that the economic base of these two types of cities will become less, instead of more, similar. Furthermore, some claim that the clustering of advanced producer services in some service-oriented cities feeds on the de-clustering of these services in other service-oriented cities. After addressing the scenarios on the clustering of advanced producer services in section 2.2, and assessing their empirical validity in section 2.3, the first research question that will be answered in the concluding section 2.5 therefore reads *does the economic base of cities increasingly resemble the economic base of global cities*?

Assuming that the economic base of global cities shows the future guise of cities lower in the urban hierarchy is in the second place problematic, because it can be doubted that deindustrialisation and the clustering of advanced producer services can be attributed to the new international division of labour brought about by the outsourcing of parts of the production process to newly industrialising countries, especially for cities lower than global cities in the urban hierarchy. Due to this assumption in the global city debate, the standard research practice boils down to mapping the consequences of deindustrialisation and the clustering of advanced producer services, and subsequently attributing them to the new international division of labour. What this means for many research findings in the global city debate will be dealt with in section 2.4, and section 2.5 will subsequently answer the second research question in this chapter: *does international outsourcing drive deindustrialisation and the clustering of advanced producer services in cities*?

2.2 Two scenarios on advanced producer services growth

2.2.1 The clustering argument in the global city theoretical framework

The global city theoretical framework asserts that due to the new international division of labour hardly any manufacturing industry remains in the advanced economies, as it is outsourced to newly industrialising countries. The coordination and control of the globally dispersed production process that stems from this international division of labour are highly complex in comparison to that of the classical vertically integrated firms characteristic of the industrial era, often referred to as the Fordist era. As these coordination and control capacities are too complex to produce in-house, this production is outsourced to advanced producer services. Consequently, the new international division of labour leads to the clustering of advanced producer services in global cities that produce 'the capabilities for servicing, managing, and financing the global operations of firms and markets' (Sassen 2001: 359, compare: Sassen 1991, 2006a, 2006c). Put differently: 'the growth of these sectors (…) is associated with the globalisation of economic activity and the new organisational structures that such globalisation engenders' (Sassen-Koob 1986: 86).

Initially this clustering argument was formulated for a mere three cities, as the subtitle of the first edition of *The Global City. New York, London Tokyo* reveals (1991), but recently Sassen claimed that there are 'about 40' global cities nowadays (Sassen, 2006a: 142, 2006d: 315). This does not mean that the clustering argument is merely formulated for the limited number of global cities however. For it is argued that the clustering of advanced producer services will occur in cities lower in the urban hierarchy as well: '[p]arallel developments exist in cities that function as regional nodes – that is, at smaller geographical scales and lower levels of complexity than global cities' (Sassen 2006a: 193, cf. Friedmann 1995: 22, Sassen 2000: 139, 2006c: x).

Yet, this does not imply that the economic base of *all* cities in the advanced economies becomes identical to the economic base of global cities. According to Sassen the concentration of advanced producer services in the most service-oriented urban economies is a 'predatory process', in that it feeds on the industrial decline in former

industrial strongholds within the same nation (Sassen 1998: xxv, 2001: 7-8, 2006a: 130, 2007: 112). The central argument is that due to the new international division of labour, former industrial strongholds see employment in manufacturing industries decline, as it is outsourced to newly industrialising countries, while global cities see employment in advanced producer services grow *because* this outsourcing needs coordination of advanced producer services located there. And a similar predatory process will manifest itself in attenuated form in service-oriented cities that function as 'regional nodes', that is, cities that function as global cities, only at smaller geographical (read: national or regional) scales (Sassen, 2006a: 193, cf. Friedmann 1995: 22, Sassen 2000: 139, 2006c: x). According to this reasoning, these regional nodes will see their share of employment in the advanced producer services increase more markedly than former industrial strongholds as well. In short, according to the global city theoretical framework, in global cities and service-oriented cities that function as regional nodes, employment in the advanced producer services experiences stronger growth than in former industrial strongholds, as the clustering of advanced producer services in the former feeds on the deindustrialisation of the latter.

The primary example of this scenario is the economic fortune of Detroit vis-à-vis New York in recent decades. According to Sassen, 'the manufacturing jobs that Detroit began to lose in the 1970s and 1980s fed a growing demand for specialised corporate services in New York City to coordinate and manage a now globally distributed auto manufacturing system' (2006a: 71, cf. Sassen-Koob 1986: 88, Sassen 1988: 23, 2001: 361, 2006a: 33). Others have made similar arguments, not specifically for global cities, but for service-oriented cities in general. Kasarda (1985, cf. Kasarda & Friedrichs 1985, 1986) for example stressed that the growth in the advanced producer services in former industrial strongholds in the US, as well as in West Germany, already lagged behind on this clustering in service-oriented cities in the early 1980s (cf. Scott & Storper 1986). On the basis of similar findings Dangschat (1994) roughly discerned 'winners' and 'losers' in the transition to a post-industrial economy. In his dichotomy, the 'winners' are cities that already had a substantial share of producer services in their economy before deindustrialisation started in the 1970s: New York, Londen, Frankfurt and Amsterdam, for instance. The 'losers', on the other hand, are cities that strongly depended on heavy

industries back in the 1970s, such as Liverpool, cities in the German Ruhr area, Rotterdam, and in the US so-called rustbelt cities such as Detroit (cf. Cheshire 1990, Knapp & Schmitt 2008, Meijer 1993, Sassen 2006a: 71).

The arguments of Sassen on global cities and regional nodes (Sassen-Koob 1986: 88, Sassen 1988: 23, 2001: 361, 2006: 33) and of Kasarda (1985, Kasarda & Friedrichs 1985, 1986) and Dangschat (1994) on service-oriented cities in general all boil down to the expectation that, just like the advanced economies in general, all cities in the advanced economies deindustrialised and saw their employment share in the advanced producer services grow. Yet, the growth in the advanced producer services in service-oriented cities, especially global cities, is according to these authors, much stronger than in former industrial strongholds.

Some findings on the clustering of advanced producer services in cities in other countries even point in the direction of a double predatory hypothesis. For it was found that the clustering of advanced producer services in some service-oriented economies not only feeds on the deindustrialisation of former industrial strongholds as argued in the global city theoretical framework, but also on the de-clustering of advanced producer services in other service-oriented cities within the same country (cf. Hoyler, Kloosterman & Sokol 2008, Sassen 1995: 70, 2006a: 130-1) – a process that has been documented for Sydney at the cost of Melbourne in Australia (Daly & Stimson 1992), Zurich at the cost of Basel in Switzerland (Keil & Ronneberger 1992), and Toronto at the cost of Montreal in Canada (Levine 1990).

The reasoning behind this double predatory thesis is in accordance with the clustering argument in the global city theoretical framework: geographical proximity to important clients – headquarters of multinationals – and the added value due to (informal) exchange of knowledge and information between professionals in the advanced producer services (cf. Storper & Venables 2004). If this happens in the Netherlands as well, not all service-oriented Dutch cities will see their share of advanced producer services rise much higher than that of former industrial strongholds as argued in the global city theoretical framework, for some of these service-oriented cities will see this share actually decline. Despite this difference between the predatory thesis and the double predatory thesis, they both point in the direction that *Dutch cities diverge in their share of employment in the*

advanced producer services (hypothesis 1). If so, many cities, most notably former industrial strongholds, will become less similar to global city Amsterdam when it comes to their employment share in the advanced producer services.

2.2.2 The clustering argument in the global city debate

As stated, in the global city debate it is often assumed that the economic base of all cities becomes similar to the economic base of global cities. This assumption underlies the standard research practice of assessing the impact of economic globalisation in all cities in the advanced economies on the basis of the polarisation thesis and the professionalisation thesis (see table A1 in appendix A for a detailed list of these studies), or by means of other arguments in the global city theoretical framework (e.g. inter alia, Amen et al. 2006, Brenner & Keil 2006). This line of reasoning can be found from the early days of the global city debate onwards. It started with Mollenkopf and Castells (1992), who, in the often cited edited volume *Dual City: Restructuring New York* aimed to 'illuminate how global economic restructuring influenced the weaving of the social, cultural, and political fabric in (…) New York' (1991: 5-6). They claimed that '[t]he New York experience (…) can be viewed as central to understanding late twentieth century postindustrial transformation' (1992: 5). This quote inspired, among many others in the global city debate, Vaattovaara and Kortteinen to apply the polarisation and professionalisation theses to cities lower in the urban hierarchy – in their case the Helsinki region. The selection of this region was based on the following argument: 'the global city-thesis claims that the developments in global cities are paradigmatic for those in other cities (…) In other words, what is already manifest and obvious in the global cities is about to become the trend for cities at the lower levels of the global urban hierarchy' (2003: 2128).

This argument can of course still be interpreted as in line with the global city theoretical framework, as it is not clear whether it asserts that *all* cities lower in the urban hierarchy are catching up with global cities or the most service-oriented cities. Yet, a very recent claim of, again, Mollenkopf does: 'the economic functions that are concentrated in global cities – that some scholars think distinguish them from other, lesser cities – are

growing relatively faster outside the big central cities and in metropolitan areas lower down the national and international hierarchy (…) leaving even declining industrial cities different kind of places than they were in the past' (2009: 273). Although this argument is made without any reference to empirical studies, Mollenkopf seems quite convinced that this is what is actually happening. The crucial hypothesis of this second scenario, then, is *the employment share in the advanced producer services did rise in all Dutch cities, but more so in cities that previously lagged behind in this matter.* If so, all Dutch cities will become more similar to global city Amsterdam when it comes to their employment share in the advanced producer services.

2.3 Assessing advanced producer services growth

This section will assess the changing economic base of cities. It concerns an assessment of the trends in deindustrialisation, the clustering of advanced producer services, and the combination of these trends in the 22 metropolitan agglomerations in the Netherlands between 1995 and 2008 (see appendix B for the data used and the operationalisation of the variables, and for the map with the delineation of these metropolitan agglomerations). This will shed light on whether the economic base of these cities has become more similar to the one of global cities in this time span as often argued in the global city debate, or less similar as asserted in the global city theoretical framework.

For each city, I have calculated the employment shares of the manufacturing industry and the advanced producer services for the years 1995 through 2007. Subsequently I calculated for each year the mean score for the 22 metropolitan agglomerations. Table 2.1 shows the matrix that resulted from these calculations – the first row considers the trend in the means of the producer services, the third row the trend in the means of the manufacturing industry. At first sight, it is clear that the mean share of producer services did rise, while the mean share of manufacturing industry has declined, in the latter case in a strong linear fashion as the negative correlation coefficient with *year* in the last column shows. The trend in the means of the advanced producer services is considerable, but less strong, as it experienced a relapse between 2000 and

2004 – probably a consequence of the downward economic trend the Netherlands experienced after the economic boom of the 1990s. Still, the overall trends for the 22 Dutch metropolitan agglomerations between 1995 and 2008 are very clear, and not very sensational: deindustrialisation occurred, and the share of advanced producer services did grow.

Nevertheless, this does not mean that the economic base of Dutch cities increasingly resembles the economic base of global city Amsterdam. The rows below the means contain the standard deviations of the employment shares of the producer services and manufacturing industry respectively. The standard deviation measures the distribution around the mean score – a higher standard deviation indicates a wider distribution – and table 2.1 clearly shows that the standard deviation of the producer services increased in a strong linear fashion: the positive correlation with *year* is very high. This means that between 1995 and 2008 the employment shares in advanced producer services in the 22 metropolitan agglomerations under scrutiny *diverged*: in some cities this share increased more sharply than in others. The share of manufacturing industries shows an inverse trend in the same period of time: between 1995 and 2008 the standard deviation declines, indicating that the 22 metropolitan agglomerations converged on this matter. Put differently, as far as the employment share in manufacturing industries is concerned, Dutch cities became more similar between 1995 and 2008.

The diverging trends in advanced producer services' employment in table 2.1 reveal that the economic base of Dutch cities did not become more similar in this matter – just as was expected on the basis of the global city theoretical framework which corroborates hypothesis 1, and contrary to what is often expected in the global city debate which leads to the rejection of hypothesis 2. Assessing the trends for each city separately will show what is going on exactly, for there are at least two explanations that can account for these diverging trends. The first one is that the employment in the advanced producer services did grow in all metropolitan agglomerations, but most strongly in the most service-oriented ones (the predatory thesis). The second differs from the first one in that this stronger growth only occurs in some service-oriented cities, as other service-

Table 2.1: means and standard deviations of the employment share in the advanced producer services (14% - 34%), and industry (4% - 25%) in 22 Dutch metropolitan agglomerations from 1995 through 2007.

	1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*Correlation With year*
Producers														
Mean	18.4	19.3	20.3	21.4	21.8	22.0	22.6	22.4	21.9	22.0	21.6	21.9	22.7	0.76***
Standard deviation	0.045	0.047	0.044	0.044	0.045	0.048	0.047	0.047	0.048	0.050	0.050	0.049	0.052	0.86****
Industry														
Mean	15.4	14.6	13.9	13.4	13.0	12.5	12.3	12.0	11.6	11.1	10.8	10.8	10.5	-0.98****
Standard deviation	0.064	0.056	0.051	0.051	0.050	0.047	0.046	0.047	0.045	0.044	0.043	0.049	0.048	-0.76***
N	22	22	22	22	22	22	22	22	22	22	22	22	22	13

Source: Statline Statistics Netherlands (*CBS*) (own calculations).
* p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001.

oriented cities actually see their share of employment in the advanced producer services decline (double predatory thesis).

Table 2.2 shows the trends in employment in the advanced producer services in the 22 metropolitan agglomerations under scrutiny. The last column shows the correlation coefficient of the trends in this employment for each city with *year*. Sixteen cities show a significant growth in the employment in advanced producer services. In four cities, primarily *former industrial strongholds* – Heerlen, Leeuwarden, Nijmegen and Sittard-Geleen – there is neither growth nor decline (see map B1 in appendix B for the exact location of the 22 metropolitan areas in the Netherlands). This, combined with the fact that archetypical service-oriented cities such as Amsterdam and Utrecht are on top of the list in 2009 when it comes to this employment share, indicates that the employment growth in the advanced producer services did indeed go faster in the most service-oriented cities than it did in former industrial strongholds, just as claimed in the global city theoretical framework. At the same time two *strong service-oriented* cities, Apeldoorn and Arnhem, show a significant decline in this employment in the period under scrutiny. This suggests that employment growth in the advanced producer services in some service-oriented cities is predatory on this employment in other service-oriented cities – and that therefore both explanations outlined above can account for the fact that Dutch cities diverged when it came to employment share in the advanced producer services.

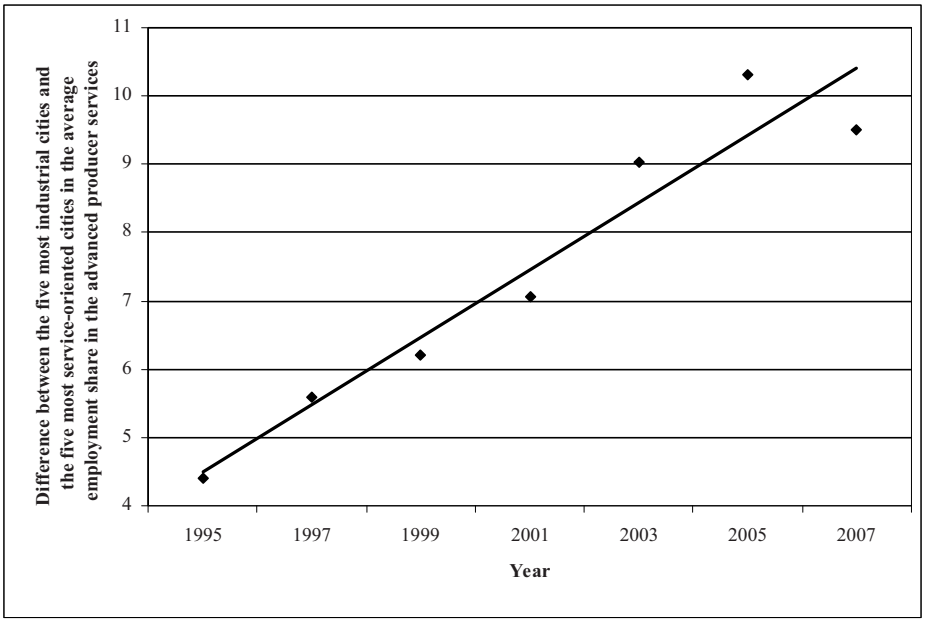
Figure 2.1 depicts this finding. More specifically, it shows the results of the first explanation (predatory thesis) – the employment share in the advanced producer services grows faster in the most service-oriented cities than in the most industrial cities – combined with the results of the second explanation (double predatory thesis): Apeldoorn and Arnhem are not included in the most service-oriented cities. To do so, I measured the difference in the average employment share in the advanced producer services among the five cities that were most service-oriented in 1995 – (excluding Apeldoorn and Arnhem) Amersfoort, Amsterdam, Leeuwarden, The Hague and Utrecht – and the average employment share in the advanced producer services in cities that were most industrial in 1995: Dordrecht, Eindhoven, Heerlen, Maastricht and Sittard-Geleen. In the former cities the average share of employment in the advanced producer services increased 8.5 per

Table 2.2: Employment share in advanced producer services of 22 Dutch metropolitan agglomerations from 1995 through 2007

	1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*Correlation With Year*
Amersfoort	23.0	25.2	24.8	26.2	26.7	27.1	28.3	28.2	28.0	28.7	28.9	28.3	28.5	0.90****
Amsterdam	26.0	26.8	27.9	29.2	30.6	32.1	32.8	32.8	32.7	31.7	31.6	32.4	33.6	0.86****
Apeldoorn	22.0	22.3	23.4	23.4	22.6	23.1	22.5	21.7	21.5	22.3	21.7	21.7	22.1	-0.55*
Arnhem	28.8	29.8	28.5	29.4	28.5	28.4	29.7	28.8	27.6	27.1	27.1	28.1	29.3	-0.48*
Breda	15.8	16.2	17.7	19.4	19.5	19.0	19.8	19.7	19.8	19.2	19.4	19.1	19.0	0.66**
Den Bosch	18.1	19.2	21.9	24.2	25.3	23.1	24.5	25.0	23.3	24.3	23.9	22.3	23.1	0.52*
Dordrecht	12.4	12.6	13.6	14.6	14.8	14.7	15.8	16.2	15.3	15.5	14.9	15.6	16.9	0.85****
Eindhoven	18.5	20.0	21.2	21.5	23.4	25.2	25.0	24.2	22.9	22.4	22.8	24.5	25.5	0.72***
Enschede	12.0	13.0	15.1	16.5	16.5	17.0	18.6	19.1	17.6	17.8	16.7	17.8	18.4	0.78***
Groningen	15.6	18.7	19.4	20.8	22.5	22.3	21.8	21.2	20.9	21.3	21.1	21.6	22.0	0.66**
Haarlem	14.9	16.3	16.6	18.2	18.6	18.4	18.8	18.2	18.4	17.7	17.6	18.3	18.6	0.64**
Heerlen	15.7	15.7	17.5	18.1	19.1	19.4	18.3	17.0	18.0	17.5	15.8	16.5	17.7	0.05
Leeuwarden	22.1	23.9	24.2	24.6	24.8	25.2	23.4	23.8	24.0	22.9	22.0	22.8	24.3	-0.20
Leiden	14.1	14.0	14.4	14.7	14.9	14.1	15.4	15.2	16.2	14.6	14.6	15.2	15.5	0.60**
Maastricht	16.0	15.9	17.1	18.4	17.5	17.7	21.1	21.7	20.9	20.3	19.6	18.5	18.8	0.64***
Nijmegen	15.2	16.3	16.2	16.7	17.7	18.2	18.5	18.2	17.1	17.1	16.5	15.7	16.5	0.13
Rotterdam	20.3	20.9	21.3	22.7	23.2	23.7	24.5	24.5	23.6	24.3	23.9	24.5	25.4	0.89****
Sittard-Geleen	17.0	17.0	19.6	21.0	21.2	20.0	20.1	19.5	17.7	16.7	16.3	16.8	17.7	-0.37
The Hague	21.8	23.4	24.4	24.6	24.8	25.2	25.8	25.3	25.4	24.8	24.3	24.3	25.8	0.60**
Tilburg	15.3	15.6	16.4	18.0	18.7	18.4	18.6	19.3	18.3	19.4	20.6	22.1	24.0	0.93****
Utrecht	24.1	24.2	25.7	28.0	28.9	30.0	29.9	30.2	31.0	30.9	30.0	30.3	31.8	0.89****
Zwolle	16.4	17.6	20.5	20.5	20.1	21.0	23.1	22.1	20.6	27.5	25.2	24.5	24.4	0.86***
N	22	22	22	22	22	22	22	22	22	22	22	22	22	13

Source: Statline Statistics Netherlands (*CBS*) (own calculations).
* p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001.

Figure 2.1: trend in the difference between the five most service-oriented cities and five most industrial cities in the average employment share in the advanced producer services.



cent between 1995 and 2008 (28.8 – 20.3), while it increased only 3.4 percent (19.3 – 15.9) in that time-span in the five most industrial cities.

We will now turn to the trends in employment in industry. Table 2.3 shows these trends for each city separately. It clearly reveals that deindustrialisation occurred in all Dutch metropolitan agglomerations between 1995 and 2008. Cities not only became more similar on this matter as shown by the declining standard deviation in table 2.1, but also became less industrial without exception. This, along with the findings on the (de)clustering of advanced producer services, means that the economic base of cities did become less similar between 1995 and 2008, but that this can merely be attributed to the trends in employment in the advanced producer services.

Table 2.3: employment share in industry of 22 Dutch metropolitan agglomerations from 1995 through 2007

	1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*Correlation with year*
Amersfoort	10.0	10.0	10.0	9.0	9.2	8.6	8.0	7.9	7.5	7.4	6.9	6.8	6.5	-0.99****
Amsterdam	9.9	9.3	9.0	8.4	8.2	7.7	7.2	6.8	6.6	6.3	6.1	6.0	6.0	-0.98****
Apeldoorn	15.3	14.5	14.8	13.8	13.1	12.8	12.7	12.4	12.1	11.2	11.2	10.0	10.0	-0.99****
Arnhem	9.0	9.0	9.0	8.0	7.7	7.6	8.0	8.0	7.0	7.0	7.0	7.0	7.0	-0.91****
Breda	16.3	15.7	14.6	14.1	13.7	13.0	13.3	13.0	12.6	12.1	11.7	10.7	10.3	-0.99****
Den Bosch	15.0	13.6	12.6	12.0	11.8	12.2	11.3	10.8	9.5	8.1	7.4	7.2	7.0	-0.98****
Dordrecht	20.2	19.5	17.9	17.3	16.3	15.0	15.0	14.0	14.0	14.0	13.0	13.0	13.0	-0.96****
Eindhoven	26.0	26.2	24.9	24.9	23.6	21.8	21.6	21.5	21.2	20.2	19.7	18.7	18.4	-0.99****
Enschede	19.7	18.5	17.7	17.5	17.5	17.0	16.7	16.5	16.1	15.5	15.7	14.9	14.3	-0.98****
Groningen	9.8	9.4	9.3	8.7	8.6	8.3	8.1	7.8	7.4	6.8	6.6	6.8	6.5	-0.99****
Haarlem	14.2	13.1	11.9	11.7	10.6	10.3	10.8	11.6	10.2	9.3	8.5	9.0	9.0	-0.91****
Heerlen	22.8	21.8	20.3	20.0	19.2	18.3	17.8	18.1	16.9	16.3	15.0	14.9	14.1	-0.99****
Leeuwarden	12.3	11.0	11.3	10.8	9.8	9.0	9.2	8.6	8.7	8.5	8.4	7.7	7.3	-0.96****
Leiden	8.9	9.0	9.1	9.1	9.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	-0.81****
Maastricht	20.9	19.6	18.3	17.7	16.8	16.0	15.0	14.0	13.0	12.0	12.0	11.4	11.4	-0.99****
Nijmegen	17.0	17.0	17.0	17.0	17.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	-0.85****
Rotterdam	13.1	12.8	12.2	11.7	11.3	10.9	9.9	10.0	10.0	9.0	9.0	8.9	8.5	-0.99****
Sittard-Geleen	31.8	25.4	23.4	22.0	22.0	21.0	20.0	21.0	21.0	22.0	23.0	24.7	23.4	-0.53*
The Hague	8.0	8.0	8.0	8.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	-0.80****
Tilburg	19.0	18.7	17.5	17.0	17.2	17.7	18.4	18.1	17.2	15.8	15.1	15.0	15.0	-0.84****
Utrecht	7.3	7.1	6.3	6.2	5.8	6.3	6.1	5.0	5.0	5.0	5.0	5.0	4.0	-0.94****
Zwolle	12.1	12.1	11.0	11.0	11.0	10.0	10.0	10.0	10.0	9.0	9.0	8.1	8.1	-0.98****
N	22	22	22	22	22	22	22	22	22	22	22	22	22	13

Bron: Statline, Centraal Bureau voor de Statistiek (*CBS*) (eigen calculaties).
* p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001.

To complete the picture on the divergence of the economic base of Dutch cities between 1995 and 2009, table 2.4 will show the trends in the mean and standard deviation of the *ratio* of the advanced producer services to industry (producers services *divided* by manufacturing industries) – a measure of the extent to which an urban economy has shifted from industrial employment to employment in the advanced producer services. According to the global city theoretical framework, this shift is the way that the new international division of labour manifests itself in cities in the advanced economies. Both the means of the service to industry ratio and the standard deviations did increase in a linear fashion between 1995 and 2008. This is depicted in figure 2.2. The trend line of the mean shows that on average the service to industry ratio did rise which does not surprise considering that all cities deindustrialised, while most cities saw employment in advanced producer services grow in the period under scrutiny.

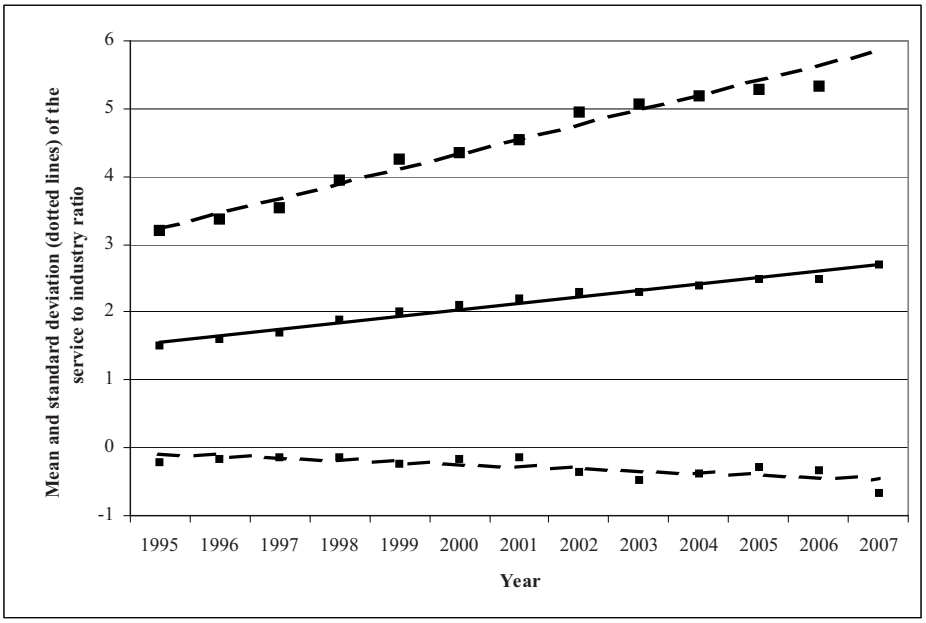
What is more important is that the trend in the standard deviation – the distribution around the mean score – increased as well, as shown by the dotted lines. This indicates that between 1995 and 2008 the range of the scores on the service to industry ratio increased. In relation to the mean score, the most service-oriented cities became even more service-oriented in that period. The most industrial cities, on the other hand, became less service-oriented in relation to the mean score in this time span. More simply put, for the most service-oriented cities the service to industry ratio grew much faster than for the most industrial cities. The economic base of Dutch cities, then, did not become more similar, but diverged between 1995 and 2007. The question that remains in this chapter is to what extent this can be attributed to the new international division of labour as argued in both the global city theoretical framework and in the global city debate.

Table 2.4: service to industry ratio (0.68 through 7.94) of 22 Dutch metropolitan agglomerations from 1995 through 2007.

	1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*Correlation With Year*
Mean	1.5	1.6	1.7	1.9	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.5	2.7	0.99****
Standard deviation	0.869	0.905	0.936	1.046	1.145	1.151	1.198	1.356	1.411	1.419	1.424	1.443	1.719	0.98****
N	22	22	22	22	22	22	22	22	22	22	22	22	22	13

Source: Statline Statistics Netherlands (*CBS*) (own calculations).
* p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001

Figure 2.2: trends in the mean score and standard deviation (dotted lines) of the service to industry ratio.



2.4 What drives deindustrialisation and growth in services?

The previous section assessed the deindustrialisation and clustering of advanced producer services in Dutch cities. According to the global city theoretical framework, these two processes are interconnected and related to the new international division of labour (Sassen 1991, 2001, 2006a), and the bulk of studies in the global city debate simply reproduce this argument. In the latest – global – phase of capitalism, so it is argued, capital has managed to disperse its production process on a global scale, so that it can extract more surplus value from labour than in the preceding Fordist/industrial phase of capitalist production.

In the Fordist/industrial phase, production took place in vertically integrated firms in the advanced economies. One of the consequences of this type of production is that the price of labour increased substantially since World War II in these countries. As low-skilled labour is more abundant in newly industrialising countries, the price of labour is

much lower than in the advanced economies. By outsourcing parts of the production process to these countries, capital can therefore extract more surplus value from labour than in the advanced economies where the price of low-skilled labour is high. According to the global city theoretical framework, this is what actually happened in recent decades and is what drives the declining employment in the manufacturing industry in the advanced economies. At face value, this theoretical rationale seems plausible. That's probably why this 'outsourcing – deindustrialisation nexus' is very prominent in public and political debates in Europe and the United States (besides, of course, for reasons of political opportunism, cf. Doogan 2009). Every plant closure in the advanced economies is accompanied by gloomy reports on the economic futures of European and American workers in an age when companies, with the help of information and communication technology and the deregulation of global markets, can outsource their production process to wherever it yields the highest profits.

In the academic debates, on the other hand, there are more theories to explain why deindustrialisation did occur in the advanced economies, and outsourcing is not even the most prominent one. In fact, approximately two decades of empirical research on this matter shows that international outsourcing is only responsible for a small part of the deindustrialisation of Europe and the United states. Recently, an OECD study by Molnar, Pain and Taglioni reviewed the bulk of the empirical studies on the impact of investments from multinationals in newly industrialising countries and concluded that 'some studies have found evidence of substitution between employment in foreign affiliates and parent companies, but others have found that the two are complements. In either case the reported effects are generally small and may vary over time' (2007: 33). Similar arguments can be found in two additional studies on the same topic. Hijzen and Swaim, conclude that:

> offshoring has no effect or a slight positive effect on sectoral employment. Offshoring within the same industry (intra-industry offshoring) reduces the labour-intensity of production, but does not affect overall industry employment. Inter-industry offshoring does not affect labour-intensity, but may have a positive effect on overall industry employment. These findings suggest that the productivity gains from offshoring are

> sufficiently large that the jobs created by higher sales completely offset the jobs lost by relocating certain production stages to foreign production sites. (2007: 86).

And the main finding of the chapter in the *OECD Employment Outlook* of 2007 entitled *OECD Workers in the Global Economy: Increasingly Vulnerable?* is very clear on this matter as well: 'offshoring has no effect or a positive effect on sectoral employment' (2007: 3, cf. Brady et al. 2007, Crinò 2009: 233-4).[2]

In short, the available evidence suggests that the deindustrialisation of Europe and the United States cannot, or at most can very minimally, be attributed to the practice of multinationals of relocating part of their production process abroad. This finding begs the question as to how this deindustrialisation in recent decades came about and how it is possible that the share of employment in industry declined strongly in the advanced economies. Several studies have addressed this question in what has become known as the 'technology versus trade debate' (cf. Krugman 1994, 1996). According to the technology argument in this debate, manufacturing industry did not contract in the advanced economies due to outsourcing to, or imports from, newly industrialising countries – as for instance Faux (2006), Saeger (1997) and Wood (1994) argue – but due to productivity growth owing to automation of the production process (Kollmeyer 2009, Krugman & Lawrence 1993, Rowthorn & Ramaswamy 1997, 1999).

Others stress that besides productivity growth in industry two other factors account for deindustrialisation and the declining share of employment in industry as compared to commercial services in Europe and the US. In the first place this concerns the shift in national demand from manufactured goods to services. In the second place this concerns the commodification of the household economy – child care, care of the elderly, housekeeping and the like – due to the increasing labour market participation of women (Esping-Andersen 1999, Iversen & Cusack 2000, Kollmeyer 2009, Rowthorn &

2 In the globalization literature the terms outsourcing and offshoring are often used as synonyms. However, strictly speaking, these are labels for different processes. The former concerns the purchase of goods and services produced abroad which were previously produced by firms themselves. The latter concerns a similar practice, except that these goods and services are produced *by the same company that purchases them, only in a foreign establishment* (Molnar et al 2007). However, in the debate on what drives deindustrialisation of the advanced economies, both processes boil down to the same logic: if they would not exist, these goods and services would need to be produced in the home country of the company that purchases them.

Ramaswamy 1999, see however: Alderson 1999). Contrary to the manufacturing industry, these kinds of services are very labour-intensive, as they often require human contact.

In short, higher productivity growth in manufacturing industry than in services, changing national demand, and commodification of the household economy made the advanced economies post-industrial by the turn of the millennium, not the outsourcing of parts of the production process to newly industrialising countries. Therefore, the consequences of deindustrialisation for labour demand should not be ascribed to international outsourcing, as is the standard argument in the global city debate. To be clear, the question as to whether other processes of economic globalisation than outsourcing are responsible for the deindustrialisation of cities in the advanced economies is an open one that goes far beyond the scope of this study. It is, for example, more than likely that global economic competition is an important driver for the technological innovation that drives deindustrialisation. Yet, what is important here is that the argument in the global city theoretical framework concerning deindustrialisation that revolves around international outsourcing seems to have no empirical basis.

The same logic can be applied to the rising share in commercial services in cities in the advanced economies in general. The rising share of employment in these services has no clear link with outsourcing as assumed in the global city debate. Contrary to the bulk of commercial services in cities in the advanced economies, the part of the advanced producer services in *global cities* that produces 'the capabilities for servicing, managing, and financing the global operations of firms and markets' (Sassen 2001: 359), can however be linked to international outsourcing. After all, this very outsourcing is why advanced producer services are needed to produce these capabilities in order for the headquarters of multinationals to manage their globally dispersed production process in the first place, and that is why these services cluster in global cities. The activities of the accountants, consultants, lawyers, financial specialists and the like who are involved with this production can consequently be linked to international outsourcing. Considering that this only concerns a part of the employment in producer services in a global city, the impact of international outsourcing on the economic base of cities in the advanced economies in general is minimal.

Furthermore, not only global cities that are involved in producing the capabilities for the headquarters of multinationals to manage their globally dispersed production process, but also nationally or regionally oriented cities can have a very substantial part of their employment in the producer services. Consider, for instance, Utrecht, whose economic base when it comes to employment in industry and advanced producer services closely resembles that of global city Amsterdam (compare table 2.2), but which functions as 'the centre of *nationally oriented* producer services' (Ministerie van Economische zaken, 2004; italics added). This is completely in accordance with Sassen's claim that the clustering of advanced producer services 'exists in cities that function as regional nodes – that is, at smaller geographical scales and lower levels of complexity than global cities' (Sassen, 2006a: 193, cf. Friedmann 1995: 22, Sassen 2000: 139, 2006c: x). However, in such 'regional nodes' there is no clear link with international outsourcing. This is already explicitly referred to in this quote that mentions the smaller geographical scales at which the driving processes occur. This in practice means that national or regional instead of global forces may also drive the clustering of advanced producer services in the bulk of cities in the advanced economies. In fact, that is why they are labeled as regional nodes in the first place.

Yet, in the global city debate the clustering of advanced producer services in all cities in the advanced economies is still considered to be a consequence of international outsourcing. A recent study in this debate speaks volumes on this matter. Zhong, Clark and Sassen aimed to assess 'globalisation impacts on changes in income inequality' (2007: 385) by means of rigorously testing the polarisation thesis in comparing over 250 cities in the United States. In that study the 'share of earnings by producer services' is considered and used as a 'globalization variable' (Zhong et al. 2007: 387). The argument for doing so is, not very surprisingly considering that Sassen is one of the authors, in accordance with the global city theoretical framework: 'producer services like finance, accounting, internet consulting, and law firms are critical to support other global businesses' (2007: 387). In short, producer services facilitate managing the new international division of labour induced by international outsourcing. Yet, although for part of the producer services in global cities such as New York this might be so, the bulk of the 250 cities in the study of Zhong et al. will, at most, function as regional nodes.

Consequently this link with international outsourcing simply does not exist for the producer services located there. Modelling producer services as a globalisation variable therefore seems way off course, and will consequently greatly overestimate the impact of economic globalisation on urban labour markets.

2.5 Conclusions

In the global city debate it is often assumed that the economic base of cities in the advanced economies becomes similar to the economic base of global cities. This results in the standard research practice of assessing the impact of economic globalisation on labour markets in cities in general on the basis of the global city theoretical framework. This assumption could be doubted as the global city theoretical framework asserts another scenario concerning advanced producer services growth, and that is why this chapter addressed the research question *does the economic base of cities increasingly resemble the economic base of global cities?*

This chapter shows that this question needs to be answered in the negative, for the economic base of many Dutch cities did not increasingly resemble the economic base of global city Amsterdam between 1995 and 2008, by and large because Dutch cities diverged when it came to employment share in the advanced producer services. And they did so in accordance with the arguments of Sassen considering this matter. She argued that the clustering of advanced producer services in the most service-oriented cities, most notably global cities and regional nodes, feeds on the deindustrialisation of former industrial strongholds. The facts that the employment share in industry declined in all Dutch cities, while in the most service-oriented cities the employment share in the advanced producer services grew much faster than in the most industrial cities also point in that direction. The economic base of many Dutch cities therefore decreasingly, instead of increasingly, resembled the economic base of global city Amsterdam.

This is contrary to what is often assumed in the global city debate and contrary to the recent claim of Mollenkopf that: ‘the economic functions that are concentrated in global cities – that some scholars think distinguish them from other, lesser cities – are

growing relatively faster outside the big central cities and in metropolitan areas lower down the national and international hierarchy' (Mollenkopf 2009: 273). In reality, at least in the Netherlands, the exact opposite is happening. The clustering in the advanced producer services was strongest in the most service-oriented cities, especially in global city Amsterdam. That Mollenkopf furthermore combines his claim – in a section entitled 'some terms do not travel well' (2009: 272-274) – with cautioning against using the global city theoretical rationale for cities lower in the urban hierarchy (2009: 273) strikes me as 'one of the oddest logics ever presented' in the global city debate.[3] Although on the basis of my findings such cautioning seems justified, on the basis of his claim an exact opposite line of reasoning seems more appropriate.

The findings in this chapter show that the economic base of all cities in the advanced economies does not necessarily become similar to the economic base of global cities in the current phase of economic globalisation. This did not happen in the Netherlands where between 1995 and 2008 many cities became less similar to global city Amsterdam. In the 1980s, Kasarda and Friedrichs came to similar conclusions for cities in the United States and West Germany (1985, 1986), which suggests that this scenario is not merely happening in the Netherlands, but in advanced economies in general. Contrary to what is often claimed, then, global cities do not show the future guise of cities lower in the urban hierarchy (e.g. inter alia, Burgers 1996, Mollenkopf 2009, Mollenkopf & Castells 1992, Vaattovaara & Kortteinen 2003). In the idiom used by Dangschat (1994), some cities 'win' while other cities 'lose' in the transition to a post-industrial economy, and the former are cities that were already service-oriented in the 1970s, while the latter are former industrial strongholds. Applying the global city theoretical framework to cities in general is therefore highly problematic, especially considering another invalid assumption in the global city debate that was addressed in this chapter.

According to the global city theoretical framework, international outsourcing induces the deindustrialisation of and the clustering of advanced producer services in cities in the advanced economies. As the bulk of research findings on these matters point in another direction, the second research question addressed in this chapter was *does*

[3] See for 'one of the oddest logics of analysis ever presented in social science' in general: Stonecash's critique on Inglehart (Stonecash 2000: 152).

international outsourcing drive deindustrialisation and the clustering of advanced producer services in cities? Although this clustering in global cities is partly – as far as it concerns the advanced producer services that produce 'the capabilities for servicing, managing, and financing the global operations of firms and markets' (Sassen 2001: 359, cf. Sassen 1991, 2006a, 2006d) – in cities that function as regional nodes, this link with international outsourcing seems to be missing, as the clustering is driven by national or regional processes. For the Dutch case, this means that only part of the employment in the advanced producer services in global city Amsterdam is indeed driven by international outsourcing. Just as claimed in the global city theoretical framework, the advanced producer services produce the inputs for the headquarters of multinationals located there and thus can be linked to economic globalisation. Yet, other service-oriented Dutch cities such as Utrecht primarily function as national or regional nodes, and the link between the clustering of advanced producer services in those cities with global economic restructuring in the form of international outsourcing seems consequently absent.

This suggests that several studies in the global city debate thus far greatly overestimated the impact of economic globalisation on urban labour demand, as they mapped this impact by assessing the consequences of the clustering of advanced producer services. Certainly, many of these studies assessed this impact in cities that function as global cities (see table A1 in appendix A), but others included former industrial strongholds and/or cities that are more likely to function as regional nodes. In grand-scale comparisons like the one of Zhong, Clark and Sassen (2007) the bulk of cities by definition are former industrial strongholds and regional nodes. Such a framework indeed allows rigorous testing of the polarisation thesis as 'comparing many locations has the advantages of (1) offering greater variations on key hypothesized variables and (2) controlling impacts of other variables that may generate spurious results in a few cases' (Zhong Clark & Sassen 2007: 386). Consequently, such comparative frameworks are a valuable contribution to the global city debate, in which the bulk of studies concern case studies of one or two cities that miss such rigor.

Yet, the very irony is that by using such a framework the findings are falsely attributed to international outsourcing and the new international division of labour that

stems from it *if* the share of employment in the advanced producer services is used as a globalisation indicator. This does not mean that such a research framework should be abandoned altogether, as this would come down to throwing the baby out with the bath water. Rigorous testing of the polarisation (and professionalisation) thesis simply needs such a comparative framework just as claimed by Zhong Clark and Sassen (2007), and using such frameworks is therefore a great step forward in the global city debate. However, if such a framework is combined with the operationalisation of economic globalisation and/or international outsourcing with the share of employment in the advanced producer services, it will greatly overestimate the impact of this globalisation and/or outsourcing. For the bulk of this employment in former industrial strongholds and regional nodes has no relation to international outsourcing whatsoever.

3 Advanced producer services and labour demand

The structure of economic activity has brought about changes in the organization of work that are reflected in a pronounced shift in the job-supply, with strong polarization occurring in the (...) occupational distribution of workers (Sassen 2006a: 197)

Sassen's thesis of growing social polarisation in global cities is flawed [because] it fails to engage adequately with existing work on social change, and the evidence of large-scale professionalisation in the occupational structure of Western societies and many global cities (Hamnett 1994a: 422)

3.1 Introduction

This chapter aims to assess the empirical validity of two competing theories in the global city debate on urban labour demand: the polarisation thesis and the professionalisation thesis. The polarisation thesis basically argues that the clustering of advanced producer services leads to an hourglass-shaped urban occupational hierarchy: high labour demand for both the highest and lowest occupational strata. Consequently, the polarisation thesis predicts that in cities with the highest shares of employment in the advanced producer services the occupational hierarchy will be most strongly polarised, and that these cities will consequently have the smallest mismatch between labour demand and labour supply at the bottom of the labour market.

The professionalisation thesis, on the other hand, argues that the clustering of advanced producer services leads to *high* labour demand for the highest occupational

stratum, but to *low* labour demand for the lowest occupational stratum. Regarding the labour demand for the highest occupational stratum the polarisation thesis and the professionalisation thesis thus do not differ. The crucial difference between these theses is that the latter predicts that cities with the greatest share of employment in the advanced producer services have to cope with the largest, instead of the smallest, mismatch between labour demand and labour supply at the bottom of the labour market.

Section 3.2 will further elaborate the theoretical arguments of the polarisation and professionalisation theses, and section 3.3 will assess their empirical validity for explaining labour demand for less educated urbanites. The concluding section 3.4 will discuss the findings of this chapter and will answer the research question: *what is the impact of the clustering of advanced producer services on the unemployment level of less educated urbanites*?

3.2 Polarisation, professionalisation and mismatch

3.2.1 The polarisation thesis

The polarisation thesis in urban studies is clearly influenced by Braverman who argued that the rise of the service economy leads to proletarianisation due to automation and de-skilling (1974). Consequently, in the transition to a post-industrial economy, the intermediate occupational categories characteristic of the industrial era wither away, leading to an hourglass-shaped occupational hierarchy of highly-educated professionals at the top, and a less educated service proletariat at the bottom.

Braverman's thesis was formulated for the transition to a service economy at country level, but Friedmann and Wolff (1982), Noyelle (1983), Sassen (Sassen-Koob 1984a, 1984b, 1986) and Trachte and Ross (1985) were the first to apply it to occupational change of urban economies. It is however especially the works of Sassen (1991, 2001) on global cities that stirred the debate on the polarisation thesis in urban studies. Particularly the chapters *Employment and Earnings* and *Class and Spatial Polarization* in both the first (1991) and second (2001) edition of *The Global City: New*

York, London, Tokyo have become the main point of reference in this debate. The central arguments in these chapters have remained unchanged (Sassen 2006a, 2007).

Sassen asserts that the combination of deindustrialisation and the clustering of advanced producer services leads to polarisation of the occupational hierarchy (Sassen-Koob 1984a, 1984b, 1985, 1986, Sassen 1991, 2000, 2001, 2006a, 2007). The theoretical rationale behind this polarisation is that 'different types of economic growth promote different types of social forms. In the post-World War II era, growth was characterized by the vast expansion of a middle class (…) The historical forms assumed by this expansion, notably capital intensity, standardization, and suburbanization (…) acted against the casualization of work ' (2001: 255). In the current global age, this process is more or less inversed: 'the group of service industries that were one of the driving economic forces beginning in the 1980s [the advanced producer services, JvdW], and continue as such today, is characterized by greater (…) *occupational dispersion*, weak unions, and a *growing share of casualized low-wage jobs*' (Sassen 2006a: 173, italics added). According to the polarisation thesis there are two mechanisms by means of which the occupational hierarchy in global cities is dispersed, that is polarised, due to the clustering of advanced producer services.

The first mechanism is often referred to as a direct effect, because it concerns employment in producer services firms: 'almost half the jobs in the producer services are lower-income jobs, and the other half are in the two highest earning classes' (Sassen 2006a: 197, cf. 2000: 142). The former are the less educated facilitators such as cleaners, clerks and security, and the latter are well-educated professionals, such as financial specialists, accountants and consultants, who perform complex operations (Sassen 2000: 142, 2006a: 197). A growing share of advanced producer services in cities therefore increases labour demand at both the top and bottom of the occupational hierarchy. The second mechanism is often referred to as an indirect effect, or a 'multiplier effect' (cf. Burgers & Musterd 2002: 409), as it is driven by the consumption pattern of the well-educated professionals employed in the advanced producer services. This pattern is supposed to yield demand for 'an army of low-wage workers (…) including residential building attendants, dog-walkers, housekeepers for the two-career family, workers in the

gourmet restaurants and food shops, French hand laundries, and so on' (Sassen-Koob 1985: 262, cf. Sassen-Koob 1984a, 1984b, 1986, Sassen 1988, 2001, 2006a).

According to the polarisation thesis, then, the occupational hierarchy that characterised an urban economy in the industrial regime, also referred to as the Fordist regime, was onion-shaped: large in the middle and small at the top and bottom. In the current post-industrial/post-Fordist era in which the clustering of advanced producer services is considered the driving force of employment growth, this onion-shaped industrial occupational hierarchy gives way to a post-industrial occupational hierarchy that is hourglass-shaped: small in the middle and large at the top and bottom. The polarisation thesis has therefore been conceived of as 'the theory of the declining middle' (Fainstein 2002). If so, the smallest mismatch between labour demand and labour supply at the bottom of Dutch urban labour market exists in cities with the highest share of advanced producer services. The crucial hypothesis that can be derived from the polarisation thesis therefore is *in Dutch cities with a high share of employment in the advanced producer services, the unemployment level of less educated urbanites is lower than in Dutch cities with a low share of employment in the advanced producer services*.

3.2.2 The professionalisation thesis

Chris Hamnett formulated the most prominent critique of the polarisation thesis in the global city debate. He claimed that the occupational hierarchy of global cities will become professionalised instead of polarised. More specifically he claims that the transition to a post-industrial urban economy leads to professionalisation, because the post-industrial occupational hierarchy is more professionalised than the industrial occupational hierarchy. The crucial difference from the polarisation thesis is that according to the professionalisation thesis the clustering of advanced producer services leads to high labour demand for the highest occupational stratum, but to *low* labour demand for the lowest occupational stratum.

Hamnett's seminal works that sparked the 'polarisation versus professionalisation dispute' contain two arguments as to why he expects professionalisation instead of polarisation in global cities, which he has repeated ever since (1996a, 1996b, 1998,

2004). In the first place he sincerely doubts the polarisation thesis, because it has already been challenged at the national level. Erik Olin Wright and Bill Martin found that the transition to a post-industrial economy has led to professionalisation instead of proletarianisation in the United States in the 1970s (1987, for similar findings on Europe see: Esping-Andersen 1993). In the idiom of the issue at hand, the transition to a post-industrial economy leads to low labour demand, not high labour demand, for the less educated in the United States. This finding stems from a country-level study however and therefore does not need to be incompatible with Sassen's polarisation thesis that concerns cities.

The second argument as to why Sassen's polarisation thesis is erroneous according to Hamnett is more relevant for this study. He considers it 'Americancentric,' for Sassen bases her polarisation claim on the occupational hierarchy of New York and other big cities in the United States such as Los Angeles. Hamnett considers these cities not representative for global cities in general however, as they combine a high immigrant influx with a highly deregulated labour market. Due to this combination high labour demand for low-skilled service workers can be met by a large supply of cheap low-skilled labour.

This combination simply does not exist in most advanced economies, because they are more regulated and/or attract fewer low-skilled immigrants than New York and Los Angeles do. Consequently, a growing low-wage service sector might not be a 'universal' feature of global cities, but an exceptionality of global cities in the United States. In short, global cities in more regulated economies, such as on the European mainland, are according to Hamnett more prone to professionalise than to polarise due to the clustering of advanced producer services, especially when the share of immigrants in their population is not as high as in New York or Los Angeles. According to this reasoning, then, the clustering of advanced producer services leads to high labour demand for the better educated, but to low labour demand for the less educated. If so, the greatest mismatch between labour demand and labour supply at the bottom of Dutch urban labour market exists in cities with the highest share of advanced producer services. The crucial hypothesis that can be derived from the professionalisation thesis therefore is *in Dutch cities with a high share of employment in the advanced producer services the*

unemployment level of less -educated urbanites is higher than in Dutch cities with a low share of employment in the advanced producer services.

3.2.3 Polarisation and professionalisation in Dutch cities

Burgers and Musterd (2002) have previously applied the polarisation and professionalisation theses to the two biggest cities in the Netherlands: Amsterdam and Rotterdam (2002). To do so, they divided the total urban employment in a Fordist and post-Fordist occupational structure according to the classification scheme of Esping-Andersen (1993), which is very appropriate for the question at hand 'because it relates inequality directly to economic restructuring. Thus, it can be easily related to the theoretical notions of Sassen (…). As a case in point, Sassen's claim of social polarization resulting from the growing service character of urban economies should be especially visible in the "post-Fordist" job hierarchy' (Burger & Musterd 2002: 408). In assessments of the empirical validity of the polarisation and professionalisation theses in the global city debate, it has consequently become the standard research practice to use this classification scheme (Buck 1997, Hamnett 1994a, 1994b, 1996a, 2004, Rhein 1996, Steijn, Snel & Van der Laan 2000).

Burgers and Musterd found that 'both cities show a continuing de-industrialization of their local economy during the first half of the 1990s. But because this occurred at a much slower pace in Rotterdam than in Amsterdam, the relative difference between the two cities has increased in this respect. [Consequently,] the difference between Amsterdam and Rotterdam as to the share of Fordist (and thus of post-Fordist) jobs has almost doubled (…) between 1992 and 1996' (2002: 408). This is not very surprising considering the findings in the previous chapter that Amsterdam is more post-industrial – in Burgers and Musterd's terms post-Fordist – than Rotterdam and that the share of employment in the advanced producer services increased more greatly in the former than in the latter (see table 2.2).

The comparison of the post-Fordist occupational hierarchy in Amsterdam with that hierarchy in Rotterdam by Burgers and Musterd (2002) showed that the former fits the polarisation model, while the latter fits the professionalisation model. In Amsterdam,

the transition to a post-industrial economy leads to high labour demand for both the more educated and the less educated. In Rotterdam, on the other hand, this merely leads to high labour demand for the more highly educated. According to Burgers and Musterd (2002), this finding is responsible for the fact that the unemployment level of less educated urbanites in Rotterdam is substantially higher than in Amsterdam. That 'Sassen's polarization model seems to be more powerful in explaining inequality in Amsterdam while the mismatch scheme (…) seems more adequate for Rotterdam' (Burgers & Musterd 2002: 409) is subsequently interpreted according to the theoretical reasoning of the polarisation thesis. It is suggested that the greater share of professionals in the advanced producer services in Amsterdam in comparison to Rotterdam is what drives the higher labour demand for low-skilled service workers in the former than in the latter: 'As Sassen has suggested, the presence of the new middle class — itself largely the result of an expanding service sector — in turn creates additional employment in the service sector, mainly in those parts which cater for the lifestyles of these urban professionals: restaurants, specialty shops, cultural industries and so forth' (Burgers & Musterd 2002: 409).

However, the question of whether employment in the advanced producer services really is responsible for high labour demand for the low skilled as claimed in the polarisation thesis is as yet unanswered. A mere comparison of Amsterdam with Rotterdam simply cannot determine the validity of this suggested cause.

3.3 Assessing the impact of advanced producer services on labour demand

The claim of several scholars in the global city debate that a global city like Amsterdam wears the future guise of cities lower in the urban hierarchy did not stand the test in the previous chapter. Although all 22 Dutch metropolitan agglomerations became less industrial, their economic base did not become like the one of global city Amsterdam. On the contrary, in the most service-oriented cities the employment share in the advanced producer services saw a greater increase than in former industrial strongholds. Combined

with the findings of Burgers and Musterd that the occupational hierarchy of Amsterdam is polarised, while it is professionalised in Rotterdam (2002), this points in the direction that in cities with the highest employment share in the advanced producer services the occupational hierarchy will be polarised, while the occupational hierarchy in cities with a low employment share in these services will be professionalised, and the latter cities consequently have to cope with a mismatch between labour demand and labour supply at the bottom of the labour market.

This seems all in accord with a crucial hypothesis that can be deduced from the polarisation thesis in the global city theoretical framework: in cities with the highest share of advanced producer services, the mismatch between labour demand and labour supply at the bottom of the labour market is lowest. Table 3.1 assesses whether this claim is correct by comparing the impact of the employment share in the advanced producer services on the unemployment level of less educated urbanites in the 22 Dutch metropolitan agglomerations (see appendix B for a detailed description of the datasets used in this study and the operationalisation of all variables).

As the data used have a multilevel structure, 11 years within 22 cities, there is need for multilevel modelling (Hox 1995). Therefore table 3.1 starts with a null model, which shows how much variation of *unemployment level less educated* exists at the level of metropolitan agglomerations, and how much of this variation exists at the level of years. It shows that 21.2 per cent (0.211 / (0.785 + 0.211) of the variation in the unemployment level of the less educated occurs because urban economies differ, while 78.8 per cent (0.785 / (0.785 + 0.211)) of this variation is caused by fluctuations in time – probably the result of the economic boom of the second half of the 1990s and the economic bust after 2001.

In model 1 I entered the variable *producer services* to find out whether cities with the highest share of producer services have the lowest (polarisation thesis / hypothesis 1) or highest (professionalisation thesis / hypothesis 2) share of unemployment among their less educated citizens. The negative and significant coefficient of *producer services* confirms

the former hypothesis that is deduced from the polarisation thesis and rejects the latter hypothesis that is deduced from the professionalisation thesis.[4] This points in the

Table 3.1: unemployment level of the less educated in 22 Dutch metropolitan agglomerations from 1998 through 2007, explained by share of producer services (multilevel regression analysis; entries are regression coefficients; estimation: maximum likelihood).

	Null model	*Model 1*
Independents	*β*	*β*
Constant	-0.00	0.000
Producer services		-0.468***
Controls		
Working population		0.289*
Share less educated		-0.226**
Age 15-24		0.052
Age 25-34		-0.116
Age 35-44		0.105
Age 45-54		-0.119
Variance metropolitan level (N = 22)	0.211**	0.340*
Variance year level (N = 11)	0.785****	0.630****
Deviance	658.46	564.48
DF		7

Source: Statline Statistics Netherlands (*CBS*) (own calculations).
p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001.

direction that in Dutch cities both polarisation and professionalisation occur, just as Burgers and Musterd showed for Amsterdam and Rotterdam (2002), albeit under different conditions. The former applies to the most service-oriented Dutch cities, while the latter applies to the most industrial cities, which consequently have to deal with a

4 Model 1 is a significant improvement of the null model as the deviance drops 34.12 (598.60 – 564.48) in points, which is more than the 12.02 that is needed for a significance decline at 5 per cent level when using seven degrees of freedom (seven variables were entered into the model). The variance of *unemployment less educated* at year level declines as could be expected, but the variance at metropolitan level increases after entering *producer services* and the control variables. This seems rather odd, for entering variables normally explains part of the variance in the dependent variable. In multilevel modelling this sometimes happens however, and indicates an omission of important explanatory variables in the model (Kreft & De Leeuw 1998). It thus simply means that besides the clustering of advanced producer services, there are other important factors that determine the unemployment level of the less educated in Dutch cities. In chapter 5 we will see as to whether these important factors include immigration.

mismatch between labour demand and labour supply at the bottom of the urban labour market. This can be interpreted according to the argument of the polarisation thesis, as the clustering of advanced producer services proved to be crucial for explaining the extent to which such a mismatch occurs in cities. In cities with the highest share of advanced producer services, the unemployment level for less educated urbanites is lowest, not highest as claimed by the professionalisation thesis.

3.4 Conclusions

This chapter assessed the impact of the clustering of advanced producer services on urban unemployment. According to the polarisation thesis in the global city theoretical framework, this clustering leads to high labour demand for both high-skilled and low-skilled service workers. The professionalisation thesis, on the other hand, asserts that this clustering leads to high labour demand for high-skilled service workers, but to low labour demand for low-skilled service workers. Consequently, according to the polarisation thesis the unemployment level of less educated urbanites will be lowest in cities with the highest share of advanced producer services, while according to the professionalisation thesis it will be highest in those cities. As it is presently not clear which one is correct, this chapter revolved around the following research question*: what is the impact of the clustering of advanced producer services on the unemployment level of less educated urbanites?*

A previous comparison of the occupational hierarchy in global city Amsterdam with that hierarchy in Rotterdam revealed that both occupational polarisation and occupational professionalisation occurs in contemporary Dutch cities, albeit under different conditions (Burgers & Musterd 2002). It was found that polarisation occurred in Amsterdam, while professionalisation occurred in Rotterdam. The authors consequently suggested that the latter therefore had to cope with a mismatch between labour demand and labour supply at the bottom of the labour market. This suggestion is in accordance with the argument of the polarisation thesis: only urban economies with a high share of employment in the advanced producer services yield high labour demand for both the

highly educated and the less educated. The comparison of the impact of the employment share in the advanced producer services on the unemployment level of less educated urbanites in the 22 Dutch metropolitan agglomerations between 1998 and 2008 in this chapter confirmed this suggestion and corroborated this argument. As could be expected on the basis of the polarisation thesis, the unemployment level is lowest in cities with the highest share of advanced producer services, instead of highest as could be expected on the basis of the professionalisation thesis.

Previous comparisons of cities in the former Federal Republic of Germany and United States (Kasarda 1985, Kasarda & Friedrichs 1985, 1986) did yield results of a similar kind. They showed that cities with a low share of employment in the advanced producer services generate the least labour market opportunities for the less educated. As the study of Kasarda and Friedrichs used data from the 1970s and early 1980s, it concluded that 'we actually do not know whether the high unemployment rates currently confronting many Western economies are a relatively permanent structural feature or simply reflect temporarily incomplete adaptation; if the latter (…) substantial new service sector jobs (both high and low skill) will be created in the long run, relieving the mismatch' (1986: 22).

The analyses in this chapter on data from the mid-1990s up until 2008 suggest that the mismatch between labour demand and labour supply induced by the deindustrialisation of cities in the advanced economies in the 1980s is *neither* a permanent feature *nor* a temporarily incomplete adaptation. Instead, both occurred. It was a temporary feature in cities with a high share of employment in advanced producer services, while in cities with a low share of these services it seems permanent. The latter cities still have to cope with a mismatch between labour demand and labour supply. What the future brings for cities with a low employment share in the advanced producer services is not clear, but in past decades this mismatch proved very persistent. In addition, and more importantly, the previous chapter showed that the driving force that could alleviate this problem – the clustering of advanced producer services – is least developed in those cities. Consequently it can be expected that only in the long run can market forces relieve the plight of less educated jobless urbanites in such cities.

The suggestion in this and in previous studies that polarisation happens in cities with a high share of employment in the advanced producer services, while professionalisation happens in cities with a low share of employment in these services is fully in accord with the argument of the polarisation thesis. It asserts that, besides high labour demand for less educated service workers in the producer services, it is the consumption pattern of the professionals employed there that drives labour demand for less educated service workers. According to this reasoning, then, a substantial number of professionals need to be employed in cities, i.e., a high employment share in the advanced producer services, before such a 'multiplier effect' sets in and yields enough demand for less educated service workers. Hence, only in cities with a high share of employment in the advanced producer services will there be occupational polarisation, as these employ such a substantial number of professionals. Cities with a low share of employment in the advanced producer services simply do not employ enough professionals and consequently miss an important driving force for growth in the low-skilled services. As a result, in those cities the occupational hierarchy will be professionalised instead of polarised.

This scenario suggests that findings of previous studies on occupational change in cities in the global city debate that found professionalisation can also be interpreted on the basis of the arguments of the polarisation thesis. The studies on Amsterdam (Hamnett 1994a), London (Hamnett 1994b, 1996a, 2004) and Paris (Rhein 1996) used data from the 1980s. Back then, the employment share in the advanced producer services might have been too small to yield enough labour demand for less educated service workers. The fact that Hamnett found professionalisation of the occupational hierarchy in Amsterdam in the 1980s, while Burgers and Musterd found polarisation of this hierarchy in Amsterdam in the 1990s also points in this direction. This, then, suggests that the occupational structure of London, Paris and other European global cities is polarised by now, but that this has not yet been documented: there are simply no studies on these cities that use data from that period. By using another method than applied in this chapter, a study by May et al. (2007) on London already strongly points in that direction.

Just as the findings in the previous chapter, the findings in this chapter indicate that the widely held assumption in the global city debate that global cities such as New

York and Amsterdam wear the future guise of cities lower in the urban hierarchy (e.g. inter alia, Burgers 1996, Mollenkopf 2009, Mollenkopf & Castells 1992, Vaattovaara & Kortteinen 2003) is problematic. In the first place the previous chapter showed that the economic base of all cities does not become similar to the economic base of global city Amsterdam. On the contrary, the employment share in the advanced producer services increased much more in Amsterdam and the most service-oriented cities in general than in former industrial strongholds just as argued in the global city theoretical framework. The findings in this chapter revealed that consequently the former cities yield much more labour demand for less educated urbanites than the latter cities, and that the latter cities consequently have to cope with a mismatch between labour demand and labour supply.

The widely held assumption in the global city debate that global cities as New York and Amsterdam wear the future guise of cities lower in the urban hierarchy is in the second place problematic, because it boils down to assuming that the occupational hierarchy of all cities will polarise (polarisation thesis), or professionalise (professionalisation thesis). Yet all the available evidence points in the direction that the occupational hierarchy of *all* cities will *neither* polarise *nor* professionalise. Instead, the findings in the previous chapter combined with the findings in this chapter imply that both polarisation and professionalisation of the occupational hierarchy of cities in the advanced economies will occur, albeit under different conditions. In cities with the highest share of employment in the advanced producer services, the occupational hierarchy is likely to be polarised, especially since the previous chapter showed that this employment share increased most strongly in those cities. In cities with a low share of employment in the advanced producer services, on the other hand, the occupational hierarchy is likely to be professionalised, all the more so because, as the previous chapter showed, this employment share hardly increases in those cities.

4 Foreign direct investment and immigration

Displacing the locus of explanation away from poverty or economic stagnation in sending countries and onto the processes that link sending and receiving country introduces a set of variables into the analysis not usually thought of as pertaining to immigration. Such linkages are constituted through processes that are historically specific. In the current period, the internationalization of production is central in the constitution of such linkages (Sassen 1988: 9-10)

4.1 Introduction

This chapter aims to assess the central claims in the global city theoretical framework on what drives immigration flows from newly industrialising countries to cities in the advanced economies in general and to global cities in particular. In this framework it is argued that classical migration theory, which revolves around underdevelopment and population pressures, falls short in explaining these immigrant flows. Instead, they should be understood as driven by a combination of a *new* push and a *new* pull factor. The former concerns foreign direct investment from the advanced economies in newly industrialising countries, the latter concerns massive labour demand for low-skilled service workers driven by the clustering of advanced producer services.

Section 4.2 will further elaborate on these claims and how they relate to classical explanations for immigration from less-developed countries to the advanced economies. Subsequently, section 4.3 will assess their empirical validity. The findings of this assessment will be discussed in the concluding section 4.4, which will answer the following research questions: *can the new immigration to cities in the advanced economies be explained by foreign direct investments*, and *does the clustering of advanced producer services attract immigrant labour?*

4.2 Immigration in the global city theoretical framework

Before Sassen published *The Global City* in 1991, her scholarly interest primarily concerned immigration flows from newly industrialising countries to large cities in the advanced economies. In fact, the roots of the global city theoretical framework can be found in her studies on that subject, as clearly revealed by titles like *The New Labour Demand in Global Cities* (Sassen-Koob1984b) and *New York City: Economic Restructuring and Immigration* (Sassen-Koob 1986). In her theory on immigration from newly industrialising countries to large cities in the advanced economies, Sassen combined push and pull factors of immigration with the argument that 'the same set of basic processes that (…) promoted emigration from several rapidly industrializing countries (…) also promoted immigration into several booming global cities' (1988: 22). This 'set of basic processes' is the new international division of labour caused by the outsourcing of parts of the production process from the advanced economies to newly industrialising countries, often abstractly referred to as foreign direct investments, abbreviated to FDI.

The pull factor in this theoretical framework has been extensively elaborated upon in the previous chapter: high labour demand for low-skilled service workers due to the clustering of advanced producer services. It is argued that this clustering 'generates low wage jobs directly, through the structure of the work process, and indirectly, through the structure of the high income life-styles of those therein employed' (Sassen-Koob 1986: 99, cf. Sassen-Koob 1984a, 1984b, 1985, Sassen 1988, 2001, 2006a). The direct labour demand being cleaners, clerks, security and the like (Sassen 2000: 142, 2006a: 197), the indirect labour demand concerns 'an army of low-wage workers' (Sassen-Koob 1985: 262, cf. Sassen-Koob 1984a, 1984b, 1986, Sassen 1988, 2001, 2006a) in the consumer services to cater to the professionals employed in the advanced producer services. In short, 'it is the expansion in the supply of low-wage jobs generated by major growth sectors that is one of the key factors in the continuation at even higher levels of the current immigration' (Sassen-Koob 1984b: 158).

The push factor of immigration in this theoretical framework is induced by the outsourcing of parts of the production process to newly industrialising countries by

multinationals. These foreign direct investments mostly concern production sites for labour-intensive manufacturing and service activities. According to Sassen such investment flows encourage immigration flows in the exact opposite direction: from newly industrialising countries to cities in the advanced economies, especially global cities.

The central argument explaining how this comes about is put forward in detail in *Direct Foreign Investment: A Migration Push-Factor?* (Sassen-Koob 1984a), and *The Mobility of Labor and Capital: A Study in International Investment and Labor Flow* (1988). The underlying mechanism is aptly summarised by the title of the subsection in the latter: *The Growth of Direct Foreign Investment and the Uprooting of People* (1988: 17). It argues that investments in newly industrialising countries cause the 'disruption of traditional work structures' due to 'the transformation of subsistence workers into wage-labor' (Sassen 1988: 18). As a consequence, 'this "new industrialization" has generated domestic and international migrations within the regions which eventually may overflow into long-distance migration' (Sassen 1988: 18). That this long-distance migration is primarily directed to the advanced economies, especially to those where the investments came from, is because:

> the presence of such investments creates cultural-ideological and objective links with the countries providing this capital (…) Besides the long recognized westernization effect of large-scale foreign investment in the less developed world, there is the more specific impact on workers employed in production for export or in the services in the export sector. These workers are using their labor power in the production of goods and services demanded by people and firms in the U.S. or any other highly developed country. *The distance between a job in the off-shore plant or office and in the* on-*shore plant is subjectively reduced*. Under these conditions emigration may begin to emerge as an option actually felt by individuals' (Sassen 1988: 18-19, italics added).

According to the global city theoretical framework, then, the same process that leads to the clustering of advanced producer services in global cities leads to immigration from newly industrialising countries to those cities: investment in newly industrialising countries and the new international division of labour that stems from it. The disruption of the traditional work structures in newly industrialising countries due to these

investments stimulate immigration to the advanced economies in general, but especially to global cities due to the high labour demand for low-skilled services. Furthermore, the cultural-ideological and objective links between sending and receiving countries that result from foreign direct investments often direct these immigration flows in the exact opposite direction of the investment flows. Put differently, these immigration flows are primarily directed at the advanced economy that invested in the country from which this immigration stems.

With this theoretical reasoning Sassen does *not* claim that theories on 'classical' push factors of immigration from underdeveloped countries to the advanced economies, such as economic stagnation, overpopulation, political turmoil and poverty are wrong. Also, that the direction of those immigrant flows is influenced by political ties such as previous colonial bonds, military exercises, and immigration legislation is not denied. What is claimed is that these explanations fall short in explaining the *new* immigrant flows induced by the current phase of economic globalisation and that these can instead be understood according to the theoretical reasoning addressed above.

As such, it Sassen's argument aims to explain *recent* immigration flows from newly industrialising countries to the advanced economies, especially to global cities. In her publications on this subject Sassen therefore labels these migration flows as 'the new immigration phase' (Sassen-Koob 1984b: 158), 'the current phase of (…) migration' (Sassen-Koob 1986: 86), or 'the current migration phase' (Sassen 1988: 4). For the explanation of these flows Sassen considers *Foreign Investment a Neglected Variable* – as the title of the first chapter in *The Mobility of Labor and Capital: A Study in International Investment and Labor Flow* indicates (1988: 12). That it was published almost twenty years later in abbreviated form under the exact same header as a chapter in *The Migration Reader: Exploring Politics and Policy* (2006b) reveals that Sassen still considers foreign direct investments an under-assessed explanation for current immigration to cities in the advanced economies in general and to global cities in particular.

This is no overstatement, as the number of empirical studies on the impact of foreign direct investments on immigration from underdeveloped economies to the advanced economies can, literally, be counted on the fingers of one hand. As early as

1987 Ricketts found that these investments drive immigration from countries in the Caribbean area to the United States, eleven years later Yang found that 'foreign investment abroad is a push factor for migration' (1998: 378) to the United States, and recently Sanderson and Kentor (2008) found that out-migration from 25 less-developed countries was indeed driven by increasing foreign investments.

These three studies concern state-level inquiries, two of migration to the United States, one of out-migration from less-developed economies – they assessed migration between nations instead of from less-developed countries to cities with high labour demand for low-skilled service workers. As a consequence, the question of whether the new immigration to cities in the advanced economies is driven by the combination of push and pull factors spurred by foreign direct investments as argued by Sassen yet remains unanswered. This chapter therefore aims to answer this question by assessing whether the growth of new immigrant groups in Dutch cities can indeed be explained by Dutch foreign investments in the countries from where these immigrants stem. If so, it can be expected that *the growth of new immigrant groups in Dutch cities is greatest from countries where Dutch foreign direct investments increased most* (hypothesis 1).

After assessing this push factor of the new immigration, this chapter will assess the pull factor as outlined in the theoretical framework above and the previous chapter. It is argued that the labour demand for low-skilled service workers that is directly and indirectly induced by the clustering of advanced producer services pulls immigrants from newly industrialising economies to cities in the advanced economies. If this is correct it can be expected that *the growth of new immigrant groups is strongest in cities with the strongest employment growth in the advanced producer services* (hypothesis 2).

4.3 Assessing the push and pull factors of the new immigration

4.3.1 Assessing Dutch FDI as push factor for immigration

Before assessing whether Dutch foreign direct investments drive the immigrant influx into Dutch cities, we will first take a look at the trends in the immigrant population in global city Amsterdam and the 22 Dutch metropolitan agglomerations combined (for a

detailed description of the data used in this chapter and the exact operationalisation of the variables used see appendix B). Table 4.1 shows the trends of the immigrant groups from non-OECD countries outside Europe for which data could be retrieved.[5] It includes 22 sending countries and a data range from 1996 through 2009.

Two categories of immigrants in this table are not relevant for the issue at hand, as they do not belong to 'the new immigration phase' that, according to Sassen, can be explained by foreign direct investments. The first category is refugees who fled their country for political reasons and have been granted access to the Netherlands on the basis of human rights treaties. Consequently the immigrants from Afghanistan, Iran, Iraq and Somalia will not be included in the analyses that follow. In the second place there are immigrants from countries with previous colonial or economic ties: Indonesia and Suriname are former colonies, the Dutch Antilles are still part of the Netherlands, and the immigration from Morocco to Amsterdam reflects chain migration initiated by the guest workers that were recruited in the 1960s and 1970s. These immigrants are therefore also not included in the analyses that follow.

What needs to be emphasised here is that I do not claim that the excluded immigrant groups are 1) not a part of economic globalisation and 2) not active on the labour market. On the contrary, some of these groups have a direct or indirect link with economic globalisation. In fact, as they represent labour power, such labour migration flows are often referred to as the globalisation of labour. Furthermore, most of them are dependent on their labour power for their subsistence and are therefore active on Dutch urban labour markets. Both factors will be accounted for when the impact of immigration on Dutch urban labour markets will be analysed in the next chapter. Yet, this chapter aims to assess the empirical validity of the explanation in the global city theoretical framework for the push and pull factors of the new immigrant flows that stem from the newly industrialising countries. Hence, only the 14 immigrant groups that can be considered new immigrants according to this theoretical framework remain in this

5 I chose explicitly to leave European countries from the former East Block out of the analyses, as these countries joined the European Union in the time span of the analyses. This was accompanied by another regulatory regime for labour movement in this union. Consequently, the extent to which immigration from these countries to the Netherlands is driven by Dutch FDI and the extent to which this is driven by this new regulatory framework is impossible to disentangle.

chapter. The following chapter will deal with all immigrants in Dutch metropolitan agglomerations.

Table 4.1: Number of immigrants from non-OECD countries outside Europe by country of origin in Amsterdam and the 22 Dutch metropolitan agglomerations combined in 1996 and 2009, and the growth in this number between 1996 and 2009.

	Amsterdam			*22 Dutch urban agglomerations*		
	1996	*2009*	*Δ1996-2009*	*1996*	*2009*	*Δ1996-2009*
Afghanistan	344	1,964	1,620	1,445	10,885	9,440
Brazil	868	1,836	968	2,345	5,469	3,124
Cape Verde	357	314	-43	9,167	9,382	215
China	1,504	2,854	1,350	7,455	19,117	11,662
Colombia	590	1,257	667	2,593	5,324	2,731
Dominican	1,170	1,462	292	3,041	4,822	1,781
Dutch Antilles	7,398	7,370	-28	35,895	49,351	13,456
Egypt	2,588	3,452	864	4,979	6,629	1,650
Ethiopia	1,052	1,136	84	3,771	4,434	663
Ghana	5,255	6,688	1,433	7,872	9,583	1,711
Hong Kong	1,476	1,354	-122	5,706	5,573	-133
India	1,916	3,121	1,205	4,957	9,109	4,152
Indonesia	11,621	8,951	-2,670	64,747	51,464	-13,283
Iran	1,396	1,999	603	6,667	11,183	4,516
Iraq	882	1,911	1,029	3,702	13,763	10,061
Morocco	29,635	34,184	4,549	90,617	105,679	15,062
Pakistan	3,205	3,225	20	7,648	7,897	249
Philippines	997	1,371	374	2,403	4,167	1,764
Russian Federation	1,025	3,236	2,211	3,598	15,975	12,377
Somalia	578	703	125	5,640	6,256	616
Surinam	45,680	39,902	-5,778	126,282	118,803	-7,479
Vietnam	110	271	161	2,680	3,833	1,153
Total	119,647	128,561	8,914	403,210	478,698	75,488

Source: Statline Statistics Netherlands (*CBS*) (own calculations).

I fully understand that there still is a certain arbitrariness in this selection. It is based on theoretical grounds, but this cannot overcome the problem that part of the immigration that stems from the excluded countries is actually induced by foreign direct investments. Also, part of the immigration from the countries used in the analysis below might, for instance, be driven by political reasons. This problem is inherent in the subject addressed in this chapter, and the limited number of previous empirical studies consequently suffer the same flaw (cf. Ricketts 1987, Sanderson & Kentor 2008, Yang 1998). This might influence the analyses, and, even more important, the interpretation of the analyses that follows. In the concluding section this will be elaborated upon further.

Unfortunately, the data used do not allow selecting immigrants by education level, while the theoretical reasoning addressed in this chapter obviously concerns less educated immigrants. When possible, the analyses that follow will therefore also be performed while controlling for the estimated share of so-called 'knowledge workers' of each immigrant group (for a more detailed description of the data used and the exact operationalisation of the variables see appendix B).[6] Concerning the crucial independent variable, Dutch FDI flows, I explicitly chose to use the *absolute* amount of growth in the time span under scrutiny (cf. Ricketts 1987, Sanderson & Kentor 20087, Yang 1998), instead of the *relative* amount, that is, as the total amount instead of as a percentage of the gross domestic product of the receiving country. This is most in accordance with the theoretical rationale of the uprooting process that is claimed to underlie the theoretical

6 Since 2004, the Dutch organization for entry into the Netherlands (*Immigratie- en Naturalisatiedienst*, IND) is responsible for the number of applications for residence in the Netherlands of so-called knowledge workers (*kennismigranten*) (INDIAC 2009). These figures showed that from the 14 countries in the analyses in this chapter, 3 countries did send a substantial number of such immigrants: India, China and Russia. The average annual number of knowledge workers from these countries who applied for residence in the Netherlands between 2005 and 2009 was 3582, 812 and 390 respectively. These are taken as a percentage of the total increase of immigrants from those countries in that time span. This indicated that between 2005 and 2009 11.8 percent of the Russian immigrants, 27.8 percent of Chinese immigrants, and 128 per cent of Indian immigrants were knowledge workers. These percentages are used as a crude indicator for the share of knowledge workers from these countries between 1996 and 2009 – the complete time span assessed in this chapter. In the analyses that control for these knowledge workers, the growth in the number of Russian immigrants and of Chinese immigrants has therefore been reduced by 11.8 percent and 27.8 percent respectively. In the analyses that control for knowledge workers, India is left out altogether, as the number of knowledge workers from India who applied for residence in the Netherlands as a whole between 2005 and 2009 exceeds the total number of Indian immigrants who settled in the 22 Dutch metropolitan agglomerations. This finding points in the direction that in the analyses that control for knowledge workers, the number of knowledge workers from China and Russia is overestimated, which boils down to testing the FDI-immigration nexus more strictly.

reasoning addressed in this chapter. The absolute amount can be considered as a measure of the absolute number of production sites / export processing zones and as such as a measure for the absolute number of people exposed to the uprooting of traditional work structures. These are the people that are likely to be 'pushed' towards migration.

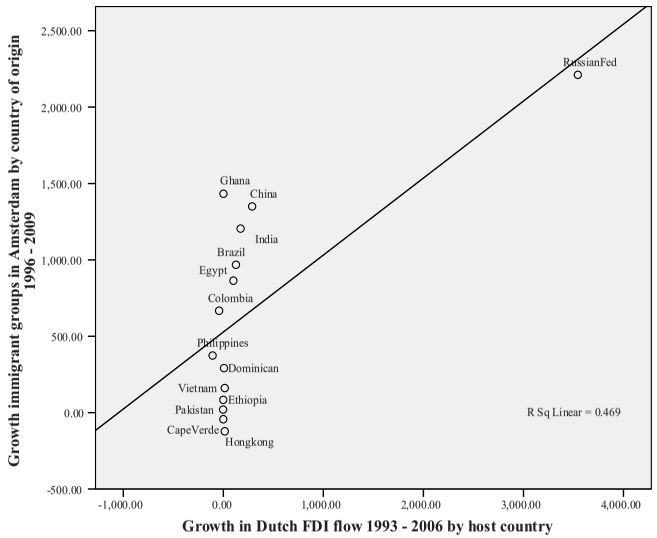
For the dependent variable I explicitly followed the same line of reasoning. Contrary to Ricketts (1987), for instance, I measured the absolute increase of immigrant groups instead of the relative increase – that is: total growth instead of growth divided by the population size of the sending country. Again, the theoretical reasoning addressed in this chapter concerns the absolute number of people uprooted by investments, not the relative number, that is, the share of the total population that is uprooted in a given country. If one would, for example, measure the relative instead of total number of immigrants from China, hardly any Chinese immigrants would remain because there are more than one billion Chinese, among whom are hundreds of millions of peasants. These peasants are however not (yet) involved in the capitalist economy of the production plants / export processing zones in the urbanising areas. As a result, dividing the number of immigrants from China by the total population would not be in accordance with the theoretical arguments addressed in this chapter.

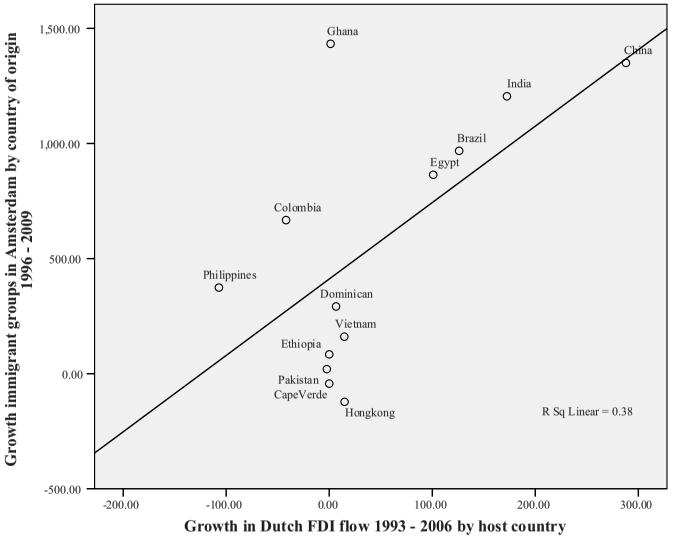
As a preliminary test of the FDI-immigration nexus I plotted the bivariate relationship between the growth in the FDI flow from the Netherlands to the countries from which the new immigrants stem between 1993 and 2006 with the growth in the 14 immigrant groups between 1996 and 2010 in global city Amsterdam (figures 4.1 and 4.2) and the 22 Dutch metropolitan agglomerations combined (figures 4.3 and 4.4). The former has thus been measured with a time-lag of three years as the migration effects of foreign direct investments are not likely to occur instantly – modelling a time-lag is therefore standard research practice in this kind of analysis (cf. Rickett 1987, Sanderson & Kentor 2008, Yang 1998). Figure 4.1 shows this relationship that clearly is in the expected direction, but it also shows that the growth in Dutch FDI is very unequally distributed due to the relatively high growth of this FDI to the Russian Federation. Figure 4.2 corrects for this unequal distribution by excluding the Russian Federation. It clearly shows that one outlier did not drive the finding in figure 4.1, but that the new immigrant

groups in Amsterdam that increased most in number came from countries where Dutch FDI increased most.

A similar picture emerges from this bivariate relationship for the 22 Dutch metropolitan agglomerations combined. It is in the expected direction as well when controlled for outlier 'Russian Federation'. Yet, the distribution of the cases in figure 4.4 is less convincing than the distribution of the cases in global city Amsterdam in figure 4.2. This might be a first indication that high labour demand in services in Amsterdam indeed is a pull factor of the new immigration as claimed in the global city theoretical framework, but this calls for closer scrutiny. Although the bivariate relationships between FDI growth and growth in the population of new immigrants are in accordance with the global city theoretical framework, we need a more thorough assessment to control for other explanations. As the immigrant flows assessed all come from countries less developed than the Netherlands, there is need to control for the usual suspects: underdevelopment and population pressures.

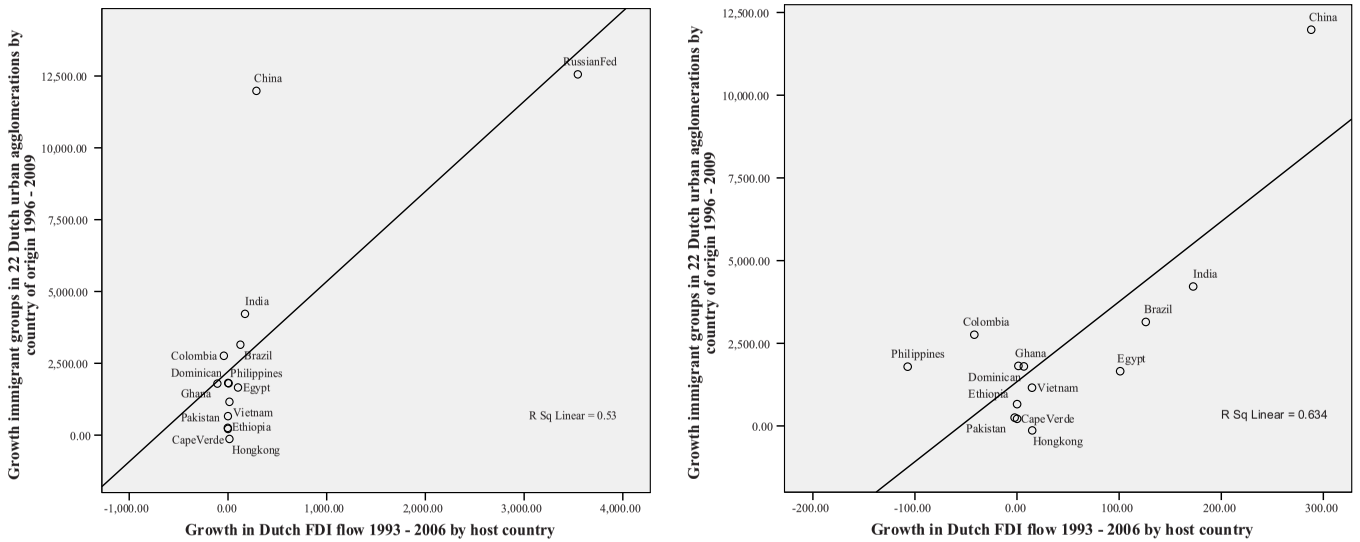
Figures 4.1 and 4.2: the relation between growth in Dutch foreign direct investment and growth in immigrant populations in Amsterdam by country of origin (figure 4.1: Pearson's $r = 0.685$, $p < 0.01$; N = 14), outlier Russian Federation excluded (Figure 4.2: Pearson's $r = 0.617$, $p < 0.05$; N = 13)





Source: OECD and Statline Statistics Netherlands (*CBS*) (own calculations).

Figures 4.3 and 4.4: the relation between growth in Dutch foreign direct investment and growth in immigrant populations in the 22 Dutch urban agglomerations by country of origin (figure 4.3: Pearson's $r = 0.728$, $p < 0.01$; $N = 14$), outlier Russian Federation excluded (Figure 4.4: Pearson's $r = 0.796$, $p < 0.05$; $N = 13$)



Source: OECD and Statline Statistics Netherlands (*CBS*) (own calculations).

Table 4.2 shows how the classical migration theory relates to the FDI theory in explaining the growth of new immigrant groups in global city Amsterdam, while table 4.3 does the same for the 22 Dutch metropolitan agglomerations combined. The first and second models test the FDI explanation controlled for population growth and for two standard indicators for economic development respectively: GDP per capita (model 1) and GDP growth (model 2). Both models show that the growth of immigrant groups in both global city Amsterdam and the 22 Dutch metropolitan agglomerations combined can indeed be explained by the increase of Dutch FDI in the countries where these immigrants come from. However, the classical migration theory has explanatory value as well, because economic growth in those countries slows this immigrant growth to global city Amsterdam, while the gross domestic product per capita is inversely related to immigrant growth to the 22 Dutch metropolitan agglomerations combined. In model 3, which models, in addition to Dutch FDI growth, all indicators for the classical migration theory, these findings do not change.

In the fourth model of both table 4.2 and table 4.3 the outlier 'Russian Federation' was excluded from the analyses. It makes clear that this does not alter the previous findings, or, put differently, that this outlier is not responsible for the findings. The new immigration to global city Amsterdam and to the 22 Dutch metropolitan agglomerations combined, then, seems to be driven by Dutch foreign direct investments as has been argued by Sassen from the beginning of the 1980s onwards. Yet, considering that these migration flows concern immigrants of all education levels, there is need for an additional analysis that controls for knowledge workers from new immigration countries. Settlement of knowledge workers is not fully in accordance with the theoretical argument addressed in this chapter, but might be (partly) responsible for the findings.[7]

[7] Although Sassen explicitly formulated the theory addressed in this chapter for the migration of low-skilled workers employed in export-processing zones, one could argue that the push factor in this theory – the introduction of a capitalist regime combined with the cultural ties between FDI sending and receiving countries – is also applicable to knowledge workers. Consider for instance someone from a rural family in a newly industrializing country that acquires a college degree and subsequently finds employment in a multinational firm that has connections with the university where he or she went to college. The difference with low-skilled workers employed in export processing zones is, of course, that the uprooting caused by the introduction of a capitalistic regime does not result from the transformation of subsistence worker into wage-laborer, but is driven by attaining the education needed to succeed in a capitalist economy.

Table 4.2: growth immigrant groups (1996 – 2009) in Amsterdam explained by growth in Dutch foreign direct investment in host countries, and 1) GDP per capita, 2) growth GDP in 2000, 3) population growth in immigrant's countries of origin (model 1-3), and controlled for outlier Russian Federation (model 4) (regression analysis; entries are regression coefficients; estimation: ordinary least squares).

	Model 1	*Model 2*	*Model 3*	*Model 4*
				Outlier Russian Federation excluded
Independents	*β*	*β*	*β*	*β*
Constant	-0.000	0.000	0.000	0.000
Growth Dutch FDI	0.625**	0.882***	0.794***	0.711***
Gross domestic product per capita	-0.285		-0.194	-0.118
Growth gross domestic product 2000		-0.483*	-0.404	-0.477*
Population growth	-0.072	-0.175	-0.221	-0.033
R^2	0.542	0.582	0.612	0.640
N	14	14	14	13

Source: OECD, World Bank (UNCTAD) and Statline Statistics Netherlands (*CBS*) (own calculations).
*p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001, one-sided

Table 4.3: growth immigrant groups (1996 – 2009) in 22 Dutch urban agglomerations explained by growth in Dutch foreign direct investment in host countries, and 1) GDP per capita, 2) growth GDP in 2000, 3) population growth in immigrant's countries of origin (model 1-3), controlled for outlier Russian Federation (model 4), controlled for knowledge workers (model 5), controlled for outlier Russian Federation and knowledge workers (model 6) (regression analysis; entries are regression coefficients; estimation: ordinary least squares).

	Model 1	*Model 2*	*Model 3*	*Model 4*	*Model 5*	*Model 6*
				Outlier Russian Federation excluded	*Corrected for Knowledge workers*	*Outlier Russia excluded and corrected for knowledge workers*
Independents	*β*	*β*	*β*	*β*	*β*	*β*
Constant	0.000	0.000	0.000	0.000	0.000	0.000
Growth Dutch FDI	0.487**	0.565**	0.424*	0.689***	0.542**	0.702**
Gross domestic product per capita	-0.278*		-0.312*	-0.279	-0.284*	-0.281
Growth gross domestic product 2000		0.023	0.150	0.105	0.086	-0.062
Population growth	-0.392*	-0.262	-0.336	-0.164	-0.318	-0.214
R^2	0.648	0.580	0.658	0.701	0.736	0.685
N	14	14	14	13	13	12

Source: OECD, World Bank (UNCTAD) and Statline Statistics Netherlands (CBS) (own calculations).
*p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001, one-sided

Such a control for knowledge workers is only possible for the analyses of the 22 Dutch metropolitan agglomerations combined, as the number of knowledge workers by immigrant group could only be retrieved for the Netherlands as a whole. It needs to be emphasised that consequently the share of knowledge workers is likely to be overestimated (see note 2). Consequently, the analysis that follows concerns a very strict empirical test of the FDI-immigration nexus in the global city theoretical framework. Model 5 of table 4.3 shows the results, which indicate that even then, the FDI-immigration nexus in the global city theoretical framework still has an empirical basis. Controlling for the share of knowledge workers does not alter the previous findings. There is still a substantial positive relation between the increase in the new immigration to the 22 Dutch metropolitan agglomerations and growth in Dutch foreign direct investments in the countries where these immigrants come from. Model 6, which controls for the share of knowledge workers and outlier 'Russian Federation,' yields practically the same results.

Table 4.4 summarises the results of the findings on the 22 Dutch metropolitan agglomerations separately. These analyses are made according to the same scheme as the analyses on global city Amsterdam in table 2.2. Almost without exception, the 22 Dutch metropolitan agglomerations show the same results as global city Amsterdam. Bivariately (column 1) controlled for outlier 'Russian Federation' (column 2), controlled for indicators of underdevelopment (column 3), and controlled for indicators of underdevelopment and outlier 'Russian Federation' (column 4), the bulk of cities show a positive relationship between growth in new immigrant groups and growth in Dutch FDI in the countries where these immigrants come from. This indicates that, in accordance with the theoretical arguments in the global city theoretical framework concerning the new immigration, FDI is indeed a push factor for this immigration – which confirms hypothesis 1.

Table 4.4: Pearson's correlation coefficients between growth immigrant groups (1996 – 2009) in 22 Dutch urban agglomerations and growth of Dutch FDI into immigrant sending countries (column 1), with outlier Russian Federation excluded (column 2), controlled for 1) GDP per capita, 2) growth GDP in 2000, 3) population growth in immigrant's countries of origin (column 3), and controlled for 1) GDP per capita, 2) growth GDP in 2000, 3) population growth in immigrant's countries of origin with outlier Russian Federation excluded (column 4).

	Bivariate correlation (N = 14)	*Bivariate correlation with outlier Russian Federation excluded (N = 13)*	*Controlled for under-development (N = 14)*	*Controlled for under-development with outlier Russian Federation excluded (N = 13)*
Amersfoort	0.820****	0.579***	0.624***	0.504*
Amsterdam	0.685***	0.617***	0.794***	0.711***
Apeldoorn	0.945****	0.533**	0.899****	0.467*
Arnhem	0.423*	0.725***	-0.148	0.659***
Breda	0.600***	0.706***	0.163	0.622**
Den Bosch	0.933****	0.799****	0.867****	0.754***
Dordrecht	0.690***	0.560**	0.304	0.411
Eindhoven	0.494**	0.829****	0.160	0.790***
Enschede	0.830****	0.846****	0.676***	0.814***
Geleen/Sittard	0.869****	0.670***	0.720***	0.564**
Groningen	0.721***	0.794****	0.422*	0.741***
Haarlem	0.920****	0.652***	0.862****	0.624**
Heerlen	0.949****	0.578***	0.905****	0.433
Leeuwarden	0.458***	0.765***	-0.012	0.709***
Leiden	0.739***	0.829****	0.419*	0.798***
Maastricht	0.908****	0.801****	0.811****	0.745***
Nijmegen	0.853****	0.686****	0.699***	0.617**
Rotterdam	0.522**	0.698***	0.002	0.616**
The Hague	0.761***	0.705***	0.525**	0.627**
Tilburg	0.526*	0.687***	0.024	0.600**
Utrecht	0.600***	0.799****	0.272	0.742***
Zwolle	0.760***	0.623**	0.599**	0.614**
Total	0.728***	0.796****	0.424*	0.689***

Source: Statline Statistics Netherlands (CBS) (own calculations).
* p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001.

4.3.2 Assessing advanced producer service growth as pull factor for immigration

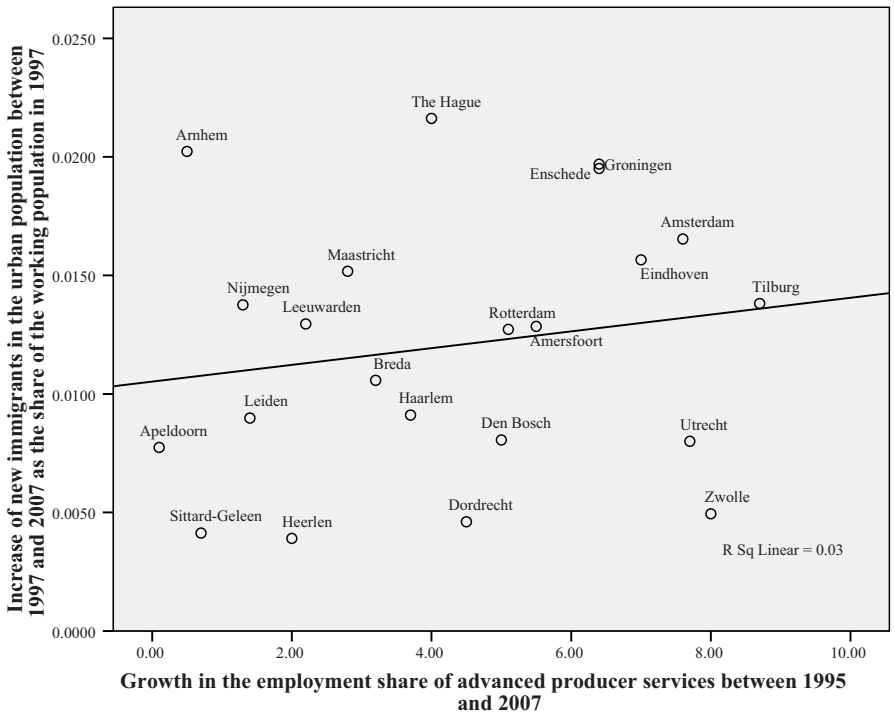
After assessing the push factor of the new immigration, it is now time to assess its alleged pull factor: the clustering of advanced producer services. As shown in the previous chapter, Dutch cities with the highest share of employment in the advanced producer services have the lowest unemployment rate among their less educated citizens. This was in accord with the argument of the polarisation thesis and means that in cities with the lowest share of employment in the advanced producer services, the mismatch between labour demand and labour supply is highest. If the pull factor explanation for the new immigration in the global city theoretical framework is correct, it can therefore be expected that in Dutch cities where employment in the advanced producer services most increased, the growth of the new immigrant groups should also have most increased.

To determine the validity of this explanation, figure 4.5 plots the growth in the share of the new immigrant groups in the working population of the 22 Dutch metropolitan agglomerations between 1997 and 2007 as the share of the total working population in 1997 against the growth in the employment share in the advanced producer services in those agglomerations between 1995 and 2005. The growth in the share of new immigrant groups is measured while controlling for knowledge workers (see note 2), as the theoretical reasoning addressed in this section concerns the pull factor for low-skilled migration. Controlling for classical migration theories as in the former section is therefore not necessary, as the reasoning behind these theories revolves around improving one's economic position. Hence on the basis of classical migration theories, it can be expected that immigrants tend to settle in places with abundant labour market opportunity. In other words, both the pull factor in the FDI-migration nexus from the global city theoretical framework and the pull factor explanation in classical migration theories address basic market logic.

Figure 4.5 shows that this market logic does not stand the test when it comes to the settlement of new immigrant flows in Dutch cities. Although the relationship is positive, it is rather weak. In addition, and more importantly, the coefficient is not significant – consequently hypothesis 2 is rejected. This means that although the push factor explanation for the new immigration in the global city theoretical framework

seems basically correct, the pull factor explanation in this framework falls short – at least for Dutch cities. The settlement of new immigrants in these cities calls for another explanation. The concluding section will further elaborate on this finding.

Figure 4.5: the impact of advanced producer services growth on the settlement of new immigrants in 22 Dutch metropolitan agglomerations, knowledge workers excluded (Pearson's $r = 0.173$, $p = 0.442$; N = 22).



4.4 Conclusions

This chapter assessed the basic claims in the global city theoretical framework concerning the push and pull factors for the new immigration, i.e., the immigration from newly industrialising countries to (global) cities in the advanced economies. It points in the direction that the claim concerning the push factors for this immigration is correct when applied to Dutch cities. Controlled for factors that according to classical migration theories drive such immigration – underdevelopment and overpopulation – Dutch investments in newly industrialising countries were demonstrated to increase migration flows that mirror these investments: the new immigrant groups that increased most in size in Dutch cities between 1996 and 2010 stem from the countries where Dutch foreign direct investments increased most between 1993 and 2007.

Although this finding seems to corroborate the push factor argument concerning the new immigration in the global city theoretical framework, which will be dealt with later on, it also raises serious questions about the central arguments of classical migration theories according to which 'the root causes' (Martin 1995: 820) of immigration from less-developed countries to the advanced economies lie in underdevelopment, or 'low wages and few jobs' (Martin 1995: 820). In line with these classical migration theories, it is often supposed that 'immigration countries can influence the propensity to emigrate from other countries through three major economic channels – trade, *investment*, aid' (Martin 1995: 820, italics added).

Foreign direct investments in less-developed countries does indeed lead to economic growth (Hahm & Heo 2008), which means that, contrary to the central assumptions in classical migration theories, economic development in less-developed economies does not have unequivocal consequences when it comes to migration pressures. As this development is (partly) driven by foreign direct investments, it is likely that it leads on the one hand to decreasing emigration due to improving economic conditions, while it, on the other hand, strengthens or even initiates emigration due to the cultural and objective links with countries where such investments come from. All this should be interpreted with care however as the corroboration of the 'FDI drives

emigration argument' in this study is based on investments from one advanced economy in a limited number of newly industrialising countries. Yet, as outlined in section 4.2, three other studies corroborated this link at country level. Further research could shed more light on this 'development paradox' when it comes to migration from less-developed economies to advanced economies.

All the findings presented in this chapter are in line with the push factor argument concerning the new immigration in the global city theoretical framework. Therefore the third research question *can the new immigration to global cities be explained by foreign direct investments?* can be answered in the positive. Yet, more research is needed to assess the empirical validity of the explanation assessed in this chapter. In the first place because the central mechanism of this explanation focuses on the uprooting of local communities due to the introduction of the capitalistic logic of wage-labour. Whether this is empirically valid cannot be assessed in a study that merely addresses the impact of FDI on out-migration from newly industrialising countries. Therefore further research is needed. Secondly, it was not possible to merely select low-skilled immigrants from newly industrialising countries in this study, while high-skilled immigrants from these countries are driven by another mechanism (see however note 3). Although I tried to control for this by extracting the estimated number of knowledge workers from the immigrant flows, this effort might be flawed as it is, in the end, based on estimations.

The third, and I would argue the most substantial, reason why future research could shed more light on the validity of the argument concerning the relationship between foreign direct investments and migration from newly industrialising countries to advanced economies in the global city theoretical framework is that the findings in this chapter can be interpreted according to another theory as well. This theory basically claims that outward FDI flows are *initiated* by immigrants, instead of the other way around (Kugler & Rapoport 2007). In this line of reasoning it is the information immigrants have about investment opportunities in their country of origin that drives these investment flows. It can consequently be expected that this theory primarily makes reference to more highly educated immigrants. Considering that due to data limitations this study could only control for knowledge workers by using a very crude measure,

future research on the causal direction of the relationship between FDI and immigration that was found in this study becomes even more relevant.

The findings in this chapter should furthermore be interpreted with care because the impact of foreign direct investments on two types of migration flows cannot be assessed. The first group concerns immigration flows from countries that are too small to be 'detected' by the provider of the immigration data used in this study. As a consequence, the assessments in this chapter were limited to immigrants from 14 non-OECD countries outside Europe, while it is certain that immigrants from other non-OECD countries outside Europe reside in Dutch cities as well. The second group concerns illegal immigrants, as they are by definition not included in official statistics. Assessing the push factors that initiate and / or strengthen these two immigrant flows might yield new insights concerning the tenability and explanatory value of the theory assessed in this chapter.

Contrary to the push factor explanation, the pull factor explanation for the new immigration in the global city theoretical framework could not be corroborated. The previous chapter showed that cities with a high employment share in the advanced producer services yield high labour demand for low-skilled service workers. Those cities consequently have the smallest mismatch between labour demand and labour supply at the bottom of the labour market – if there is such a mismatch at all. However, this labour demand proves not to be a pull factor for the new immigration: there was no relationship between growth in advanced producer services and growth in the new immigrant population in Dutch cities. The fourth research question – *does the clustering of advanced producer services attract immigrant labour?* – therefore needs to be answered in the negative.

If there were such a relationship, the underlying mechanism of the pull factor explanation in the global city theoretical framework would be correct, but the overarching theoretical rationale that revolves around the new international division of labour might be flawed. As argued in the previous chapters, growth in the advanced producer services in most cities is not driven by outsourcing parts of the production process to newly industrialising countries. Consequently, if labour demand for low-skilled service workers due to the clustering of advanced producer services did function

as a pull factor for immigration from newly industrialising countries, this pull factor would not be linked to international outsourcing. Hence, Sassen's claim that 'the same set of basic processes that (…) promoted emigration from several rapidly industrializing countries (…) also promoted immigration into several booming global cities' (1988: 22), would be incorrect.

Assuming that the absent relationship between advanced producer services growth and the growth of new immigrant groups is not due to the data deficiencies addressed above, it makes abundantly clear that labour-market logic does not determine the settlement of new immigrant groups in Dutch cities. Such logic probably has more explanatory value for cities in a highly deregulated economy such as the United States – remember Sassen primarily illustrates her arguments with data from New York – but not in the Netherlands. In the latter the settlement of immigrants is determined by other factors as well. Consider for instance that a decommodified housing market, as well as kinship, ethnic or social ties with immigrants who are already settled might influence where immigrants decide to live (cf. Zorlu & Mulder 2008) – whether this improves their opportunities on the labour market or not.

5 Immigration, wages and unemployment

Immigration is one of the constitutive processes of globalization today (Sassen 2006d: 315, cf. Sassen 1998: xxi)

We argue that immigration is a powerful example of 'globalization from below' and needs to be integrated into our understanding of global city dynamics. By linking global cities and immigration, this research highlights those cities that are experiencing dramatic socio-cultural changes brought about by large and often diverse streams of immigrants (Benton-Short, Price & Friedman 2005: 945)

5.1 Introduction

According to the theoretical reasoning concerning the push and pull factors in the new immigration in the global city theoretical framework addressed in the previous chapter, this immigration is driven by economic globalisation. This logic was partly corroborated, as Dutch foreign direct investments were strongly related to immigration flows from newly industrialising countries to Dutch cities. Considering the central aim in the global city debate is to assess the impact of economic globalisation on the social and economic reality of cities, it seems overly one-sided to merely assess what drives immigration. For immigration is not only a consequence of economic globalisation, but also one of its constituting elements (cf. Sassen 2006d: 315, Sassen 1998: xxi) – hence it is often referred to with the abstract term 'globalisation of labour'. Several immigration researchers active in the global city debate consequently recommended treating it as such (Benton-Short, Price & Friedman 2005). And some even suggested using it as another indicator for the globalness of cities in addition to the clustering of advanced producer services (Malecki & Ewers 2007).

Many studies that treat immigration as the globalisation of labour assess the tenability of the substitution thesis which asserts that immigrants can be substitutes for natives and former waves of immigrants with whom they compete on the labour market. By applying neo-classical economic logic to the labour market, the substitution thesis claims that immigration leads to downward pressure on the wages of natives and former waves of immigrants and, especially in regulated labour markets, eventually to their unemployment. After elaborating on the theoretical logic of the substitution thesis and the findings of empirical tests of this thesis in section 5.2, this chapter will then assess the impact of immigration on Dutch urban labour markets. To do so, it will first assess the impact of immigration on wages in section 5.3, and second, the impact of immigration on unemployment in section 5.4. The concluding sections 5.5 and 5.6 will discuss the findings of this chapter and will answer research question number 5: *what is the impact of immigration on urban labour markets*?

5.2 The substitution thesis

5.2.1 The substitution thesis: theory and evidence

The substitution thesis asserts that immigrants and their descendents can be *substitutes* for domestic workers on the labour market (Chiswick 1982, Johnson 1980). As such, this thesis applies a neo-classical economic model of supply and demand to the labour market, expecting that immigration – read: increasing labour supply – lowers the price for labour. Hence, immigration will lead to declining wages of workers with whom the immigrants compete. Furthermore, at some point the substitution mechanism between immigrants and natives on the labour market that shows itself in declining wage levels will lead to rising unemployment levels, as wages cannot decline beyond a certain level due to labour market regulation.

Most studies in this field of research focus on the United States, but still a substantial number address western European countries. In 2005, Longhi, Nijkamp and Poot made an inventory of the few dozens of studies on the impact of immigration on wages through 2003, and analysed their research findings in a meta-study. A few years

later, Okkerse (2008) followed with a review on the findings of studies on the substitution thesis up until 2005. She stated that the 'approaches and results [of her study] complement the ones discussed in the meta-analysis carried out by Longhi, Nijkamp and Poot (2005) on wage effects of migration.' (2008: 2). This is because her study was more comprehensive, since it took 'a broader definition of labour market effects' (2008: 2), as it 'also question[ed] the effects of immigration on labour participation and on the likelihood of being employed or unemployed' (Okkerse 2008: 2). As such, her review included almost all empirical studies on the substitution thesis to 2005.

Despite their different approaches and scope, both studies came to the same conclusions. First, 'immigration negatively affects wages of less-skilled labourers and earlier immigrants' (Okkerse 2008: 24), especially the wages of the latter since 'immigrants are more in competition with other immigrants than with natives' (Longhi, Nijkamp & Poot 2005: 472). It needs to be stressed however that these effects are very small, as emphasised by these authors themselves (Longhi, Nijkamp & Poot 2005). Second, 'the probability that immigrants increase unemployment is low in the short run and zero in the long run' (Okkerse 2008: 24). In short, it might be concluded that the substitution thesis holds in general: immigration depresses wages and increases the likelihood of unemployment of low-skilled natives, and especially immigrants. The overall effects are weak, however, and the employment effects wither away in time.

Studies on the substitution thesis that appeared after 2005 or were not included in the meta-studies addressed above basically show the same results: no impact (Arrasco, Jimeno & Ortega 2008, Catanzarite 2002, Cohen-Goldner & Paserman 2006, Islam 2008), or weak negative impact on the wages or likelihood of unemployment of low-skilled natives (Borjas 2006, Islam 2009, Ferderman, Harrington & Krynski 2006, Wilson & Jaynes 2000) – albeit that this impact is somewhat stronger on the jobs and wages of (former waves of) immigrants or ethnic minorities, since those are the most direct competitors of immigrants on the labour market (Boustan 2007, Catanzarite & Aguilera 2002, Reed & Danziger 2007).

So, although there is a great variety in findings, the 'overall' results of studies on the substitution thesis published between 1980 and 2009 can be summarised as follows: immigration has negative impact on the wages of both natives and immigrants the new

immigrants compete with, especially on the wages of the latter. Furthermore, it can lead to unemployment for both of these categories, albeit that the likelihood of becoming unemployed due to immigration partly depends on the extent to which there is state interference in the labour market (Scheve & Slaughter 2004). In states with less interference, less educated natives and immigrants are less likely to become unemployed due to immigration (Jean & Jimenez 2007): as wages are more elastic, substitution due to immigration is more likely to manifest itself as declining wages instead of increasing unemployment.

On the basis of the theoretical rationale of the substitution thesis, then, it can be expected that the settlement of immigrants in Dutch cities depresses wages and increases the likelihood of unemployment of low-skilled natives, and, especially, immigrants. However, there are several indications in the literature that point in the direction that the extent of this substitution differs by city. It is suggested that some types of urban economies absorb supply shocks in labour much better than others, and that consequently immigration hardly or not at all leads to substitution on the labour market. This might be the reason why 1) studies on the substitution thesis within the same country find scattered results, and 2) the overall findings are often weaker than assumed on the basis of the theoretical rationale of that thesis.

5.2.2 The substitution thesis and the urban economy

Several authors who assess the substitution thesis suspect that urban economies differ in the extent to which immigration impacts on wages or unemployment levels. Card (1990), for instance, assessed the substitution thesis using the 'natural experiment' that has become known as the 'Mariel boatlift'. The cause of this event was that Cubans were temporarily allowed to leave Cuba in 1980. Consequently, within a time span of approximately six months the Miami labour market experienced a no less than seven per cent rise in overall labour supply – a figure that is much higher at the bottom of the labour market as most immigrants were low-skilled.

Despite this large influx of low-skilled Cubans, there was hardly an impact on the wages and unemployment rates of low-skilled natives and former waves of immigrants.

Consequently, Card wondered what might have caused this situation that seemingly flies in the face of the neo-classical economics' supply and demand logic of the substitution thesis. He suspected that the local economic structure was responsible for mitigating the wage and unemployment effects of increasing labour supply. More specifically, he expected that the strong presence of 'immigrant intensive industries [such as] private household services, hotels and motels, eating and drinking establishments, and business services' in the Miami metropolitan economy was responsible for the marginal impact of this large increase in labour supply on the labour market (1990: 256, similar arguments can be found in: Card 2005, Catanzarite 2003, Friedberg & Hunt 1995, Wilson and Jaynes 2000)

In short, several researchers on the substitution thesis suggest that the high labour demand for low-skilled service workers in strongly service-oriented cities might be responsible for the findings that there is hardly any substitution between immigrants on the one hand and natives and former waves of immigrants on the other hand. In other words, these scholars argue that service-oriented urban economies have stronger labour demand than other urban economies and are therefore better equipped to integrate newcomers into the labour market without consequences for the wages or unemployment risks of natives and earlier waves of immigrants. If so, the neo-classical economics' supply and demand logic of the substitution thesis is still basically correct, but it cannot properly be assessed by taking only the supply side, i.e., immigration, into account. It needs to be taken into consideration that urban economies might have differing labour demands, instead of assuming that labour demand is approximately equal in all regions or cities.

These suggestions are completely in line with the findings in chapter 3 that Dutch cities with the highest employment share in the advanced producer services have the smallest, if any, mismatch between labour demand and labour supply at the bottom of the labour market. This was interpreted on the basis of the polarisation thesis, which claims that this is driven by high labour demand for low-skilled service workers who occupy the same kind of service jobs that Card (1990) in the quote above suspected to absorb shocks in labour supply and consequently to attenuate substitution on the labour market. The combination of the findings in chapter 3 and the suggestions of Card and other scholars

on the substitution thesis, then, leads to the expectation that immigration has little impact on wages and unemployment in cities with a high share of advanced producer services, as the presence of these services yields high labour demand for low-skilled labour.

That studies on the tenability of the substitution thesis thus far do not account for the fact that cities differ widely in demand for low-skilled labour and that this is driven by differences in the employment share of the advanced producer services might be the reason why 1) they find scattered results within the same country, and 2) why the substitution that is found at country level is often rather weak. In that case, this weak substitution would simply be the average result of (potentially) high substitution in former industrial strongholds and weak or even absent substitution in cities with a high share of employment in the advanced producer services.

The following sections will assess whether immigration indeed leads to less substitution in labour markets with a high share of employment in the advanced producer services. This will be done in two steps. In the first step *the impact of immigration on wages* of less educated natives and former waves of immigrants will be assessed in section 5.3. I was not able to retrieve the necessary data on the 22 metropolitan agglomerations for this analysis, only the data for the urban areas of Amsterdam and Rotterdam.[8] These are however strategic cases for the issue at hand because they have the highest, and approximately equal, immigrant shares in their population. Yet, in spite of this, on the basis of the suggestions just mentioned, labour market substitution is likely to be weaker in Amsterdam than in Rotterdam. For chapter 3 showed that the former has a higher share of advanced producer services than the latter and consequently had higher labour demand for less educated urbanites. It can therefore be expected that *the negative impact of immigration on wages is smaller in Amsterdam than in Rotterdam* (hypothesis 1).

In the second step *the impact of immigration on unemployment* of less educated urbanites will be assessed in section 5.4. As all the necessary data for this analysis could be retrieved for all 22 Dutch urban agglomerations, this assessment will be done by comparing this impact among these 22 Dutch urban agglomerations, so as to rigorously

[8] These urban areas are larger than the metropolitan agglomerations assessed in the other analyses in this book.

test the suggestion that substitution on the labour market due to immigration is lowest in cities with the highest share of employment in the advanced producer services. Here it is in the first place expected that immigration leads to unemployment among less educated urbanites in Dutch cities. If so, *the unemployment level of less educated urbanites is highest in Dutch cities with the highest share of immigrants in the population* (hypothesis 2). In the second place it is expected that immigration leads to less unemployment in Dutch cities with a high share of advanced producer services than in cities with a low share of advanced producer services. If so, *the positive relationship between immigrant share and unemployment share of less educated urbanites is smaller in Dutch cities with a high employment share in the advanced producer services than in Dutch cities with a low employment share in the advanced producer services* (hypothesis 3).

5.3 Assessing the substitution thesis on wages

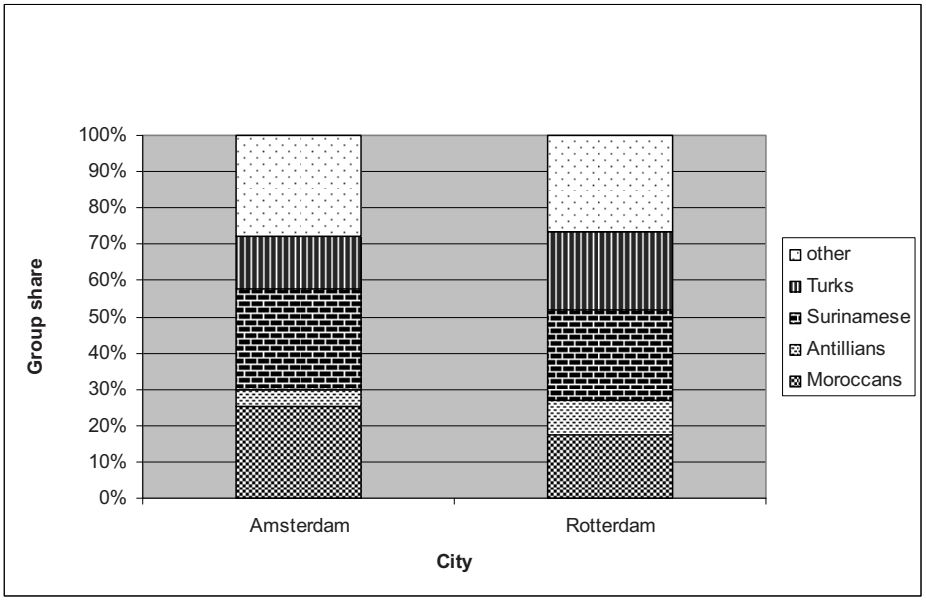
Before comparing the impact of immigration on the wages of less educated natives and former waves of immigrants in Amsterdam with that impact in Rotterdam, we will first take a look at their immigrant populations. Contrary to the previous chapter, the analyses in this chapter will include all the immigrants and not just the new immigrant groups. This is because the previous chapter assessed whether Dutch foreign direct investments indeed drive immigration from newly industrialising countries to Dutch cities, while this chapter aims to assess the tenability of the substitution thesis. To do so, all immigrants on the labour market should be dealt with. Although a substantial number of immigrants might have settled in Dutch cities for reasons that are not primarily related to the labour market, such as political turmoil in their home country or family reunification, they are almost without exception dependent on their labour power to sustain themselves.

Figure 5.1 depicts the immigrant populations from less-developed countries by ethnic group in Amsterdam and Rotterdam. The four largest ethnic groups add up to more than 70 per cent of this population in both cities. Two of these, the Surinamese and Antilleans, are immigrants from (former) colonies, and the other two, the Turks and Moroccans, are guest workers who were recruited in the 1960s and 1970s due to a labour

shortage in the Dutch labour markets and their descendents. Figure 5.2 shows that immigrants from less-developed economies by far exceed immigrants from advanced economies and that the share of the former immigrants in the population in both cities is roughly similar.

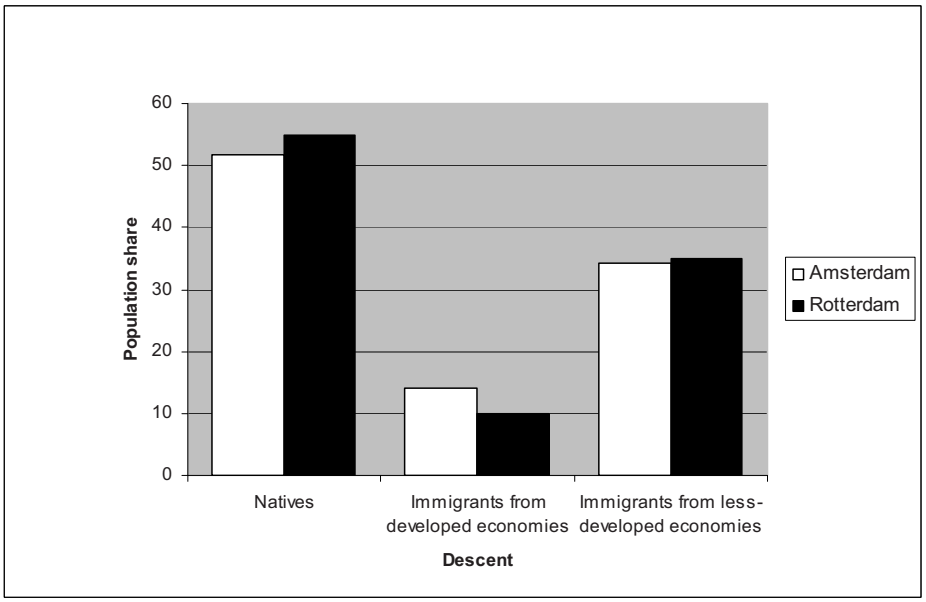
This, combined with the fact that in both cities the 'other' category in figure 5.1 is about equal in size, points in the same direction as the finding in the previous chapter that labour demand is not the primary driver of the settlement of immigrants from less-developed countries in Dutch cities. If this were so, this share should have been higher in Amsterdam, because its more service-oriented economy yields higher labour demand for low-skilled service workers than the economy of Rotterdam. For the issue at hand, the approximately equal size and ethnic composition of immigrants from less-developed countries not only improves the comparability of the cities under scrutiny, but also more or less controls for an ethnic division of labour: many studies show that ethnic groups tend to cluster in certain industries (see for instance: Altonji & Card 1991, Bailey & Waldinger 1991, Ellis & Wright 1999, Waldinger 1987, 1994, 1996, Wright & Ellis 1997).

Figure 5.1: Share of largest ethnic groups in the immigrant population from less-developed economies in Amsterdam and Rotterdam



Source: Statline Statistics Netherlands (*CBS*) (own calculations).

Figure 5.2: Population share by country of origin in Amsterdam and Rotterdam



Source: Statline Statistics Netherlands (*CBS*) (own calculations).

To test hypothesis 1 – substitution between immigrants and natives at the bottom of the urban labour market is lower in Amsterdam than in Rotterdam – I will use the immigrant share of the employment in industries. Although the classification scheme used discerns 62 industries, in Amsterdam and Rotterdam people are actually employed in only 52 industries. This is, of course, because some industries simply do not exist in these urban labour markets. According to the theoretical rationale of the substitution thesis, the wages will be lower in industries with a higher share of immigrants. However, on the basis of the higher labour demand for the less educated in Amsterdam than in Rotterdam, this impact is expected to be lower in the former than in the latter (see appendix B for an elaborate justification of the data used and the exact operationalisation of the variables).

Previous studies frequently found that substitution between immigrants and former waves of immigrants is stronger than between immigrants and lower-educated natives. Combining immigrants and natives in the analyses might therefore lead to suppression of the effect in one category, when there is little to no such effect in the other. Consequently, the impact of immigration will be assessed on both categories separately. Table 5.1 shows the analysis of the impact of immigration on less educated natives' wages in Amsterdam and Rotterdam combined, that is when these two urban labour markets are considered as one. This concerns natives with no more than secondary education.[9] Since the examination involves an independent variable on two levels of aggregation – industry level and individual level – there is need for multilevel modelling (Hox 1995). This means that the variance of the dependent variable is split into industry level variance and individual level variance.

In the null model it is assessed whether this multilevel structure actually exists, i.e., whether there is significant variation of the dependent variable on both levels in the dataset. This is a necessary condition, since it will be assessed whether the industry level variable *immigrant share* will have impact on an individual level variable, *wages of less educated natives*. The null model reveals that there is indeed a multilevel structure in the data, as it reports that 86.6 per cent (0.6323 / (0.6323 + 0.0981)) of the variance in wages

9 In the United Nations ISCED code this means that these respondents have no more than a post-secondary non-tertiary education (level 4).

of the less educated natives exists at the level of individuals, while 13.5 per cent (0.0981 / (0.6323 + 0.0981)) of this variance exists at industry level.

Before assessing the impact of immigration on wages in model 2, the variables *Rotterdam*, *year*, *female*, *age*, *education* and *years employed* are entered into model 1. [10] Both variances at the industry and individual level drop substantially in comparison to the null model. The significant control variables explain 57 per cent ((0.6323 - 0.2716) / 0.6323) of the individual level variance, and 61.4 per cent ((0.0981- 0.0379) / 0.0981) of the industry level variance. In the former case this corroborates the numerous previous findings that the more highly educated, the elderly, and males tend to earn more than their counterparts. In the latter case this is due to the differing social basis by industry, i.e., some industries employ more highly educated, older, or male employees than others.

Model 2 assesses whether there is a negative impact of immigration on the wages of less educated natives for Amsterdam and Rotterdam combined by entering the variable *immigrant share*.[11] It is negative and significant: a higher share of immigrants in an industry leads to lower wages for less educated natives in that industry. This is not a surprising finding considering the study of Zorlu and Hartog (2005) for the Netherlands as a whole showed the same results, and it is completely in line with the meta-study (Longhi, Nijkamp & Poot 2005) and review (Okkerse 2008) of almost three decades of studies on the substitution thesis.

10 As the six degrees of freedom (six variables were entered into the model) yield a drop in deviance of 2419.696 (6882.599 – 4462.903), model 1 is a significant improvement of the null model. According to the chi square distribution, there is need for a mere drop of 12.59 in deviance to be significant at 5 per cent level.

11 Model 2 is a significant improvement of model 1, as using one degree of freedom yields a drop in deviance of 7.378 (4462.903 - 4455.525), which is bigger than is minimally required (3.841 at 5 per cent level).

Table 5.1: Less educated natives' wages in Amsterdam and Rotterdam explained by immigrant shares in industries (multilevel regression analysis; entries are regression coefficients; estimation: maximum likelihood.).

Independents	*Null model*	*Model 1*	*Model 2*	*Model 3*
Independents	*β*	*β*	*β*	*β*
Constant	0.030	-0.001	-0.010	-0.008
Rotterdam		-0.016	-0.016	0.087*
Immigrant share			-0.071**	0.025
Immigrant share * Rotterdam				-0.140*
Controls				
Year		0.544***	0.543***	0.543***
Female		-0.109***	-0.109***	-0.109***
Age		0.187***	0.187***	0.187***
Education		0.223***	0.223***	0.223***
Years employed		0.108***	0.108***	0.108***
Variance industry level (N = 52)	0.098***	0.037***	0.028**	0.027**
Variance individual level (N = 2,859)	0.632***	0.271***	0.271***	0.271***
Deviance	6,882.56	4,462.90	4,455.53	4,449.30
DF		6	1	1

Source: Statistics Netherlands (*CBS*) (own calculations).
* p< .05; ** p< .01; *** p< .001

Whether this impact is weaker in Amsterdam than in Rotterdam, as can be expected because of higher labour demand for less educated urbanites in the former than in the latter, will be assessed in model 3 by entering an interaction-effect of *immigrant share* with *Rotterdam*.[12] The interaction effect is negative and significant, meaning that the negative impact of immigration on the wages of natives is indeed stronger in Rotterdam than in Amsterdam. The coefficients of the impact of immigration on less educated natives' wages for Rotterdam and Amsterdam separately can be found in table C1 in appendix C. This table shows that this impact in Amsterdam is not only weaker, but even completely absent. These findings clearly show that despite their comparable labour market interference and immigrant population, there is more substitution on the labour market due to immigration in Rotterdam than in Amsterdam. In the latter there is no substitution at all. Concerning the wages of less educated natives, then, the substitution thesis holds in Rotterdam, but does not in Amsterdam – which confirms hypothesis 1.

Now let us see whether the impact of immigration on the wages of immigrants is higher in Rotterdam than in Amsterdam as well. The null model of table 5.2 shows that 10.8 per cent of the variance in immigrants' wages can be explained by industry of employment (0.0895 / (0.0895 + 0.7434)), leaving 89.2 per cent of this variance to be explained by individual characteristics. Just as in table 5.1 on the wages of less educated natives, a large share of the variance at both industry ((0.0895 – 0.0334) / 0.0895 = 62.7 per cent), and individual level ((0.7434 - 0.3059) / 0.7434 = 58.9 per cent) can be explained by the individual level control variables as model 2 shows.[13]

Surprisingly, model 3 is not a significant improvement of model 2 however.[14] This means that when Amsterdam and Rotterdam are treated as one labour market, there is no impact of immigration on the wages of immigrants. This is contrary to what one would expect on the basis of the bulk of studies on the substitution thesis. As found time and again, this impact is usually stronger than the one on the wages of less educated natives. This does not occur in this case however, and this will be elaborated upon in the

12 It proves a significant improvement in comparison to model 2 ((4455.525 - 4449.304) > 3.841).
13 Entering these six variables leads to a substantial decline in deviance (3393.946 – 2221.906 = 1171.1). This indicates that model 2 is a highly significant improvement in comparison to model 1.
14 Entering *immigrant share* only leads to a decline in deviance of (2221.906 – 2220.053 = 1.85), which is not enough when using one degree of freedom (1.85 < 3.841).

conclusions. However, this does not mean that there is no impact of immigration on the wages of immigrants at all, as the interaction effect of *immigrant share* with *Rotterdam* in model 3 shows.[15] It is negative and significant, which means that the negative impact of immigration on the wages of immigrants is higher in Rotterdam than in Amsterdam. Table C2 in appendix C shows the results for Amsterdam and Rotterdam respectively, and again, just like the impact of immigration on wages of less educated natives, the impact of immigration on immigrants' wages solely exists in Rotterdam – again, a confirmation of hypothesis 1.

The comparison of the negative impact of immigration on wages of less educated natives and former waves of immigrants between Amsterdam and Rotterdam showed that substitution on the labour market due to immigration exists only in the latter. Despite the high and roughly equal share of immigrants in the populations of Amsterdam and Rotterdam, this was expected as the former yields more labour demand at the bottom of the labour market than the latter due to its higher employment share in the advanced producer services. Yet, the question of whether the higher share of advanced producer services in Amsterdam than in Rotterdam really is responsible for this finding cannot be answered on the basis of comparing just two cities. For answering this question, the impact of immigration on the labour market needs to be compared among a substantial number of cities that differ in the employment share in the advanced producer services. This will be done in the following section by means of comparing the impact of immigration on unemployment of less educated urbanites in the 22 Dutch metropolitan agglomerations.

15 Model 3 is a significant improvement of model 2 (2220.053 – 2216.144 > 3.841).

Table 5.2: Immigrants' wages in Amsterdam and Rotterdam explained by immigrant shares in industries (multilevel regression analysis; entries are regression coefficients; estimation: maximum likelihood).

Independents	Null model	Model 1	Model 2	Model 3
Independents	*β*	*β*	*β*	*β*
Constant	-0.098	-0.030	-0.027	-0.024
Rotterdam		-0.004	-0.004	0.099
Immigrant share			-0.034	0.051
Immigrant share * Rotterdam				-0.133*
Controls				
Year		0.583***	0.583***	0.582***
Female		-0.060***	-0.060***	-0.060***
Age		0.191***	0.190***	0.190***
Education		0.294***	0.295***	0.295***
Years employed		0.146***	0.146***	0.146***
Variance industry level (N = 52)	0.090**	0.033**	0.028**	0.028**
Variance individual level (N = 1,345)	0.743***	0.306***	0.307***	0.306***
Deviance	3,393.95	2,221.91	2,220.05	2,216.14
DF		6	1	1

Source: Statistics Netherlands (*CBS*) (own calculations).
* p< .05; ** p< .01; *** p< .001

5.4 Assessing the substitution thesis on unemployment

At some point the substitution mechanism between immigrants and natives on the labour market that shows itself in declining wage levels will lead to rising unemployment levels, as wages cannot decline beyond a certain level due to labour market regulation. That is why most economists who assess the impact of immigration on labour markets argue (Scheve & Slaugher 2004) and find (Jean & Jimenez 2007) that for the less educated the likelihood of becoming unemployed due to immigration is higher in more regulated labour markets. For the negative impact of immigration on wages, this logic is of course reversed. It will be higher in less regulated labour markets, because wage elasticity is higher.

On the basis of the substitution thesis, it can therefore be expected that a higher share of immigrants leads to higher unemployment of less educated urbanites (hypothesis 2). This impact is likely to be conditional on the type of urban economy however. Chapter 3 showed that labour demand for less educated urbanites was higher in cities with a high employment share in the advanced producer services. This suggests that in cities with the highest share of advanced producer services, the substitution between immigrants and lower-educated urbanites will be weaker than in cities with a low employment share in these services (hypothesis 3). In this section hypothesis 2 and 3 will be tested by means of comparing the impact of immigration on the unemployment of less educated urbanites among the 22 Dutch metropolitan agglomerations.

The assessment of the expectation that there is less substitution on the labour market due to immigration in cities with a high share of employment in the advanced producer services will be done by using the same data on the 22 metropolitan agglomerations as used to assess the impact of the clustering of advanced producer services on unemployment in chapter 3. This time, however, the analysis will be on a smaller number of cases as incorporating the variable *immigrant share* into the dataset reduced the range of years available for the analysis from 11 in chapter 2 (1997-2007) to 10 in this chapter (1998-2007) (see appendix B for a more detailed description of the data and the exact operationalisation of the variables).

Therefore, the null model and model 1 in table 5.3 will first control whether this limitation does alter the findings in chapter 3. It clearly does not, because the null model still indicates there is a multilevel structure in the dependent variable, and model 1 shows that, just as found in chapter 3, a high share of producer services leads to low unemployment levels for less educated urbanites. Model 3 will assess hypothesis 2 derived from the substitution thesis, that immigration leads to higher unemployment levels among less educated urbanites. Remember that in chapter 2 the variance of *unemployment level less educated* increased instead of decreased after entering *producer services*, which indicated an omission of important explanatory variables in the model (Kreft & De Leeuw 1998, see note 1 in chapter 3). Model 3 clearly reveals that immigration is an important explanatory factor for this unemployment level, as the variance at metropolitan level drops substantially – roughly to its initial level – after entering *immigrant share*. The variance at year level declines as well.[16]

The coefficient of *immigrant share* is as expected positive and significant: in metropolitan areas with a high share of immigrants the unemployment level of less educated urbanites is higher – confirming hypothesis 2. Model 3 reveals more than this however. As the strength of the coefficient of *producer services* declines substantially, this indicates that the higher unemployment level in cities with a low employment share in the advanced producer services is partly caused by the immigrant share in their population. Furthermore, the higher unemployment level in the biggest cities, as shown by the significant and positive coefficient of *working population* in model 1, can completely be explained by their higher share of immigrants. After entering *immigrant share* into model 2, this coefficient drops substantially and becomes insignificant. This finding, again, points in the direction that factors other than labour market opportunities determine in which Dutch cities immigrants from less-developed economies settle. The concluding section will further elaborate on this matter.

16 Model 2 is a significant improvement of model 1, as using one degree of freedom yields a drop in deviance of 16.62 (564.48 – 547.67), which is more than minimally required (3.841 at 5 per cent level).

Table 5.3: unemployment level of the less educated in 22 Dutch metropolitan agglomerations from 1998 through 2007, explained by share of producer services, share of manufacturing industry and immigrant share in the population (multilevel regression analysis; entries are regression coefficients; estimation: maximum likelihood.

	Null model	Model 1	Model 2	Model 3
Independents	*β*	*β*	*β*	*β*
Constant	0.000	0.000	0.000	0.062
Producer services		-0.385***	-0.292**	-0.285**
Immigrant share			0.489****	0.471****
Immigrant share * producer services				-0.214**
Controls				
Working population		0.354*	-0.056	0.117
Share lower educated		-0.371***	-0.276***	-0.286***
Age 15-24		0.123	0.233*	0.251**
Age 25-34		-0.179*	-0.047	-0.036
Age 35-44		0.108	0.125	0.133
Age 45-54		-0.053	0.001	0.014
Variance metropolitan level (N = 22)	0.217**	0.356**	0.232*	0.219*
Variance year level (N = 10)	0.779****	0.630****	0.502****	0.590****
Deviance	598.60	564.48	547.67	542.47
DF		7	1	1

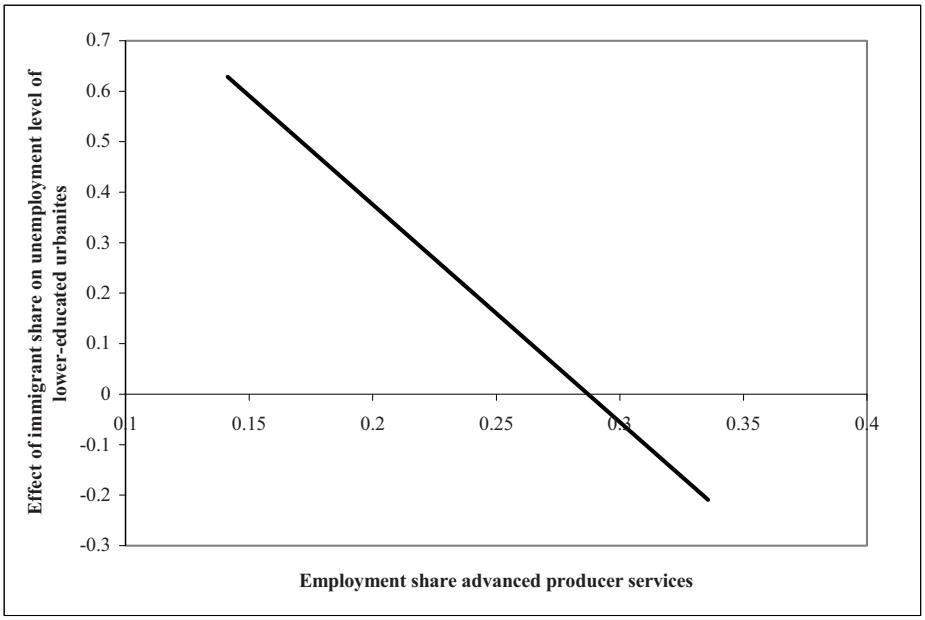
Source: Statline Statistics Netherlands (*CBS*) (own calculations).
p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001.

The question remains whether the impact of immigration on the unemployment level of less educated urbanites is weaker, or even absent, in cities with a high share of employment in the advanced producer services (hypothesis 3). This can be expected because in those cities there is more labour demand for the less educated, and it is therefore likely that substitution between immigrants on the one hand and less educated natives and former waves of immigrants on the other will lessen. Entering the interaction effect of *immigrant share* with *producer services* into model 3 corroborates this logic.[17] The coefficient is negative and significant, which means that the unemployment effect of immigration is lower in cities with a high share of employment in advanced producer services – which confirms hypothesis 3.

Figure 5.3 is a graphic presentation of this interaction effect. It shows that in urban economies with high employment shares in the producer services, immigration does not have any impact on the unemployment level of less educated citizens. The fact that the effect is negative in cities with a higher employment share should not be interpreted too rigidly. Although the effect is significant, there is no theoretical logic in the substitution thesis to interpret this to mean that a rising immigrant share in cities with the highest share of advanced producer services leads to declining unemployment levels. The unemployment level in those cities is simply very low for less educated urbanites, no matter how many immigrants settle there.

17 It proves a significant improvement in comparison to model 2 ((547.67-542.47) > 3.841).

Figure 5.3: the conditionality of the impact of immigration on unemployment levels of less educated citizens on type of urban economy



Source: Statline Statistics Netherlands (CBS) (own calculations).

5.5 Conclusions

This chapter started with the observation that the examination of immigration in the global city theoretical framework, and therefore global city debate, has a one-sided focus. It merely delves into what drives immigration from newly industrialising countries to cities in the advanced economies and argues that this immigration is driven by pull and push factors that stem from the new international division of labour. This one-sided focus seems remarkable considering that the global city theoretical framework, which spurred the global city debate, was formulated to understand the impact of the current phase of economic globalisation on the social, economic and political reality of cities. For immigration cannot only be considered a consequence, but also one of globalisation's constitutive elements: the globalisation of labour.

This globalisation of labour is claimed to have an impact on urban labour markets, and the theoretical rationale of this impact is laid down in the substitution thesis. This thesis applies neo-classical economic supply and demand logic to the labour market and claims that immigration leads to supply shocks in labour that lower the price for labour and, eventually leads to unemployment of those with whom immigrants compete. Hence, this chapter assessed the empirical validity of this claim to answer the following research question: *what is the impact of immigration on urban labour markets*? It did so by assessing the impact of immigration on the wages and likelihood of unemployment of immigrants' competitors on the labour market: less educated natives and former waves of immigrants.

Several scholars working with the substitution thesis suspect this impact is weaker in service-oriented urban economies due to higher labour demand, and this expectation is completely in line with the findings in chapters 3 and 4. Chapter 3 showed that labour demand for low-skilled service workers is high in cities with a high share of employment in the advanced producer services, and that consequently the unemployment level of less educated urbanites in those cities is low. Consequently, it can be expected that if the substitution thesis holds, substitution between immigrants on the one hand and less educated natives and former waves of immigrants on the other hand will be least severe

in cities with a high share of employment in the advanced producer services, and most severe in cities with a low share of this employment.

And, indeed, the expectation that the impact of immigration on wages of less educated natives and former waves of immigrants is lower in Amsterdam than in Rotterdam proved to hold empirically: immigration did not lead to declining wages of less educated natives and immigrants in Amsterdam with its high share of employment in the advanced producer services, while it clearly did in industrial Rotterdam. This shows that conclusions like the one of Zorlu and Hartog on the Netherlands that 'A 10 percent increase of ethnic minorities fron non-EU countries decreases the earnings of low-skilled workers by 0.42%' (2005: 120-21) can be misleading. Such conclusions (compare the one of the meta-study by Longhi, Nijkamp & Poot 2005: 472) imply that wages in cities or areas with the highest share of immigrants experience the strongest negative impacts. This chapter shows however how important it is to model the type of urban economy, as Amsterdam and Rotterdam have the highest and roughly similar immigrant shares in the Netherlands, but differ greatly in terms of the impact of immigration on wages.

Like the findings of the OECD-study on the conditionality of the substitution thesis on national institutional frameworks (Jean & Jimenez 2007), the finding that the negative impact of immigration on wages is conditional on type of urban economy is in line with the neo classical economics' supply and demand logic of the substitution thesis. For it models the demand side, the type of urban economy, which Zorlu and Hartog were unable to do because of data deficiencies; they could not identify local unemployment levels with their data. Hence, in their study 'the participation rate is assumed to be *identically distributed* across local labour markets for each ethnic minority group' (2005: 120, italics: JvdW). As this chapter shows, such an assumption is highly problematic when assessing the impact of immigration on wages.

The analyses in this chapter could model local differences in labour demand that are determined by the employment share in the advanced producer services. Consequently, different outcomes could be interpreted according to the supply and demand logic of the substitution thesis. This proves it is fruitful to thoroughly consider the theoretical underpinnings of the substitution thesis when looking for a cause of its scattered results, instead of merely discussing methods and statistics (cf. Card 2005: 321).

This is not to say that the use of proper methods and statistics are unimportant (cf. Longhi, Nijkamp & Poot 2005: 471), but that scattered results can be corroborations of theoretical expectations, as the nature and strength of labour demand differs between states and between cities.

As wages are not fully elastic, i.e., cannot decline below a certain level, the substitution between immigrants and less educated urbanites and former waves of immigrants will at some point manifest itself in rising unemployment instead of declining wages. Section 4.4 therefore assessed what the substitution thesis and its alleged conditionality on type of urban economy mean for unemployment in Dutch cities. In accordance with the substitution thesis, a high immigrant share in the urban population indeed leads to a high unemployment level of less educated urbanites. This impact proved to be conditional on type of urban economy as expected: only in cities with a low share of employment in the advanced producer services does immigration lead to such unemployment. This is not contrary to, but completely in line with, the supply and demand logic of the substitution thesis, as such cities yield less labour demand for the less educated than cities with a high share of employment in those services.
Future research on the tenability of the substitution thesis that takes these differences in labour demand between cities into account might determine whether this is responsible for the scattered results and low impacts that studies on the substitution thesis have yielded to date.

There is one remarkable finding that calls for an explanation however. Many studies on the substitution thesis find higher negative impacts of immigration on the wages of immigrants than on the wages of natives. In line with the substitution thesis it is argued this is because recent immigrants compete most fiercely with former waves of immigrants on the labour market (Longhi, Nijkamp & Poot 2005, Okkerse 2008). However, in this study the impact of immigration on the wages of immigrants proved to be weaker than the impact on the wages of less educated natives. What might be responsible for this unexpected finding is that different ethnic groups apply different labour market strategies to cope with economic insecurity and limited labour market mobility. For instance, labour supply might not increase in certain industries due to immigration when a substantial number of immigrants decide to become entrepreneurs

(Rath 2000). There is also the possibility that the registration of wages of immigrants is insufficient, as they might be overrepresented in the informal economy (cf. Portes & Sassen-Koob 1987). If so, the data used cannot reveal part of the impact of immigration on immigrants' wages. Further research can shed light on whether, and to what extent, such mechanisms are responsible for the finding that the negative impact of immigration on wages of immigrants is not stronger than on the wages of less educated natives. A more substantial problem concerning the interpretation of the finding that wages are lower in industries that employ a high share of immigrants will be addressed in the following section: is this indeed due to substitution as asserted in the substitution thesis, or is it driven by a process of social closure?

5.6 Discussion: substitution or social closure?

There are two interrelated problems concerning studies of the impact of immigration on wages that call for attention. The first one concerns the exact meaning of the findings on the negative impact of immigration on wages of less educated natives and former waves of immigrants in Rotterdam in this chapter *and* in all other studies on the substitution thesis that find this impact. The crucial hypothesis derived from this thesis – net of other factors, wages are lower in areas, industries or occupations with high immigrant shares – shows striking similarities with the central hypothesis in another field of research: social closure studies. Nevertheless, social closure theories have fundamentally different theoretical underpinnings than does the substitution thesis. They do not build on the latter's neo-classical economics' supply and demand logic, but on the idea of social closure (Weber [1922] 2006, cf. Roscigno, Garcia & Bobbitt-Zeher 2007), or ethnic conflict (Blalock 1956, 1967) – which are different labels for the proposition that dominant groups in society try to exclude low-status groups from scarce economic resources.

So, whereas studies on the substitution thesis focus on increased labour supply whenever it is found that wages are lower as immigrant shares are higher, social closure studies would conclude that the allocation of ethnic minorities on the labour market is biased towards jobs that are poorly paid or that wages of what have become known as

'minority jobs' have declined due to the low status of the people who are employed in them (see for an elaborate overview of social closure mechanisms among others: Reskin 2000, Reskin 2003, Roscigno, Garcia & Bobbitt-Zeher 2007).

Although many social closure studies concern 'blacks' or 'African Americans' in the US, and as such build on a majority-minority distinction, there are studies of a similar kind that address an immigrant-native distinction – for instance for immigrants from central America (Baker 1999, Bean & Tienda 1987, Catanzarite 1998, 2003, Kmec 2003, Tienda & Ding-Tzann 1987). In the latter case, as in many advanced economies (compare section 5.3 on the immigrant population in Amsterdam and Rotterdam), ethnic minorities and the immigrant population significantly overlap, and these studies basically yield the same results.

So, two fields of research with different theoretical underpinnings come up with the same empirical findings, and each field gives these findings theoretical meaning according to its own logic. The finding in section 5.3 that the negative impact of immigration on wages of both less educated natives and immigrants is stronger in industrial Rotterdam than in service-oriented Amsterdam, can be interpreted by both theoretical positions as well. According to the substitution thesis this is due to different labour demand, while according to social closure theories this 'pay degradation' of 'immigrant dominated industries' or the segregation of immigrants into industries with low wages in Rotterdam occurs because discriminative practices are more salient when there are fewer jobs to share.

The main reason that the theoretical meaning of these findings still remains in need of further clarification is that studies in both fields of research – including this one – do not take the assumed mechanisms into account. Reskin therefore called for research into the underlying mechanisms instead of the outcomes of social closure on the labour market (2003, cf. Tomaskovic-Devey, Thomas & Johnson 2005, Roscigno, Garcia & Bobbitt-Zeher 2007). And, indeed, studies with a more qualitative approach of this kind clearly reveal that discriminatory practices negatively affect the labour market opportunities for ethnic minorities (Pager 2003, Pager & Quillian 2005, Roscigno, Garcia & Bobbitt-Zeher 2007, cf. Holzer 1996). Future research of this kind could shed light on the empirical validity of the mechanisms postulated in social closure theories. Naturally

studies on the empirical validity of the substitution thesis should also model the underlying mechanism. Just as in social closure studies, such a research format seems the only way to uncover how the supply of immigrant labour really has negative impact on the wages of those with whom these immigrants compete in the labour market.

The findings on the impact of immigration on the unemployment levels in the 22 Dutch metropolitan agglomerations point in the direction that the supply and demand logic of the substitution thesis indeed exists, After all, the unemployment levels concern less educated natives and less educated immigrants alike and can therefore not be completely ascribed to discriminatory practices which exclude ethnic minorities from the labour market. It can consequently be expected that the findings of the negative impact of immigration on wages in Rotterdam is – at least partially – driven by this logic. To what extent is very hard to uncover, however, and this brings us to the second problem that needs to be addressed.

Assessing the *relative worth* of the supply and demand logic of the substitution thesis and of discriminatory practices in explaining the lower wages in areas, industries or occupations with a high share of immigrants will be hard due to the ambiguity of human capital indicators. Human capital is considered the main indicator for productivity and is therefore an important determinant of wages and labour market opportunities. Therefore studies on the substitution thesis and social closure theories obviously need to control for the extent to which human capital is responsible for one's labour market position. This research practice does not meet its own ends however, for it builds on the false assumption that human capital is not itself the product of racial or ethnic discrimination. Collins (1979), for instance, strongly doubts this assumption when it comes to one of the primary indicators of human capital: education. He argued that 'the access to credentials is inherently biased toward particular groups, the case for discrimination is [therefore] easy to make' (p. 198, compare for this intergenerational reproduction of inequality in education: Bernstein 1982, Bourdieu 1977, Parkin 1979). He consequently concluded that 'as direct ethnic and sexual discrimination becomes increasingly illegitimate and subject to legal challenge, educational discrimination becomes increasingly relied upon as surrogate means of group domination' (Collins 1979 p. 199).

The same reasoning goes for controlling for scores on all kinds of cognitive skill tests, or human capital that is accumulated on the labour market such as experience and tenure. These tests are considered racially or ethnically biased (Raudenbush & Kasim 1998, Rodgers & Spriggs 1996), and getting hired or keeping a position within a work organisation is already influenced by social closure (Tomaskovic-Devey, Thomas & Johnson 2005).

In short, human capital indicators such as 'education', 'cognitive skills', 'work experience' and 'tenure' are already the result of discriminatory practices. Hence discriminatory effects found in social closure studies that control for human capital with such racially biased human capital indicators might already be deflated. Unless we find non-ambiguous indicators for human capital – indicators that are not already the product of racial discrimination – it seems therefore a sheer impossibility to determine to what extent wage gaps between ascribed-status groups and pay degradation of 'minority dominated' industries, occupations or jobs in society at large exist net of human capital.

As finding out to what extent these wage gaps and this pay degradation exist controlled for differences in human capital is a necessary condition, unravelling the relative importance of social closure and substitution will be even more difficult. But as far as I can see, it will be the only way to give further theoretical meaning to the fact that wages of ethnic minorities and for 'minority dominated' industries, occupations or jobs are lower in advanced economies. However difficult it might be, such an endeavor would be of great importance: progress in this direction will be a valuable contribution for our understanding of labour market logic and of great value for public policy aimed at combating discriminatory practices.

6 Immigration, post-industrialisation and ethnocentrism

If the urban politics field has become marginalized, it is because the field has neglected to develop a contemporary, theoretically grounded version of cultural explanation to go along with its attention to institutions and political economy (Sharp 2007: 55)

6.1 Introduction

In both urban studies and the social sciences at large, it is asserted that the combination of declining labour-market opportunities and immigration from less-developed countries spurs ethnic animosities. The theoretical logic for this expectation can be found in the ethnic competition theory (Olzak 1992), which basically claims that ethnic groups try to exclude one another from scarce economic resources. The previous chapter showed that there is competition over job opportunities between less educated natives and immigrants in Dutch cities. On the basis of the ethnic competition theory, it can therefore be expected that less educated natives in those cities are more ethnocentric than their more highly educated counterparts. Furthermore, according to this reasoning this will especially be so in cities with the lowest share of employment in the advanced producer services. After all, in those cities the substitution between less educated natives and immigrants proved to be strongest due to low labour demand.

This might explain why the issue of immigration has moved centre stage in contemporary politics in many European countries in recent decades (Achterberg, 2006a, 2006b; Ignazi 2003, Van der Waal & Achterberg 2006), all the more so because anti-immigrant parties primarily get electoral support from the less educated (Achterberg, 2006a; Achterberg & Houtman, 2006; Van der Waal, Achterberg & Houtman, 2007). The idea that the ethnocentrism of less educated natives in the advanced economies has its roots in their economic misfortunes is however challenged by a cultural explanation, which basically claims that it is their low level of cultural capital, rather than their weak

economic position, which disposes less educated natives to ethnocentrism. Consequently, it is not clear as to whether the ethnocentrism of less educated natives has its roots in their weak economic position and the labour market competition with immigrants this brings with it.

Furthermore, there are indications in the literature that cities not only differ in an economic sense, but also in a cultural sense. Just as some urban economies prosper while others do not, some cities have a far more tolerant cultural atmosphere than others (Florida 2002, 2005). It is claimed that such a tolerant cultural atmosphere reduces the ethnocentrism of urbanites (Sharp 2007, 2008). Consequently, not only on the basis of the economic logic behind the ethnic competition theory, but also on the basis of a cultural explanation, it can be expected that the ethnocentrism of less educated natives differs by city. After exploring both the economic and cultural explanation in section 6.2, section 6.3 will assess their empirical validity in accounting for ethnocentrism in less educated urbanites. The concluding section 6.4 will discuss the findings of this assessment and will consequently answer the last research question of this study: *is the ethnocentrism of less educated urbanites driven by ethnic competition*?

6.2 The economic and cultural logic of ethnocentrism

6.2.1 Ethnic competition

Several scholars in the global city debate assert that the transition to a post-industrial economy leads to the combination of less labour demand at the bottom of the labour market *and* immigration from less-developed economies. Consequently they foresee competition over job opportunities between these immigrants and less educated natives. Both Anthony King, in *Global Cities: Post-Imperialism and the Internationalization of London* (1990: 29-30), and Susan Fainstein, in *Divided Cities* (1992: 263), expect that this competition will spur resistance to immigrants among less educated natives in order to defend their economic interests. The theoretical core in such accounts concerns the idea of 'social closure' (Weber [1922] 2006; compare: Roscigno, Garcia & Bobbitt-Zeher 2007), or 'ethnic conflict' (Blalock 1956; 1967). These are different labels for the same

mechanism as laid down in the ethnic competition theory which asserts that 'competition for resources leads to attempts at exclusion of one group by another' (Olzak 1992: 163, cf. Blalock 1956, 1967).

As argued in the previous chapter, in contemporary Europe immigration involves especially immigrants from less-developed economies, who are considered competitors for less educated natives on the labour market. It is found time and again that this is not a mere theoretical expectation, but that substitution on the labour market between these two groups indeed exists (Longhi, Nijkamp & Poot 2005, Okkerse 2008). The previous chapter showed that immigration to Dutch cities has led to substitution between immigrants and less educated natives at the bottom of the labour market as well. Due to immigration the labour market opportunities for less educated urbanites decreased. Consequently, according to the ethnic competition theory, it can be expected that less educated natives in Dutch cities will adopt a negative stance towards ethnic minorities in order to protect their own or their own group's position (Blalock 1956, 1967, Olzak 1992, Reid 1977: 232). On the basis of the ethnic competition theory, then, *it can be expected that less educated natives in Dutch cities are more ethnocentric than more highly educated natives because of their weak economic position* (hypothesis 1).

What the previous chapter showed as well is that the actual level of job competition between immigrants and less educated natives differs by city. In cities with a high share of employment in the advanced producer services there was hardly any substitution between immigrants and less educated natives due to high labour demand for the less educated – if there was any substitution at all. In cities with the lowest share of advanced producer services, on the other hand, there proved to be a mismatch between labour demand and labour supply at the bottom of the labour market, and consequently substitution between less educated natives and immigrants. According to the ethnic competition theory it can therefore be expected that *less educated natives in cities with a low share of employment in the advanced producer services are more ethnocentric than less educated natives in cities with a high share of employment in the advanced producer services, because there are fewer job opportunities for the less educated in the former cities than in the latter* (hypothesis 2).

The economic logic of the ethnic competition theory, which scholars in urban studies at large (Fainstein, Gordon & Harloe 1992, King 1990, Wacquant 2008, Wilson, 1978; 1987; 1999) consider the driving force of ethnic animosities in the transition to a post-industrial economy, is not undisputed.[18] That less educated natives are more ethnocentric than more highly educated natives is beyond doubt. As Emler and Frazer put it in their article *Politics: the Education Effect,* 'one of the earliest "political" correlates of education to be highlighted was support for *ethnocentric and anti-democratic attitudes*' (Emler & Frazer 1999: 251, italics in original, cf. Stubager 2008, 2009). Whether this ethnocentrism is driven by the weak economic position of less well educated natives and the competition with immigrants over scarce resources that accompanies it is not clear, however.

In the first place indicators for economic position other than education, such as socio-economic frustration, labour-market status, income and labour-market position hardly underlie ethnocentrism (Scheepers, Felling & Peters 1990: 22, cf. Lubbers & Scheepers 2002, Pedahzur & Canetti-Nisim 2004, Scheepers, Eisinga & Van Snippenburg 1992, Van der Waal & Burgers 2010, Van der Waal et al. 2010) – if they underlie it at all. In the second place the same goes for the impact of such economic indicators on cultural tolerance in general, i.e., libertarianism and a 'progressive' stance towards homosexuals, gender equality, abortion, and euthanasia (Achterberg & Houtman 2006, Dekker & Ester 1987, De Koster & Van der Waal 2006, 2007, Grabb 1979, Houtman 2001, 2003, Stubager 2008, 2009). These findings suggest that there is an explanation other than an economic one as to why less educated natives are more ethnocentric than more highly educated natives.

6.2.2 Cultural capital and ethnic tolerance

Immigrants not only can be considered competitors for scarce economic resources, i.e., an economic threat, but also can be considered to be culturally or ethnically deviant, i.e.,

[18] Of course, the studies of Wilson on the jobless ghetto in Chicago do not emphasize immigration but do emphasize, among other things, race relations in the transition to a post-industrial economy. Nevertheless, when it comes to these relations the arguments boil down to ethnic competition: the ethnocentrism of whites (blacks) versus blacks (whites) is supposed to be driven by competition over scarce economic resources.

a cultural threat. Key to understanding why there can be a cultural instead of an economic explanation for the ethnocentrism of lower-educated natives is that education does not only effect one's economic position, but also one's cultural capital (Houtman 2001, 2003, De Graaf & Kalmijn 2001, Kalmijn 1994). Cultural capital is the ability to recognise cultural expressions and comprehend their meaning (Bauman 1987, Bourdieu 1984), and comes in three forms: embodied, objectified and institutionalised (Bourdieu 1984, 1986).[19] Embodied cultural capital concerns the long lasting disposition of the mind that is often referred to by the terms 'cultivation' or *Bildung*, and is primarily measured with participation in and consumption of high-status culture. Objectified cultural capital concerns the objectified forms of such cultivation like the possession of books and art, and institutionalised cultural capital is an objectified form of cultivation in the form of qualifications, i.e., level of education.

It can be argued that instead of economic differences, it is the high (low) amount of cultural capital of the highly (less) educated that accompanies high (low) ethnic tolerance, but it needs to be emphasised that it only does so in liberal democracies. Certainly, the elites of the totalitarian regimes that ravaged mid-20th century Europe were highly educated and interested in arts and culture. Yet, this clearly was not associated with cultural tolerance, to say the least. In present-day liberal democracies, on the other hand, education and participation in and consumption of high-status culture are likely to instil liberal democratic values that emphasise tolerance of cultural differences. In his article *Authoritarianism as World View*, Howard Gabennesch provides the theoretical arguments for this expectation (1972).

Gabennesch's explanation as to why it is found time and again that education is negatively related to authoritarianism, ethnocentrism and non-economic conservatism revolves around the concepts 'breadth of perspective' and 'reification'. He expects that education broadens, multiplies and diversifies one's 'sociocultural perspectives [and] expands [one's] awareness of alternative definitions, evaluations, and viewpoints' (1972:

[19] According to the founding father of the concept, Pierre Bourdieu, the ability to recognize cultural expressions and to comprehend their meaning primarily has a status function, and as such functions as a resource to preserve and reproduce economic inequality (cf. Houtman 2003: chapter 8). It needs to be emphasised that this study has no quarrel with this argument, but that it merely addresses the relationship of cultural capital to cultural tolerance, as it aims to explain why the less educated tend to be more ethnocentric than the more highly educated.

858). Consequently, the more highly educated are better able to understand that 'each society, with its norms and values, is one of many, capable of change – in various directions – and is the product of man's effort to come to terms with the world around him and with the needs of an ongoing social order. *The awareness of cultural diversity is thus an antidote to ethnocentrism*.' (Chinoy, 1967 in Gabennesch 1972: 859, italics in original).

The less educated, on the other hand, have a more narrow perspective and are 'more likely to view the social world in fixed, absolute terms', which hints at 'what Berger and Luckmann (1966) have described as a "reified" view of social reality' (Gabennesch 1972: 862-3). The less educated see 'social reality as if it were fixed instead of a process, absolute instead of relative, natural instead of conventional, and in general, as a product of forces which are more than human. (…) Being morally and ontologically superior to men, [social reality] demands that men strive to adjust themselves to it. Reified institutions or institutional orders admit of no legitimate compromises, deviations, or alternatives' (Gabennesch 1972: 863-4). Consequently, this results in 'an advocacy of harsh punishment for deviants and *a rejection of groups oriented towards different norms*' (Gabennesch 1972: 866, italics added).

Although labeled differently, Gabennesch's 'breadth of perspective' is exactly what cultural capital in liberal democracies entails: the ability to recognise cultural expressions and comprehend their meaning (Bauman 1987, Bourdieu 1984, Houtman 2003).[20] It is therefore just as likely that the theoretical reasoning of the breadth of perspective explanation for ethnic tolerance applies to differences in cultural capital. People with ample cultural capital are better equipped than people with little cultural capital to conceive culture as 'culture' rather than 'nature'. Which means that the former are more able to recognise culture as socially produced and contingent, and therefore other, *and one's own*, culture(s) as (arbitrary) options among many others that should consequently be tolerated. People with a low amount of cultural capital are less able to recognise other cultures as socially produced and contingent, and they will therefore consider other cultures primarily as deviations of a naturally given social order. Put differently, people with a low amount of cultural capital primarily consider other cultures

[20] See however the previous note.

as a violation of the super-ordinate normative dimension to which one should adapt and will consequently be less tolerant towards other cultures.

Three sets of research findings indicate that the breadth of perspective that accompanies having ample cultural capital in liberal democracies is responsible for tolerance towards cultural differences in general and toward ethnic minorities in particular. They all boil down to the conclusion that socialisation in institutions that question the pre-given legitimacy of the social and cultural order is the key in understanding this link between cultural capital and cultural tolerance. The first two findings pertain to the culturally liberalising consequences of institutionalised cultural capital, i.e., education; the third one pertains to the affinity between tolerance of cultural differences and embodied cultural capital as measured by participation in and consumption of high-status culture.

In the first place, education's liberalising tendencies prove to be principally a phenomenon in liberal democracies. Simpson (1972) and Farnen and Meloen (2000) compared the effect of education on the F-scale, which was intended to reveal 'prejudice without appearing to have this aim and without mentioning the name of any minority group' (Adorno et al. 1950: 151) among countries. Both studies showed that 'in less-democratic countries this [negative] relationship is much weaker' (Farnen & Meloen 2000: 141) than in more liberal-democratic countries. In his study of anti-Semitism Weil came up with similar findings: 'the impact of education on liberal values is weaker, nonexistent, or sometimes even reversed in nonliberal democracies or countries which did not have liberal-democratic regime forms in earlier decades, compared to countries which have been liberal democratic for a long time' (1985: 470).

In the second place, not only the level, but also the direction of education affects cultural tolerance in general and ethnocentrism in particular (cf. Houtman 1994). Gabennesch's claim that studies that lead to 'greater sophistication in areas most directly involved in understanding human social phenomena tend to produce greater dereification and thus less authoritarianism' (1972: 868) has been corroborated several times. Trent and Medsker, for example, found the greatest decrease in authoritarianism among those studying humanities and social sciences and the smallest decrease among those studying engineering and natural sciences (1968, cf. Feldman & Newcomb 1994, Stubager 2008).

The empirical validity of this argument was corroborated by Hamilton & Hargens (1993), Ladd and Lipset (1975), Lipset (1982) and Lipset & Ladd (1972) who compared the ideological outlook among scientists from different disciplines. These studies found that (1) social scientists and scholars in humanities are more tolerant when considering cultural issues than scholars in the (applied) natural sciences (cf. McFalls et al 1999), and (2) that within academia the most prominent intellectuals in the social sciences are more tolerant towards cultural differences than their less eminent colleagues.

The third set of research findings does not revolve around the culturally liberalising tendencies of education as do the first two, but concerns the affinity between cultural tolerance and embodied cultural capital. This disposition of the mind is often measured with participation in and consumption of high-status culture (Achterberg 2006a, 2006b, Achterberg & Houtman 2006, DiMaggio 1982, DiMaggio and Mohr 1985, Dumais 2002, Eitle and Eitle 2002, Houtman 2001, 2003, Houtman, Achterberg and Derks 2008, Katsillis and Rubinson 1990).

Just like (higher) education participation in and consumption of high-status culture do not per se have affinity with cultural tolerance. This affinity exists only in liberal democracies according to the same theoretical reasoning outlined above. Art in non-liberal societies tends to reproduce and legitimate the established order – think of medieval art, which was mostly religiously inspired and as such reaffirmed and legitimated the by then dominant Christian worldview (Wilson 1982), or think of Nazi suspicions of 'entartete' modern avant-garde art – while in the contemporary western world, art is rather aimed at 'denaturalisation', i.e., the critical interrogation, deconstruction and disturbance of established cultural meanings and practices, aimed at exposing their contingency, social constructedness and hence 'unnaturalness' (Bell 1976, Jensen 1995).

S/he who consumes arts in liberal democracies on a regular basis is therefore aware that there are different points of view, that culture and social reality are relative instead of absolute, conventional instead of natural, and a human product instead of morally and ontologically superior to man. Consequently, just like people with ample institutionalised cultural capital, people with ample embodied cultural capital are likely to be tolerant of cultural differences. This link between participation in and consumption of

high-status culture on the one hand and tolerance of cultural differences on the other is not a mere expectation based on Gabennesch's theoretical considerations, but has been corroborated several times (Achterberg & Houtman 2006, Houtman 1994, Houtman 2001, Houtman 2003, Houtman, Achterberg & Derks 2008, Van der Waal et al. 2010).

The vital point to underscore here is that, contrary to the negative relationship between education and ethnocentrism, the link between embodied cultural capital and cultural tolerance cannot be interpreted according to the economic logic of the ethnic competition theory. Contrary to education, embodied cultural capital is an unambiguous indicator for one's cultural disposition as it does not depend on one's economic position (Ganzeboom 1989, Houtman 2001, 2003). Consequently, unlike unambiguous indicators for economic position such as income and unemployment, it does not affect class issues concerning the distribution of wealth, while it does affect cultural tolerance and quite strongly so (Achterberg & Houtman 2006, Houtman 1994, Houtman 2001, Houtman 2003, Houtman, Achterberg & Derks 2008).

This points in the direction that the effect of education on ethnocentrism needs to be interpreted according to cultural, instead of economic, logic for the following reason. In all the studies that find the relationship between embodied cultural capital and cultural tolerance just mentioned, education is highly related to cultural tolerance as well, while unambiguous indicators for a weak economic position such as income do *not* affect cultural tolerance whatsoever (cf. Kohn 1977 [1969], Kohn & Schooler 1983, Kohn & Slomczynski 1990, Zipp 1986 which all find that, controlled for education, income has no impact on cultural tolerance). This, in short, strongly suggests that, when it comes to explaining cultural tolerance, education operates as a cultural resource (as argued in the cultural explanation), instead of as a vessel for economic interest as do income and unemployment (as would be concluded from the ethnic competition theory).

In sum, on the basis of the cultural logic outlined in this section, it is just as likely that the often found inverse relationship between level of education and ethnocentrism is not driven according to the economic logic of the ethnic competition theory, but has cultural roots. The fact that less educated natives are most intolerant towards immigrants who are ethnically and/or culturally most distinct (Dustmann & Preston 2007, Fuchs, Gerhards & Roller 1993, Sniderman, Hagendoorn & Prior 2004, Sniderman &

Hagendoorn 2007) and consider immigrants primarily a cultural instead of an economic threat (Kluegel & Smith 1983, O'Rourke & Sinnott 2006, Sniderman, Hagendoorn & Prior 2004, Sniderman & Hagendoorn 2007), points in this direction as well. It can therefore be expected that *the less educated are more ethnocentric than the more highly educated due to their small cultural capital instead of their weak economic position* (hypothesis 3).

6.2.3 The cultural atmosphere of cities

The rise of the post-industrial economy not only led to a change in the economic base of cities, but has been accompanied by changes in political culture, often referred to as post-industrial politics (cf. inter alia, Betz 1994, Kitschelt 1997, Clark & Rempel 1997), or the 'new political culture' (Clark 1996, Clark & Lipset 2001, Clark & Hoffmann-Martinot 1998). These are different labels for the same phenomenon: contrary to 'industrial politics' or the 'old political culture' they revolve around cultural issues – in the United States often referred to as social issues – pertaining to individual freedom and social order, instead of economic issues concerning the distribution of scarce economic resources. That is not to say that the latter issues decline in salience, but that this classic political fault line is now accompanied by a fault line that pits the culturally tolerant against the culturally intolerant, instead of the economically weak against the economically strong.

That cultural issues, including issues concerning immigration and ethnic minorities, gained importance in the advanced economies in general is undisputed (cf. inter alia, Achterberg 2006a, 2006b, Ignazi 2003, Van der Waal & Achterberg 2006). It is however claimed that in some cities the population is far more tolerant on these issues than in others and that this coincides with the extent to which an urban economy is post-industrial (Sharp 2007, Sharp & Joslyn 2008). In the post-industrial era, then, cities not only differ in an economic sense, but also in a cultural sense (Clark, 1996, Clark & Rempel 1997, Sharp 1996, 2002). The most post-industrial cities thrive economically, while the least post-industrial cities lag behind (In addition to the previously cited chapters see: Elliott 1999a, 1999b, 2004, Kasarda 1985, Kasarda & Friedrichs 1985,

1986), and the former cities have a far more tolerant cultural atmosphere than the latter (Sharp 2007, Sharp & Joslyn 2008). That is why they are now often labelled as 'new political culture cities' (Clark 1996, Sharp 2007, Sharp & Joslyn 2008), 'unconventional cities' (Rosdil 1991, Sharp 2002), or 'post-traditional cities' (Sharp 2007). The label does not matter. What is asserted here is that the transition to a post-industrial economy is accompanied by a rising salience of cultural issues in the political domain and that the population in the most post-industrial cities is most tolerant on these matters.

Arguments of a similar kind can be found in the work of Florida on the creative class/creative cities. According to Florida a climate of cultural tolerance is, next to technological innovation and talent, an important precondition for a thriving urban economy (2002, 2003, 2004, 2005). The theoretical reasoning is that cities with a climate of cultural tolerance attract the creative class, which is considered responsible for technological innovation and consequently an impetus for (new) forms of industry in urban economies. The question as to whether urban economic growth is indeed driven according to this mechanism is widely debated (cf. i.a. Asheim & Hansen 2009, Hoyman & Faricy 2009, Markusen & Schrock 2006), but not directly relevant for the issue addressed in this chapter. What is relevant here is that cities apparently differ in the extent to which there is an atmosphere of cultural tolerance and that the most culturally tolerant cities as measured with Florida's 'bohemian index' are, just as claimed by scholars on the new political culture in cities addressed above, the most post-industrial cities.

The 'urban geography of tolerance', then, significantly overlaps with the 'urban geography of post-industrialism'. It is important to note here that this cultural tolerance is not considered to be a compositional effect, i.e., the sum of individual characteristics, but concerns a certain milieu, ethos or atmosphere that has an impact on the ideological outlook of the urban population (Deleon & Naff 2004, Florida 2002, 2003, 2004, 2005). That is why Florida developed the bohemian index. It measures the share of people employed in the cultural sector and artists such as writers, painters and musicians (2004: 260), who according to Florida *choose to reside in the most tolerant places* (Florida, 2002: 64; 2005: 113-28). It is in short not the subculture of the bohemians that makes a city culturally tolerant, but bohemians are drawn towards the most tolerant places, and

their presence is therefore considered a valid indicator for the tolerant atmosphere of cities.

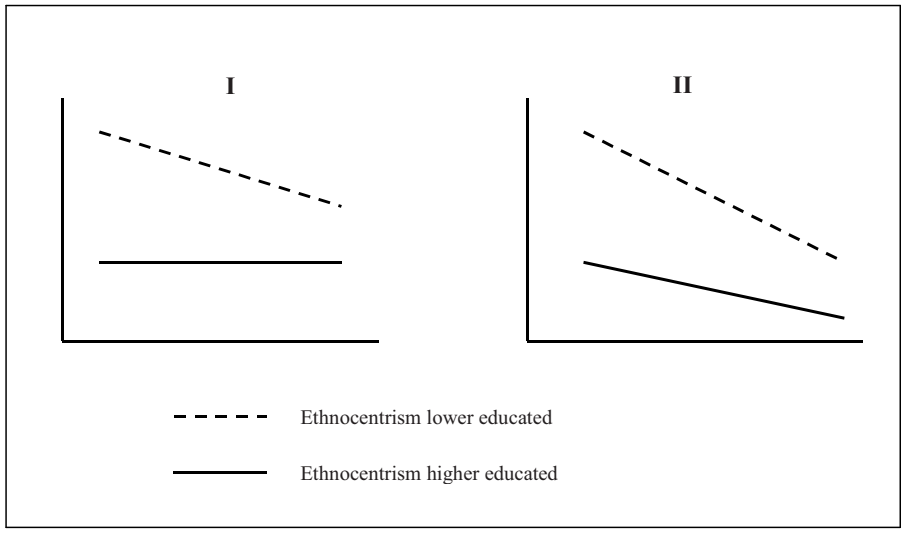
The primary example of such regional differences in tolerance is, of course, the South of the United States where, controlled for the relevant background variables such as education, people are more ethnocentric than in the North. In a study on this subject Kuklinski, Cobb and Gilens for example conclude that 'demographics cannot explain the interregional variation in prejudice that we uncovered earlier. Call it culture; call it climate; call it environment: the label does not matter. The widespread racial prejudice in the South is a uniquely southern phenomenon that is not simply a product of the mix of individuals who live there' (1997, cf. Oliver & Mendelberg 2000, Weakliem & Biggert 1999).

The expectation that the cultural atmosphere of cities works in the exact same way on the ideological outlook of its population has thus far hardly been assessed. Recently Sharp and Joslyn therefore claimed that 'the most important and controversial lines of argument concerning new political culture cities has yet to be properly tested, that is, the argument that such places are characterized by tolerance, including racial tolerance, tolerance of gays, and, more generally, "openness to diversity of all kinds" (Florida, 2005; 36)' (2008: 574). They did test this claim and found that cities with a culturally tolerant atmosphere 'diminish the degree to which racial tolerance is driven by age or *educational differences*' (2008: 584, italics added). Although this difference in ethnocentrism between the less well and the more highly educated does not say anything about the level of ethnocentrism of both categories, in accordance with the theoretical argument it seems very unlikely that this level would be higher in those cities than in cities with a less culturally tolerant atmosphere. If not, this would mean that in the most culturally tolerant cities, both the more and the less well educated would be less tolerant than both the more and the less well educated in the least culturally tolerant cities.

Consequently, there could be two interpretations for the finding of Sharp and Joslyn (2008) that in the most culturally tolerant cities the less educated and the highly educated hardly differ in their level of ethnocentrism. The first is that the level of ethnocentrism of the highly educated is unaffected by the culturally tolerant atmosphere of cities, while that of the less educated is lower in the most culturally tolerant cities. The

second is that both the highly and less well educated are less ethnocentric in the most culturally tolerant cities than in the least culturally tolerant cities, but that this applies more strongly to the less educated. Figure 6.1 depicts these two options graphically.

Figure 6.1: two scenarios on the impact of a culturally tolerant atmosphere of cities on the ethnocentrism of the lower educated (dotted line) and the higher educated.



It is very likely that, just as in the United States, the 'urban geography of cultural tolerance' in the Netherlands will significantly overlap with the 'urban geography of post-industrialism'. Consequently, on the basis of the ethnic competition theory *as well as* on the basis of this cultural logic, it can be expected that *less educated natives in cities with a low share of employment in the advanced producer services are more ethnocentric than less educated natives in cities with a high share of employment in the advanced producer services*. The big difference with expectation on the basis of the ethnic competition theory is that according to the cultural perspective this will be *because there is a less culturally tolerant atmosphere in the former cities than in the latter cities* (hypothesis 4), instead of because there are fewer job opportunities for the less educated in the former cities than in the latter cities.

6.3 The economic and cultural roots of ethnocentrism assessed

Before assessing whether the ethnocentrism of less educated natives in the 22 Dutch metropolitan agglomerations is driven by the economic logic of the ethnic competition theory or by the cultural logic that revolves around differences in cultural capital and urban differences in cultural tolerance, we will first take a look at: (1) the relationship between the indicators for economic position and for cultural capital, and (2) the relationship between the share of employment in the advanced producer services and the culturally tolerant atmosphere of cities. The data used were derived from a survey of the population in the 22 Dutch urban agglomerations (N = 770), combined with metropolitan-level data concerning the economic and cultural condition (N = 22) (for a detailed description of the data used in this chapter and the exact operationalisation of the variables used, see appendix B).

Table 6.1 shows the bivariate relationship between *education*, *income*, *unemployment*, and embodied cultural capital as measured with high-status *cultural participation* in the first column and these correlations controlled for *education* in the second. It clearly shows that *education* is an ambiguous variable, for it relates on the one hand to economic position as the correlation with *income* shows, while it proves on the other hand to function as a vessel for cultural capital, considering its correlation with *cultural participation*. This finding clearly shows that the often-found relationship between education and ethnocentrism can neither be straightforwardly interpreted as in accordance with the ethnic competition theory, nor as in accordance with the cultural logic that revolves around differences in cultural capital.

Contrary to education, embodied cultural capital proves to be an unambiguous indicator for cultural disposition as *cultural participation* correlates with neither *income* nor *unemployment* when controlled for *education*. Contrary to the relationship between *education* and *ethnocentrism*, then, a relationship between *cultural participation* and *ethnocentrism* can unequivocally be interpreted as a cultural phenomenon. Furthermore, both *income* and *unemployment* prove to be unambiguous indicators for economic position: controlled for *education*, they do not have any relationship with embodied

cultural capital whatsoever. Their impact on *ethnocentrism* therefore can be interpreted according to the economic logic of the ethnic competition theory.

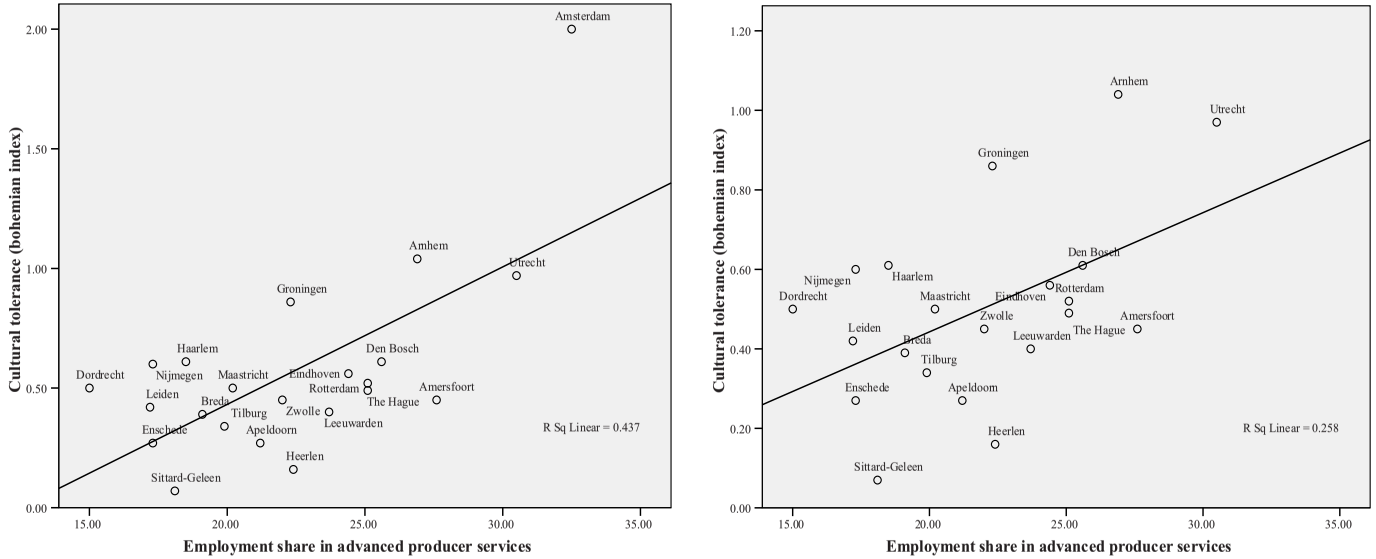
Table 6.1: zero-order correlation (column 1) and partial correlations controlling for education (column 2) between indicators for economic position (income and unemployment), education and cultural participation.

	Bivariate correlation	*Correlation controlled for education*
Education and income	0.119***	-
Education and unemployment	0.037	-
Education and cultural participation	0.311****	
Cultural participation and income	0.084**	0.050
Cultural participation and unemployment	-0.036	-0.050
N	770	770

Source: CCN 2004/6, Atlas for municipalities 2004, and Statline Statistics Netherlands (*CBS*) (own calculations).
*p< 0.10; ** p< 0.05; *** p< 0.01; ****p<0.001.

Before assessing whether the economic or cultural explanation accounts for the ethnocentrism of less educated natives in Dutch cities, we will first take a look at the relationship between a city's atmosphere of cultural tolerance, and its employment share in the advanced producer services. Figure 6.2 and 6.3 depict the relationship between *producer services* and *cultural tolerance* for the 22 Dutch metropolitan agglomerations (figure 6.2), and for those agglomerations without outlier Amsterdam (figure 6.3). Both show that, just as in the United States, the 'urban geography of cultural tolerance' significantly overlaps with the 'urban geography of post-industrialism'. Cities with a high employment share in the advanced producer services, then, not only yield the highest labour demand for the less educated as shown in the previous chapter, but are also the cities with the most tolerant cultural atmosphere. If there is a negative relationship between the ethnocentrism of a city's population and the employment share in the advanced producer services, it can therefore mean (at least) two things. In accordance with the ethnic competition theory, such a negative relationship would be caused by the abundance of labour market opportunities for the less educated in such cities. On the

Figure 6.2 and 6.3: Correlation between employment share in advanced producer services and cultural tolerance in 22 Dutch metropolitan agglomerations (figure 6.1; Pearsons's *r*: 0,66, $p<0,01$), outlier Amsterdam excluded (figure 6.2; Pearson's *r*: 0,51, $p<0,05$).



Source: Atlas for municipalities 2004, and Statline Statistics Netherlands (*CBS*) (own calculations).

basis of the cultural explanation, on the other hand, the atmosphere of cultural tolerance would cause the lower levels of ethnocentrism.

In the analysis that follows we will find out which theory stands the test. As the data used have a multilevel structure, 770 respondents within 22 metropolitan agglomerations, there is need for multilevel modelling (Hox 1995). Therefore table 6.2 starts with a null model, which shows how much variation of *ethnocentrism* exists at the level of metropolitan agglomerations and how much at the level of individuals. It shows that 4.7 per cent (0.046 / (0.046 + 0.941)) of the variation in *ethnocentrism* exists at the former level, while 95.3 per cent (0.941 / (0.046 + 0.941)) of its variation exists at the latter level. *Education*, which factors into economic position as well as into cultural capital, was entered into model 1, and its coefficient is unsurprisingly negative and significant.[21] As found time and again, the more highly educated are less ethnocentric than the less well educated. The question is whether this can be interpreted as an economic effect or as a cultural effect.

Model 2 that adds the indicators for economic position *income* and *unemployed* is the first step in unravelling these effects.[22] Only the former affects ethnocentrism in the way one would expect on the basis of the ethnic competition theory. Its effect is rather weak, however, and does not affect the strength of *education*. The latter finding suggests that the effect of education is primarily cultural instead of economic. This, combined with the fact that *unemployment* has no impact on ethnocentrism whatsoever, points in the direction that in so as far as a weak economic position drives ethnocentrism, it does not do so very strongly. The economic weakness of the less educated consists of their weak market position *which manifests itself* in low incomes and high unemployment risks. It would be very odd to consider someone who is not well educated, but is employed with a substantial income as economically weak. If education had functioned as a vessel for a weak economic position in this analysis, its impact should therefore have declined substantially after entering income and unemployment. This did not happen, which leads

21 As the one degree of freedom (one variable was entered into the model) yields a drop in deviance of 80.99 (2076.88-1995.89), model 1 is a significant improvement of the null model. According to the chi square distribution, there is need for a mere drop of 3.841 in deviance to be significant at 5 per cent level.
22 It proves not to be a significant improvement in comparison to model 1 ((1995.89-1989.96) < 5.991 (5 per cent level two sided). Merely entering income does improve the model in comparison to model 1 however.

Table 6.2: ethnocentrism of natives in 22 Dutch metropolitan agglomerations explained by individual-level and urban-level economic and cultural indicators. (multilevel regression analysis; entries are regression coefficients; estimation: maximum likelihood).

	Null Model	*Model 1*	*Model2*	*Model 3*	*Model 4*	*Model 5a*	*Model5b*
Independents individual level	*β*	*β*	*β*	*β*	*β*	*β*	*β*
Constant	0.057	0.045	0.048	0.039	0.011	0.006	-0.032
Education		-0.328***	-0.317***	-0.289***	-0.330***	-0.316***	-0.291***
Income			-0.083**	-0.079**	-0.079**	-0.073**	-0.081**
Unemployed			-0.002	-0.006	-0.006	-0.007	-0.008
Cultural participation				-0.108**	-0.108***	-0.109***	-0.109***
Independents municipality level							
Producer services					-0.077~	-0.058	0.051
Economic opportunity structure						0.047	
Cultural tolerance							-0.216**
Cross-level interactions							
Economic opportunity structure *							
education						-0.102**	
Cultural tolerance * education							0.109~
Variance metropolitan level							
(N = 22)	0.046**	0.032*	0.032*	0.029*	0.025~	0.021	0.013
Variance individual level							
(N = 770)	0.941***	0.847***	0.840***	0.832***	0.817***	0.817***	0.819***
Slope education					0.015~	0.006	0.003
Deviance	2,076.88	1,995.89	1,989.96	1,981.86	1,975.59	1,969.50	1,965.20
DF		1	2	1	2	2	2

Source: CCN 2004/6, Atlas for municipalities 2004, and Statline Statistics Netherlands (*CBS*) (own calculations).
***=p<0.01; **p<0.05; *p<0.1 two-sided. ~ p<0.1 one-sided.

to the conclusion that on the individual level there is no compelling evidence for the ethnic competition theory, to say the least.

Model 3 adds the indicator for embodied cultural capital *cultural participation*.[23] Its coefficient is negative and significant as could be expected on the basis of the cultural logic of ethnocentrism: those with ample cultural capital are less ethnocentric than those with little cultural capital. Just as in all the other studies on ethnocentrism or cultural tolerance in general that found a similar effect (Achterberg & Houtman 2006, Houtman 1994, Houtman 2001, Houtman 2003, Houtman, Achterberg & Derks 2008, Van der Waal et al. 2010), embodied cultural capital and institutionalised cultural capital largely operate independently as drivers for cultural tolerance, as the effect of education hardly declines in strength. This is logical, for although there is a substantial correlation between the two forms of cultural capital, they are nonetheless distinct forms that can have an independent effect on cultural tolerance. In other words, it is not the cultural tolerance of those with ample embodied cultural capital that makes those with ample institutionalised cultural capital culturally tolerant, or vice versa.

All in all, at the individual level, most findings point in the direction that the ethnocentrism of less educated natives is primarily driven by their small cultural capital and much less so by their weak economic position. [24] Thus hypothesis 3 is empirically corroborated. In the models that follow, we will unravel to what extent the economic logic and cultural logic can account for differences in ethnocentrism among cities. But before doing so, it first needs to be clear as to whether the relationship between education and ethnocentrism differs among cities. Therefore, besides entering *producer services*, model 4 controls whether education has a significant random slope, which proves to be

23 Model 3 is a significant improvement of model 2 (1989.96-1981.86 > 3.841).
24 It must be stressed that it is not very likely that tolerance towards ethnic minorities, or cultural tolerance in general, is one-sidedly caused by institutionalised and cultural capital, because the reverse is equally possible. People who emphasise the importance of freedom in the cultural realm are likely to be more interested in high-status culture than people who emphasise the importance of social order – if only because in many high-status cultural expressions the legitimacy of that order is questioned. The same line of reasoning can be applied to the link between education and cultural tolerance. The ability to recognize cultural expressions and to comprehend their meaning is an ability that will be very valuable for comprehending the issues addressed in many academic disciplines. Instead of the one – institutionalised and embodied cultural capital – causing the other – cultural tolerance, they are more likely to mutually influence each other: a Weberian elective affinity (cf. Houtman 2003: 159-162). For the issue at hand this is not problematic, for it still indicates that the ethnocentrism of less educated natives is primarily a cultural, instead of an economic, phenomenon.

the case.[25] What model 4 shows as well is that in cities with the highest share of employment in the advanced producer services, the population is least ethnocentric: the coefficient of *producer services* is negative and significant, as could be expected on the basis of the economic logic of the ethnic competition theory, as well as on the basis of the cultural logic. The question is which one can account for this finding.

To find out I modelled both explanations independently. Model 5a represents the economic explanation, model 5b represents the cultural, and only the latter proves to be empirically valid.[26] The culturally tolerant atmosphere, not the economic opportunity structure, can explain the lower level of ethnocentrism in cities with the highest share of employment in the producer services.The coefficient of *cultural tolerance* is significant and in the right direction as it indicates that in cities with the most culturally tolerant atmosphere, the population is least ethnocentric, while *economic opportunity structure* has no impact on this ethnocentrism whatsoever. Also, the cross-level interactions unequivocally point in the direction of the cultural explanation instead of the economic explanation. The coefficient of *cultural tolerance* and *education* is positive and significant, meaning that in the most culturally tolerant cities less educated and more highly educated natives differ less in their level of ethnocentrism than in the least culturally tolerant cities. The interaction effect of *economic opportunity structure* with *education*, on the other hand, is negative: in cities with the lowest unemployment level less educated natives are much more ethnocentric than more highly educated natives than in cities with the highest share of unemployment. This is contrary to what the ethnic competition theory asserts, and therefore hypothesis 2 is rejected.

Considering these findings it comes as no surprise that the effect of *producer services* in model 5a hardly declines in strength as compared to model 4, while it does in model 5b, where it even becomes positive instead of negative. Culture, and not economics, is responsible for the fact that the population in cities with a high share of employment in the producer services is less ethnocentric than in cities with a low share of such employment. This not only strongly points in the direction that ethnocentrism has cultural instead of economic roots, but also validates, by my knowledge for the first time,

25 Model 4 is a significant improvement of model 3 (1981.86-1975.59 > 5.991).
26 Both model 5a (1975.59-1969.50 > 5.991) and model 5b (1975.59-1965.20) are significant improvements of model 4.

Florida's *bohemian* index. For this index indeed proves a valid indicator for a culturally tolerant atmosphere of a city – at least when it comes to the level of ethnocentrism of its population.

Yet, the question remains which scenario can account for the finding that in the most culturally tolerant cities the level of ethnocentrism is lowest, *combined* with the finding that in those cities less educated natives and more highly educated natives hardly differ in the extent to which they are ethnocentric. It could in the first place be possible that both categories are less ethnocentric in the most culturally tolerant cities than in the least culturally tolerant cities, but that this applies more strongly to the less educated. In the second place it could be possible that only the less educated are less ethnocentric in the most culturally tolerant cities, as the level of ethnocentrism of the higher educated hardly differs among cities. To find out, I replicated the analyses in table 6.2 for the less educated natives and more highly educated natives separately. Therefore, the dataset was split into two halves: one dataset containing all respondents with less than sixteen years of education after the age of six (less educated) and one dataset containing all respondents with more than fifteen years of education after the age of six (more highly educated). Subsequently, with each dataset I modelled the impact of *tolerant culture* on *ethnocentrism*.

Table 6.3 shows the results. For both the first dataset (less educated natives), and the second dataset (more highly educated natives), there is a significant effect of *cultural tolerance* on *ethnocentrism*.[27] The former proves to be substantially stronger than the latter, which means that although both less and more educated natives are less ethnocentric in the most culturally tolerant cities, it is especially the ethnocentrism of the less educated that drops substantially, as the cultural atmosphere of cities becomes more tolerant – which confirms hypothesis 4.

27 Model 1 of both the less educated and the more educated proved to be a significant improvement on the null models (1127.46-1118.96 > 3.841; 944.11-857.45 >3.841).

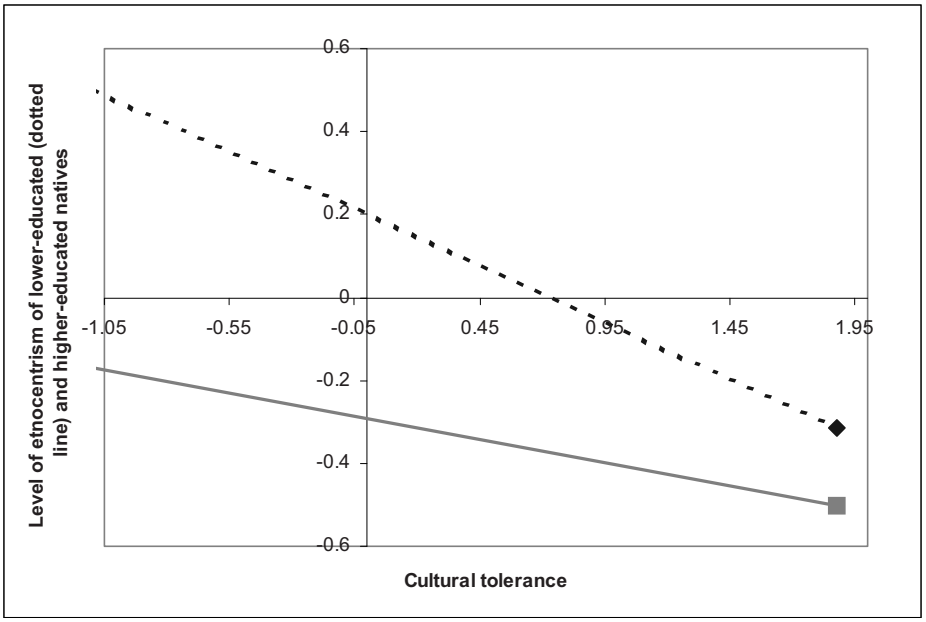
Table 6.3: ethnocentrism of less educated and more educated natives in 22 Dutch metropolitan agglomerations respectively explained by tolerant culture. (multilevel regression analysis; entries are regression coefficients; estimation: maximum likelihood).

	Less educated		*More highly educated*	
	Null Model	*Model 1*	*Null model*	*Model 1*
Independents	*B*	*β*	*β*	*β*
Constant	0.312***	0.202**	-0.267***	-0.292***
Tolerant culture		-0.275**		-0.111~
Variance metropolitan level (N = 22)	0.072*	0.013	0.029~	0.012
Variance individual level	1.138***	1.146***	0.595***	0.600***
Deviance	1127.46	1118.96	944.11	857.45
DF		1		1
N	387	387	383	383

Source: CCN 2004/6, Atlas for municipalities 2004, and Statline Statistics Netherlands (*CBS*) (own calculations).
***=p<0.01; **p<0.05; *p<0.1 two-sided. ~ p<0.1 one-sided.

Figure 6.4 is the graphic representation of the findings in tables 6.2 and 6.3. It shows in the first place that the extent to which the more and less educated natives differ in their level of ethnocentrism is smaller in the most culturally tolerant cities than in the least culturally tolerant cities as found in model 5b in table 6.2. In the most tolerant cities, the difference between less educated natives and more educated natives proves to be minimal. Put differently, the effect of education on ethnocentrism that has been found over and over again in the social sciences in recent decades proves to be largely absent in the most culturally tolerant cities. In the second place, figure 6.4 shows that the ethnocentrism of both the less and more educated natives declines as the cultural atmosphere in cities becomes more tolerant, albeit more strongly so for the former than for the latter – just as found in table 6.3.

Figure 6.4: The impact of the urban atmosphere of cultural tolerance on the ethnocentrism of less educated natives (dotted line) and more highly educated natives in 22 Dutch metropolitan agglomerations.



6.4 Conclusions: culture counts

This chapter assessed the validity of the economic logic of the ethnic competition theory. In the previous chapter we did see that less educated natives have to compete with immigrants for jobs, especially in cities with a low share of employment in the advanced producer services. In such cities there is a mismatch between labour demand and labour supply at the bottom of the labour market, which, combined with immigration, leads to substitution between immigrants and less educated natives. This is exactly the condition that according to many will spur ethnic animosities. Despite its face validity, this economic logic of the ethnic competition theory proved to be largely invalid.

As could be expected on the basis of this reasoning, less well educated natives in Dutch cities are more ethnocentric than more highly educated natives, especially so in cities with a low share of employment in the advanced producer services. However, that this is driven by their weak economic position could hardly be corroborated, and the differences between cities could not be explained by differences in labour-market opportunities. The evidence for the competing cultural logic was far more compelling, especially for explaining differences between cities. The seventh and last question addressed in this study - *is the ethnocentrism of lower-educated urbanites driven by ethnic competition*? – therefore needs to be answered in the negative, and there are three reasons to do so.

In the first place, at the individual level both education (institutionalised cultural capital) and high-status cultural participation (embodied cultural capital) proved to affect ethnocentrism (much) more strongly than income, the only unambiguous indicator for economic position that affected ethnocentrism. The other unambiguous indicator for a weak economic position, unemployment, did not have any effect at all. Second, *if education would function as a vessel for economic interests*, according to the economic logic of the ethnic competition theory, the effect of income needs to be (partly) responsible for the substantial negative effect of education on ethnocentrism. This proved not to be the case, however, which suggests that the effect of education on ethnocentrism should largely be interpreted as a cultural effect that is driven by the liberalising

consequences of institutionalised cultural capital. In the third place, at city level, the economic logic of the ethnic competition theory proved to be completely invalid, while the cultural logic could explain convincingly why less educated natives in cities with high employment shares in the advanced producer services are less ethnocentric than in cities with a low share of employment in the advanced producer services. It was the atmosphere of cultural tolerance that could account for this finding, not the presence or absence of labour market opportunities.

In 1996 Sharp claimed in her article *Culture Wars and City Politics* that 'the elevation of interests over values as the focus of inquiry in political science leaves the matter of morals-based social conflict on the periphery of the intellectual enterprise' (p. 741). In her article entitled *Revitalizing Urban Research: Can Cultural Explanation Bring Us Back from the Periphery?* she still feels the urge to spread this message: 'if the urban politics field has become marginalised, it is because the field has neglected to develop a contemporary, theoretically grounded version of cultural explanation to go along with its attention to institutions and political economy' (2007: 55). That the same argument needs to be made eleven years after its initial formulation clearly indicates that the field of urban politics leaves much to be desired when considering the subject addressed in this chapter. Sharp therefore urged researchers to 'empirically investigate whether residence in unconventional, new political culture cities affects attitudes (such as tolerance for diversity) once effects of individual-level attributes (…) are take into account' (2007:72). Together with Joslyn she did so (2008) and found that culture counts in the exact same way as it did in this chapter: in the most culturally tolerant cities the effect of education on ethnocentrism is largely absent. The indicator for cultural tolerance used in that study however combined economic indicators, such as the presence of the creative class, patent innovations and the economic output by high-tech industry, with cultural indicators, such as the prevalence of gays, that highly correlate with the bohemian index. This is problematic for two interrelated reasons.

In the first place, Sharp and Joslyn's findings are hard to interpret because, as outlined above, the 'geography of cultural tolerance' in the United States significantly overlaps with the 'geography of post-industrialism' (Florida 2005: 122). Considering that the most post-industrial cities in the United States yield the highest labour demand for the

less educated (Elliott 1999a, 1999b, 2004, Kasarda 1985, Kasarda & Friedrichs 1985, 1986), both the economic logic of the ethnic competition theory and the cultural logic can account for their finding that in the most culturally tolerant cities the level of ethnocentrism hardly differs between the more and less well educated. The indicator that was used to measure cultural tolerance simply does not allow discriminating between the cultural logic that was addressed in that study and the economic logic of the ethnic competition theory. Their finding that cities with a culturally tolerant atmosphere 'diminish the degree to which racial tolerance is driven by (…) educational differences' (2008: 584) can therefore be interpreted on the basis of both these explanations. To overcome such problems of interpretation, future research that aims to add a theoretically grounded cultural explanation to the field of urban politics should therefore disentangle cultural and economic attributes of cities analytically and empirically. As shown in this chapter, despite their substantial correlation, they function independently as only one of them was able to explain the level of ethnocentrism of urban populations.

The second reason why combining economic and cultural attributes of cities into one indicator of cultural tolerance is problematic is more fundamental. It concerns the relationship between economics and culture. In the field of urban politics it is implicitly or explicitly assumed that the former underlies/determines the latter. Even the works of Sharp, a fierce proponent of the cultural explanation in that field, still breaths that spirit. In her article *Revitalizing Urban Research: Can Cultural Explanation Bring Us Back form the Periphery?* she for instance claims that 'cultural change and the deep divisions that it can create revolve around the emergence of *postindustrial trends* in the way which people work and live (…) Cities where such trends are relatively far advanced exhibit a subculture very different from the traditional subculture that predominates in other cities' (2007: 57, italics added).

This is however not a peculiarity of the field of urban politics, but represents the dominant line of reasoning in political science in general. This shows itself for instance in that the bulk of scholars of political change in the west label the new political culture as 'post-industrial politics' (cf. inter alia. Clark & Lipset 2001, Clark & Rempel 1997, Inglehart 1990), and consider the transition to a post-industrial economy as the driving force for (1) the rising salience of cultural issues in western countries, (2) the political

expression of these values by the new left and new right, and (3) the electoral changes and cleavages these bring in their wake (Betz 1994, Ignazi 2003, Kitschelt 1997, Kriesi 2008). The idea that technological and economic change eventually determines cultural change underlies the bulk of studies in the social sciences at large (Kumar 1978, 2004, Houtman 2003). This is probably the very reason why cultural changes or phenomena are not assigned an independent explanatory role in the mainstream of the social sciences (cf. Alexander 2003, Berting 1995, Houtman 2003).

What this chapter made clear is that a cultural attribute of cities can have an independent explanatory role. Despite its substantial correlation with the share of employment in the advanced producer services, the urban atmosphere of cultural tolerance proved to function independently from economic attributes in explaining the ethnocentrism of urban populations. The question of whether this atmosphere is eventually a result of post-industrial development is however an empirical one that lies beyond the reach of this study, but I do not see why this will be necessarily so. In fact, as argued by the very author of the indicator for cultural tolerance used in this study, it is just as likely that it is the other way around. According to Florida the most culturally tolerant cities thrive economically, because they attract the most creative employees (2002, 2003, 2004, 2005). Moreover, the argument that a culturally tolerant atmosphere is an important condition for economic progress is often used to explain the rise and fall of cities from ancient times onwards (cf. Chua 2007). If so, culture would underlie economics instead of the other way around.

It is, in short, not clear at all as to whether economic change underlies cultural change or the other way around, and as to whether there is a causal relationship between the two at all instead of the possibility that their substantial correlation is the result of a Weberian Wahlverwandtschaft, put differently an 'elective affinity'. If the field of urban politics would underscore this instead of simply assuming one of the options, it could really gain from a 'theoretically grounded version of a cultural explanation to go along with its attention to institutions and political economy' (Sharp 2007: 55). To do so, it simply needs to disentangle cultural and economic attributes of cities *analytically* and *empirically* and consequently treat them as independent factors in assessments of the causes and consequences of the new political culture / cultural politics. This chapter did

so, and consequently convincingly showed that a theoretically grounded version of a cultural explanation can indeed be very fruitful in the field of urban politics.

7 Conclusions and Debate

The globalization of economic activity entails a new type of organizational structure. To capture this theoretically and empirically requires, correspondingly, a new type of conceptual architecture (Sassen 2001: xviii)

7.1 Introduction

This chapter will discuss the findings in the previous chapters and their theoretical implications as elicited by the seven research questions that guided this study (section 7.2). After doing so, it will discuss to what extent the theoretical notions in the global city theoretical framework and debate help us to understand the impact of the current phase of economic globalisation on the social, economic and political reality of cities (section 7.3). The concluding section 7.4 discusses the alleged political implications of this study.

7.2 After the unravelling: theoretical implications

Sassen formulated the global city theoretical framework, the new conceptual architecture referred to in the quote at the beginning of this chapter, because previous explanations for changes in urban labour markets were not considered sufficient for understanding the impact of the recent phase of economic globalisation on the social, economic and political reality of cities (Sassen 1994, 2000, 2001, 2006a). It argues that the new type of organisational structure which characterises the current phase of globalisation – the new international division of labour that stems from the practice of outsourcing parts of the production process from the advanced economies to newly industrialising countries – has brought major changes to urban labour markets in the advanced economies, and it provides a theoretical rationale to explain how this comes about.

Even though this theoretical rationale is built of several theoretical constructs that were already formulated in the 1980s and early 1990s, it is not yet clear whether it helps us to understand the impact of the current phase of economic globalisation on the social, economic and political reality of cities just as its author claimed. In the introductory chapter, it was argued that what is largely responsible for this theoretical stagnation is that the global city theoretical framework is not a testable middle-range theory, but a grand hotchpotch: a mishmash of integrated theories, propositions and expectations. The bulk of empirical studies in the global city debate that it spurred therefore merely used it as a frame of reference to interpret urban developments thought to be the consequence of economic globalisation. As a result, much has been said, but little is known about the impact of economic globalisation on urban labour markets in the global city debate.

This study therefore aimed to find out whether the central theoretical notions in global city theoretical framework and their alternative interpretations in the global city debate help us to understand the impact of the current phase of economic globalisation on the social, economic and political reality of cities. To do so, seven questions called for an answer. To answer them, the global city debate needed to be unravelled in order to uncover the theoretical underpinnings of this impact, and other theories concerning this impact needed to be addressed as well. In the previous chapters the research questions were answered by assessing the empirical validity of these theoretical underpinnings. The sections that follow will discuss the theoretical implications of the findings of this endeavour, and what this means for urban labour markets in the advanced economies.

7.2.1 The changing economic base of cities

Chapter 2 first addressed the question *does the economic base of cities increasingly resemble the economic base of global cities?* It did so because in the global city debate it is often assumed that global cities wear the future guise of other cities. This is contrary to what is asserted in the global city theoretical framework which claims that the clustering of advanced producer services in the most service-oriented cities – be they global cities or regional nodes – feeds on the deindustrialisation of former industrial strongholds. As a result, it is expected that the employment share in the advanced producer services

increases significantly more in the former than in the latter. In other words, according to the global city theoretical framework, the economic base of many cities, most notably former industrial strongholds, *decreasingly* resembles the economic base of global cities and other service-oriented cities that function as regional nodes. Chapter 2 showed this is exactly what has happened in the Netherlands between 1995 and 2008. The first research question addressed in this study therefore needs to be answered in the negative.

Previous studies on the changing economic base of cities in the United States and the former Federal Republic of Germany in the 1980s already pointed in the same direction (Kasarda 1985, Kasarda & Friedrichs 1985, 1986). In those countries the transition to a post-industrial economy seemed to affect cities unequally in the exact same way as found in this study: former industrial strongholds lagged behind when it came to employment growth in the advanced producer services. This suggests that we are dealing with a general phenomenon in advanced economies. Yet, which former industrial strongholds will lag behind most, and which service-oriented cities will see their share of employment in the advanced producer services increase most, of course remains an empirical question for any given country.

The second research question addressed in chapter 2 reads *does international outsourcing drive deindustrialisation and the clustering of advanced producer services in cities?* In the global city theoretical framework and the global city debate it is assumed that deindustrialisation and the clustering of advanced producer services in cities in the advanced economies is caused by international outsourcing. According to this argument, those cities saw their share of employment in industry decline substantially because large parts of industrial production have been outsourced to newly industrialising countries. The management of the globally dispersed production chains of multinationals that result from this practice is claimed to be too complex to be handled by the headquarters of these multinationals themselves. Therefore, it is contracted out to advanced producer services such as law, accountancy, and consultancy firms, which therefore cluster in cities. Although this argument was initially formulated for a limited number of global cities, in the global city debate it is considered relevant for all cities in the advanced economies. In short, deindustrialisation and the clustering of advanced producer services in cities in

general are attributed to international outsourcing and subsequently to economic globalisation.

This proved to be a crude overstatement, as it combines arguments on deindustrialisation that are incorrect with arguments on the clustering of advanced producer services that cannot be applied to cities in the advanced economies in general. Concerning deindustrialisation, the bulk of the studies on its causes indicate that it is hardly driven by international outsourcing. Instead, the combination of technological change and change in demand from goods to services is responsible for the declining share of employment in industry in cities in the advanced economies. These findings falsify the argument in the global city theoretical framework concerning the link between economic globalisation and deindustrialisation. As the bulk of the studies in the global city debate that map deindustrialisation do not assess its causes, but simply interpret them on the basis of arguments in the global city theoretical framework, this false argument is reproduced over and over again. This does not however imply that deindustrialisation has no link to economic globalisation whatsoever, as technological change could be driven by international competition.

Concerning the clustering of advanced producer services, this is only driven by international outsourcing in so far as it concerns the advanced producer services that cluster in global cities to produce the capabilities that headquarters of multinationals need to manage their globally dispersed production process. That a part of the advanced producer services in global cities is involved in this production is beyond doubt, if only for the ostentatious way it manifests itself in places like Manhattan (New York), Canary Wharf (London) and the *Zuidas* (Amsterdam). Yet, this does not mean that all professionals in the advanced producer services in global cities are involved in producing the global control capacities for headquarters of multinationals. In addition, as shown in chapter 2, many former industrial strongholds and cities that function as regional nodes saw their employment share in the advanced producer services increase in recent decades as well. That the clustering of advanced producer services not only manifests itself in global cities, but also in cities that function as regional nodes in attenuated form as argued in the global city theoretical framework (Sassen 2000: 139, 2006a: 193, 2006c: x) has thus been corroborated in this study. However, this clustering is not driven by

international outsourcing, and the link with economic globalisation therefore seems to be missing. If there is such a link, it is at least not in accordance with the argument by which it is interpreted in the global city debate.

In short, research question number 2 – *does international outsourcing drive deindustrialisation and the clustering of advanced producer services in cities?* – needs to be answered in the negative because international outsourcing does not drive deindustrialisation and does drive only part of the clustering of advanced producer services in global cities. Why, then, does the employment in the advanced producer services increase in former industrial strongholds and regional nodes as well? This was not assessed in this study, but I think that what is crucial here is that the vertical disintegration of firms which did lead to 'the new organisational structure' that characterises the current phase of economic globalisation (Sassen 2001: xviii) – the new international division of labour – has more causes than lower wage levels in less-developed economies: a quest for efficiency that does not necessarily entail economic globalisation.

Many consider a vertically disintegrated firm as more efficient for producing goods and services. By sticking to their core business, much of what was previously produced in-house in vertically integrated firms is now provided by other firms, most notably advanced *producer services*. The questions of whether this contracting out is more efficient indeed and how this higher efficiency exactly comes about go beyond the scope of this study and are not important here. What is important is that contracting out leads to a new organisational structure, which is not driven by international outsourcing and which manifests itself at another geographical scale than the new organisational structure to which the global city theoretical framework refers.

The question that remains is to what extent this argument travels beyond the Dutch case. I see no reason why this should be different for advanced economies other than the Netherlands. For it all boils down to the finding that only the share of employment in the advanced producer services in global cities that is involved in the production of the capabilities to manage globally dispersed production processes can be directly linked to international outsourcing. The bulk of cities in all advanced economies however, just as in the Netherlands, are former industrial strongholds and regional nodes

where the clustering of advanced producer services has no such link with international outsourcing, but is more likely to be driven by regional or national processes.

7.2.2 Polarisation, professionalisation and mismatch

The argument in the global city theoretical framework that the clustering of advanced producer services is the primary driving force of urban employment in recent decades is undisputed. That these services employ a disproportionate share of highly educated professionals – that is, as compared to other sectors, most notably those that were dominant in the industrial / Fordist era –is undisputed as well. What is disputed, however, is whether the clustering of advanced producer services leads to a polarised occupational hierarchy as predicted by the polarisation thesis of Sassen, or to a professionalised occupational hierarchy as predicted by the professionalisation thesis of Hamnett. The crucial difference between these theses is that according to the former the clustering of advanced producer services leads to high labour demand for low-skilled service workers, while according to the latter it leads to low labour demand for low-skilled service workers. On the basis of the polarisation thesis, it can therefore be expected that the lowest unemployment level among less educated urbanites can be found in cities with the highest employment share in these services, while on the basis of the professionalisation thesis it can be expected that it is exactly the other way around.

Dozens of studies have assessed whether the occupational hierarchy of cities becomes polarised or professionalised from the first formulations of the polarisation and professionalisation thesis onwards (see table A1 in appendix A). Both options were found several times, seemingly without a clear pattern as to why some studies find a polarised occupational hierarchy while other studies find a professionalised occupational hierarchy. The most recent study on Dutch cities concerned a comparison of Amsterdam with Rotterdam and found a polarised and and a professionalised occupational hierarchy respectively (Burgers & Musterd 2002). As the share of professionals in Amsterdam is substantially higher than in Rotterdam, the authors suspected that this finding could be explained by the theoretical reasoning behind the polarisation thesis (Burgers and Musterd 2002). This thesis asserts that the presence of professionals in the advanced

producer services yields high labour demand for low-skilled service workers to cater the life-styles of the former. If so, only in cities with a very high share of employment in the advanced producer services and consequently a very high share of professionals employed in those services, will the occupational hierarchy be polarised. Consequently, in cities with a low share of advanced producer services, the share of professionals is not large enough to yield high labour demand for low-skilled service workers, and the occupational hierarchy will be professionalised instead of polarised.

Yet, although this seems very plausible, the study of Burgers and Musterd could not provide the litmus test for the empirical tenability of the polarisation thesis, as it assessed just two cities. Like the bulk of studies in the global city debate, which assess the occupational hierarchy in one or two cities, it could therefore not determine whether the clustering of advanced producer services is indeed the driving force for this high labour demand for less educated urbanites. This needs to be tested by means of a comparative framework, and chapter 3 did so by asking the question *what is the impact of the clustering of advanced producer services on the unemployment level of less educated urbanites?* It found that, in accordance with the polarisation thesis, the lowest level of unemployment among less educated urbanites exists in Dutch cities with the highest share of employment in the advanced producer services. This is not a Dutch idiosyncrasy, as previous studies on cities in the former Federal Republic of Germany and United States (Kasarda 1985, Kasarda & Friedrichs 1985, 1986) did yield results of a similar kind. They showed that cities with a low share of employment in the advanced producer services generate the least labour market opportunities for the less educated.

Two questions remain: 1) how does this finding relate to previous findings on the polarisation and/or professionalisation thesis in the global city debate, and 2) how far do these findings travel beyond the Dutch case? Concerning the first question, all previous studies on European global cities that used a similar strategy as Burgers and Musterd (2002) did find a professionalised occupational hierarchy. However, these studies on Amsterdam (Hamnett 1994a), London (Hamnett 1994b, 1996a, 2004) and Paris (Rhein 1996) used data from the 1980s, while Burgers and Musterd used data from the 1990s. In the 1980s, the employment share in the advanced producer services might have been too small to yield enough labour demand for less educated service workers. The fact that

Hamnett found a professionalised occupational hierarchy in Amsterdam in the 1980s, while Burgers and Musterd found a polarised occupational hierarchy in Amsterdam in the 1990s also points in this direction. It can therefore be expected that the occupational hierarchy of London, Paris and other European global cities has become polarised by now, but that this has not yet been documented. As far as I know, besides the study of Burgers and Musterd, there are no studies on occupational change in European global cities that apply the same method with post-1990 data. Recent studies on London (May et al. 2007) and Athens (Maloutas 2007) by means of a slightly different method did however find a polarised occupational hierarchy as well. Again, this strongly points in the direction that the occupational hierarchy of European global cities will by now be polarised.

In short, all available evidence suggests that the occupational hierarchy in European global cities has become polarised by now and that it is indeed the clustering of advanced producer services that drives the high labour demand for less educated urbanites as asserted in the polarisation thesis. Yet, this does not mean that the occupational hierarchy in cities in the advanced economies in general will be polarised by now. As it was found in chapter 2 that the employment share in the advanced producer services in former industrial strongholds increases at a much lower pace than in the most service-oriented cities, it is very likely that the former still have a professionalised occupational hierarchy, while the latter have a polarised occupational hierarchy. The employment share in the advanced producer services in former industrial strongholds is simply not high enough to yield high labour demand for less educated service workers. Consequently, those cities still have to cope with high unemployment levels.

Again, just as argued in the previous section, the widely held assumption in the global city debate that global cities like New York and Amsterdam wear the future guise of cities lower in the urban hierarchy (e.g. inter alia, Burgers 1996, Friedmann & Wolff 1982: 319-20, Mollenkopf 2009, Mollenkopf & Castells 1992, Vaattovaara & Kortteinen 2003) is highly problematic. This is questionable not only because the economic base of the bulk of cities becomes less instead of more similar to the economic base of global cities, but also because all the available evidence suggests that the occupational hierarchy of cities *in general* will be neither polarised nor professionalised. Instead, the former will

apply to cities with the highest share of employment in the advanced producer services (most notably, global cities), while the latter will apply to cities with the lowest share of employment in those services (most notably, former industrial strongholds).

The very author of the professionalisation thesis, Chris Hamnett, already has suggested that due to the clustering of advanced producer services the occupational hierarchy of some cities will be polarised, while it will be professionalised in other cities. However, he came to this conclusion on the basis of an argument other than the one which was confirmed in this study. He argued that the polarisation thesis is 'Americancentric' (Hamnett 1994a, 1994b, 1996a, 1996b, 1998, 2004, cf. White 1998), as global cities in the United States combine a high immigrant influx with a highly deregulated labour market, which global cities outside the United States do not. Consequently, only in the former high labour demand for cheap service workers can be met by an abundant supply of low-skilled labour. As a result, he expected that the occupational hierarchy in global cities in the United States would be polarised, while it would be professionalised in more regulated European labour markets. In short, according to Hamnett, the extent to which urban labour markets are regulated will determine whether the occupational hierarchy in global cities will be polarised or professionalised.

On the basis of findings in this study, I also suggest that both polarisation and professionalisation will occur, but not according to the scenario of Hamnett. Both in deregulated and regulated advanced economies, cities with the highest share of employment in the advanced producer services (most notably, global cities) will have a polarised occupational hierarchy, while cities with the lowest share of employment in the advanced producer services (most notably, former industrial strongholds) will have a professionalised occupational hierarchy. The question of whether the share of employment in the advanced producer services will keep on increasing in the latter type of cities and consequently will lead to polarised occupational hierarchy is an empirical one. The findings in chapter 2 that this increase occurs in the former industrial strongholds at a much slower pace than in the least industrial cities suggests that this will at least take some time, and that the high unemployment levels these cities have to cope with will persist in the near future.

7.2.3 The new international division of labour and immigration

The global city theoretical framework claims that the current phase of economic globalisation spurs *new* migration flows from less-developed countries to cities in the advanced economies. As such, it does not compete with classical migration theories that revolve around underdevelopment and poverty and that basically claim that this migration is driven by the urge of migrants to improve their economic fortunes. Instead, it is argued that these 'classical' migration flows are now accompanied by new ones, driven by foreign direct investments in newly industrialising countries and the clustering of advanced producer services in cities, most notably global cities, in the advanced economies.

These investments in newly industrialising countries are postulated to cause an uprooting of people, which constitutes the *push factor* for new migration flows. It is claimed that these investments, in the form of production sites that are often referred to as export processing zones, spur labour migration from rural hinterlands to coastal and/or urban regions. Consequently, people who were previously embedded in traditional work structures become wage labourers in these production sites that produce goods and services for export to the advanced economies. The combination of the capitalist logic of wage labour and the production of goods and services for the advanced economies makes these workers aware of the possibility of migrating to these economies in order to improve their economic position. As foreign direct investments lead to cultural links between sending and receiving countries, such migration is supposed to exactly mirror the investment flows: from the countries that receive investments to the countries where these investments come from. According to the global city theoretical framework, the *pull factor* for this new immigration is the high labour demand for low-skilled service workers in cities in the advanced economies, especially in global cities, where according to the polarisation thesis such high labour demand exists.

Even though these new push and pull factors were formulated in the early 1980s, their combination has not yet been assessed. In the global city debate, they are simply assumed to be valid. This study filled this gap by assessing these factors for migration

from newly industrialising countries to Dutch cities and did so by considering the question *can the new immigration to cities in the advanced economies be explained by foreign direct investments?* It was found that, controlled for classical migration patterns that revolve around differences in economic developments between countries, the greatest increase in new migration flows stemmed from countries where Dutch foreign direct investments did increase most. Although this is completely in accordance with the push factor argument in the global city theoretical framework, it should be interpreted with care for three reasons.

In the first place, although I tried to control for this problem by excluding the estimated number of knowledge workers, the increase in immigration concerned both more and less educated immigrants. Unfortunately it was not possible to select just the latter, although these clearly are the immigrants addressed in the global city theoretical framework. In the second place, the causality of the relationship that was found is unclear, especially because another theory asserts that the relationship flows in the opposite direction. That theory basically claims that the information that immigrants have concerning investment opportunities in their homeland is what drives foreign direct investments. If so, immigration is not driven by foreign direct investments, but foreign direct investments are driven by immigration. In the third place, the applied method cannot reveal whether the immigration from newly industrialising countries to the advanced economies is indeed driven by 'uprooting' as claimed in the global city theoretical framework. Future qualitative research should uncover whether this mechanism indeed exists, but this goes way beyond the scope of this study.

The findings of the analyses on the pull factor are less difficult to interpret. According to the global city theoretical framework, high labour demand for low-skilled service workers due to the clustering of advanced producer services is what pulls immigrants from newly industrialising countries to cities in the advanced economies. Therefore the second question that was addressed in chapter 4 was *does the clustering of advanced producer services attract immigrant labour from newly industrialising countries?* If so, the greatest increase of those immigrants will be found in cities with the greatest increase in employment in the advanced producer services. Although a plausible explanation, it proved empirically invalid for the Dutch case. Indeed, labour demand for

the less educated is higher in cities with the highest share of employment in the advanced producer services, but this does not function as a pull factor for new immigrant groups. There was no relationship between the increase in new immigrant groups and the increase in this employment whatsoever.

What, then, do these findings on Dutch cities mean for cities in the advanced economies in general? Of course, advanced economies differ in their regulatory framework surrounding immigration, which will clearly influence the nature and extent of immigration. This does not however undermine the theoretical reasoning of the FDI-migration nexus, but merely influences the extent to which it exists. In addition, the empirical validity of the underlying uprooting mechanism of this push factor and the causal direction of the relation between FDI and migration flows call for closer scrutiny. If one, for the sake of the argument, assumes that this mechanism indeed exists and that the causal direction is that FDI spurs migration instead of the other way around, I do not see why this push factor would not lead to migration to advanced economies other than the Netherlands as well. In fact, two studies found the same relationship for the United States (Ricketts 1987, Yang 1998), which also points in this direction.

I expect that the findings on the pull factor will travel less well beyond the Netherlands, at least not to countries with less regulated labour and housing markets. After all, the pull factor for new immigration flows in the global city theoretical framework is a latter-day version of classical labour market logic. It is subsequently very likely that in less regulated labour markets, such as in the United States or the United Kingdom, the settlement of immigrants will be more strongly driven by labour demand than in the Netherlands, where one is less dependent on one's labour power for one's subsistence. In the Netherlands, and in many other European countries with regulated labour and housing markets for that matter, it is therefore likely that other considerations than labour market opportunities will have a substantial impact on the decisions of immigrants about where to settle.

7.2.4 The impact of immigration on urban labour markets

Sassen formulated the global city theoretical framework because in the current phase of economic globalisation old concepts by which 'sociologists have tended to study cities (…) are no longer sufficient' (Sassen 1994: xiii). Yet, this study showed this theoretical framework is only part of the story and has ironically obscured, rather than revealed, the impact of certain aspects of economic globalisation on urban labour markets. The focus of the global city theoretical framework is on the hallmark of the current phase of economic globalisation: international outsourcing and the new international division of labour that stems from it. In this framework, immigration is primarily considered a result, instead of a central element, of economic globalisation as argued in the previous section. However, immigration is also one of economic globalisation's constitutive elements – the globalisation of labour – and many therefore advocate treating it as such in the global city debate. In the globalisation literature at large, it is common practice to assess the impact of immigration on the labour market on the basis of the substitution thesis, which asserts that new waves of immigrants can lead to declining wages and unemployment among less educated natives and former waves of immigrants.

As the global city theoretical framework is built on the assumption that immigration from less-developed economies to cities in the advanced economies is driven by high labour demand for low-skilled service workers, the fact that in the global city debate the substitution thesis is overlooked might not be problematic. If so, it is not very likely that immigration will lead to substitution on the labour market. Yet, the economic base of many cities in the advanced economies does not become similar to the economic base of global cities, and consequently not all cities in the advanced economies yield high labour demand for low-skilled service workers. This, combined with the fact that, at least in the Netherlands, settlement of immigrants is not completely driven by labour market considerations, makes it less likely that no substitution will exist between immigrants and natives or former waves of immigrants on the labour market. The blind spot concerning this substitution in the global city debate therefore seems hardly justified. Hence chapter 5 revolved around the question *what is the impact of immigration on wages and unemployment among less educated urbanites?*

The analyses in Chapter 5 found that immigration does lead to substitution on urban labour markets. As labour supply increases due to immigration, labour demand for less educated urbanites falls. It was expected that this was conditional on type of urban economy. Cities with the highest share of employment in the advanced producer services yield higher labour demand for less educated urbanites than cities with the lowest share of employment in the advanced producer services. The substitution mechanism between immigrants on the one hand and less educated natives and former waves of immigrants on the other was therefore expected to be stronger in the latter than in the former. Put differently, in accordance with the supply and demand logic of the substitution thesis, immigration was expected to lead to the most substitution in cities where demand at the bottom of the labour market is lowest.

This expectation proved to be basically correct. In the first place a comparison of the impact of immigration on the wages of less educated natives and former waves of immigrants between Amsterdam and Rotterdam corroborated this logic: only in Rotterdam did immigration lead to downward pressure on the wages of these groups. The same logic applied to the unemployment level in Dutch cities in general. Immigration did increase the likelihood of unemployment of less educated urbanites, but this is most severe in cities with the lowest share of employment in the advanced producer services. In cities with the highest share of such employment, the job opportunities of less educated urbanites were unaffected by immigration.

These findings indicate that it can be very fruitful to look beyond one's own field of inquiry for solving theoretical puzzles. Many scholars in the field of labour economics often wonder why the impact of immigration on wages and unemployment is weaker than one would assume on the basis of the theoretical rationale of the substitution thesis (cf. Card 2005). The insights gained in this study might provide the key explanation. Urban or regional economies differ in the extent to which they are able to absorb immigrants on the labour market. Modelling these differences in future research on the tenability of the substitution thesis might therefore reveal that the weak substitution effects that were found in previous studies on the substitution thesis are the result of the false assumption that cities and regions do not differ in labour demand and/or the assumption that the settlement of immigrants is determined by labour market considerations.

7.2.5 Immigration, job opportunities and ethnocentrism

Several scholars in urban studies expected that the combination of immigration and post-industrialisation would lead to competition over scarce job opportunities between immigrants and less educated natives and that this competition would spur ethnocentrism among the latter. This argument is not unique to this field of research, however. It resonates through political and social science at large, under the rubric of the ethnic competition theory, the core idea of which is that 'competition for resources leads to attempts at exclusion of one group by another' (Olzak, 1992: 163, cf. Blalock 1956,1967). As argued and demonstrated in chapter 5, less educated natives are the primary competitors of immigrants on urban labour markets, especially so in cities with a low share of employment in the advanced producer services, because of the low demand for lower-educated labour. According to the ethnic competition theory it can therefore be expected that the less educated are more ethnocentric than the highly educated due to their weak economic position and that this is more so in cities with the lowest share of employment in the advanced producer services due to high unemployment levels.

Even though it seems very plausible this economic explanation might not be correct, as there is a competing cultural explanation that stresses the cultural differences between immigrants and natives, and not their competing economic interests. If so, the higher levels of ethnocentrism among the less educated is not driven by their weak economic position, but by their small amount of cultural capital which renders them less able to recognise other cultures and comprehend their meaning. Owing to their small amount of cultural capital, less educated natives are less likely to consider cultures – those that are experienced as familiar as much as those that appear alien – as 'culture', that is: as contingent and socially produced, than people with ample cultural capital, i.e., the more highly educated, do. Instead the former will consider culture rather as a fixed and 'natural' phenomenon and will subsequently consider other cultures as deviating from their own culture which is considered as a naturally given social order to which one ought to adapt. According to this cultural logic, the small amount of cultural capital of the

less educated, instead of their weak economic position and the concomitant competition over scarce resources with immigrants, will drive their resistance to immigrants.

At city level there is also a cultural pattern that can account for the observation that in cities with the highest share of employment in the advanced producer services, less educated natives will be less ethnocentric than in cities with al low share of employment in these services. Contrary to the economic explanation that revolves around differences in labour market opportunities, this cultural explanation revolves around differences in the cultural atmosphere of cities. In some cities this atmosphere is more tolerant towards cultural differences than in others, and the level of ethnocentrism of the population in those cities is consequently lower. Recent works of Florida showed that in the United States the most culturally tolerant cities significantly overlap with the most post-industrial cities (2002, 2003, 2004, 2005), and it can therefore be expected that Dutch cities with the highest share of employment in the advanced producer services will have the most culturally tolerant atmosphere as well.

The argument that ethnocentrism has its roots in competition over scarce economic resources between ethnic groups is, in short, disputed because of a competing cultural argument. Hence, chapter 6 addressed the question *is the ethnocentrism of less educated urbanites driven by ethnic competition?* The assessment in that chapter clearly demonstrated that a cultural explanation can account for the ethnocentrism of less educated natives in Dutch cities. All the available evidence points in the direction that it is their small amount of cultural capital instead of their weak economic position that drives their ethnocentrism. At the urban level this cultural explanation could account for the lower level of ethnocentrism among less educated natives in cities with the highest share of employment in the advanced producer services as well. It is the culturally tolerant atmosphere, and not the abundance of labour market opportunities, that makes these less educated natives less ethnocentric than their counterparts in cities with a low share of employment in the advanced producer services.

These findings cast serious doubts on the empirical tenability of the ethnic competition theory. They consequently point in the direction that the often found relationship between ethnocentrism and ambiguous indicators of one's economic position, most notably education level but also the widely used EGP-class scheme

(Erikson & Goldthorpe 1992), cannot straightforwardly be interpreted on the basis of its theoretical logic. Yet, this is a very common practice in studies on the causes of ethnocentrism (e.g. inter alia. Bauer, Lofstrom & Zimmerman 2000, Coenders, 1998, 2001, Coenders & Scheepers 2008, Coenders, Lubbers & Scheepers 2008, 2009, Lubbers, Coenders & Scheepers 2006, Espenshade & Hempstead 1996, Fertig & Schmidt 2002, Gijsberts, Hagendoorn & Scheepers 2004, Kunovich 2004, Scheepers, Felling en Peters, 1990, Scheepers, Eisinga & Snippenburg 1992, Seymonov, Raijman & Gorodzeisky 2006). A similar argument, of course, can be made for economic indicators at the urban or national level, such as unemployment level and gross domestic product respectively, which strongly correlate with indicators for cultural tolerance (e.g. in addition to many studies on ethnocentrism just mentioned, inter alia, Citrin et al. 1997, Facchini & Mayda 2006, Kessler 2001, Mayda 2006, O'Rourke & Sinnott 2006, Quillian 1995).

It is therefore also very unlikely that the politicisation of immigration in many European countries in recent decades and the disproportionate support of the less educated for anti-immigrant parties, can simply be ascribed to the idea that immigrants are considered an economic threat, as, among many others, Betz (1994), Kitschelt (1997) and Kriesi et al. (2008) claim (cf. Rydgren 2008). Considering the strong correlation between economic and cultural indicators at the urban level, it is therefore just as likely that the relationship between local unemployment levels and support for anti-immigrant parties is spurious (e.g. Lubbers & Scheepers 2002, Rink, Phalet & Swyngedouw 2009) and consequently cannot be unequivocally interpreted according to the economic logic of the ethnic competition theory. The fact that national unemployment levels are sometimes related to support for anti-immigrant parties (e.g. inter alia. Baimbridge, Burkitt & Macey 1994, Jackman & Volpert 1996) and sometimes not (e.g. inter alia. Knigge 1998, Lubbers, Gijsberts & Scheepers 2002) also seems to indicate that the rationale of the ethnic competition does not underlie this support (cf. Rydgren 2007). Instead, just like ethnocentrism, the politicisation of immigration in the political domain of European countries and the support for anti-immigrant parties are more likely to be driven by the feeling, especially among lower-educated natives due to their small amount of cultural capital, that immigrants, or other cultures in general, are a threat to the social order.

These findings show that, just as claimed by Sharp (2007), a theoretically grounded cultural explanation is indeed a fruitful addition to the field of urban politics with its strong focus on institutions and political economy. Yet, her question as to whether an emphasis on culture will bring urban research back from the periphery needs to be answered in the negative, because the absence of theoretically grounded cultural explanations does not make a field of inquiry peripheral. On the contrary, the bulk of the studies on ethnocentrism and support for anti-immigrant parties that emphasise their alleged economic roots belong to the mainstream of political and social science – those mentioned above are just the tip of the iceberg. Just as in urban research, then, the dominant idea in the mainstream of political and social science at large is that in the end the economy determines culture (cf. Houtman, 2003, Kumar 1978, 2004). What is peripheral, then, is the idea that culture may function as an independent force – in statistical terms: can be an independent variable – that can explain social phenomena (cf. Alexander 1982), or might even drive economic processes instead of the other way around. That a cultural explanation succeeded in explaining differences in ethnocentrism or cultural tolerance in general, while an economic explanation failed (cf. Achterberg 2006a, 2006b, Achterberg & Houtman 2006, Houtman 1994, Houtman 2001, Houtman 2003, Houtman, Achterberg & Derks 2008, Van der Waal et al. 2010), indicates that not only urban research, but also political and social science at large can benefit from a theoretically grounded cultural explanation to go along with the current focus on institutions and (political) economy.

7.3 The new conceptual architecture reconsidered

After discussing the findings and their theoretical implications in the previous sections, it is now time to draw up the balance. The primary aim of this study was to assess whether the central theoretical notions in the global city theoretical framework and global city debate help us to understand the impact of the current phase of economic globalisation on the social, economic and political reality of cities. The theoretical notions in the global city theoretical framework were formulated because the current phase of economic

globalisation required a new conceptual architecture (Sassen 2001: xviii), for the old concepts by which 'sociologists have tended to study cities (…) are no longer sufficient' (Sassen 1994: xiii). However, the empirical chapters clearly showed that this new conceptual architecture suffers substantial flaws.

What proved to be most problematic is the assumption that deindustrialisation and the clustering of advanced producer services are driven by international outsourcing, especially when combined with the false assumption in the global city debate that global cities show the future guise of other cities. For the former assumption, especially when combined with the latter assumption, has led to a crude overestimation of the impact of economic globalisation on urban labour markets. International outsourcing drives neither deindustrialisation nor the bulk of the increase in employment in the advanced producer services in cities in the advanced economies. Only the professionals employed in those services that produce the capabilities to manage globally dispersed production chains – i.e., part of the advanced producer services in global cities – can be linked to economic globalisation. Many studies in the global city debate therefore falsely attribute changes in urban labour demand due to deindustrialisation and clustering of advanced producer services to economic globalisation.

Although the global city theoretical framework and the global city debate it initiated can be distinguished analytically, in this case they slide into each other empirically. In a recent publication, the architect of the global city theoretical framework used the share of employment in the advanced producer services – a 'globalization variable' (Zhong, Clark & Sassen 2007: 387) – to assess the impact of economic globalisation on more than 250 urban labour markets in the United States. It goes without saying that the bulk of those cities function, at most, as regional nodes or are former industrial strongholds. So, although on the basis of Sassen's previous publications it cannot be determined whether she considers the clustering of advanced producer services outside global cities – that is: in regional nodes and former industrial strongholds – a result of international outsourcing, this recent study in the global city debate clearly shows she does.

What renders the false assumption that deindustrialisation and the clustering of advanced producer services are driven by international outsourcing in all cities in the

advanced economies so problematic is the architecture of the global city theoretical framework. As this architecture concerns a mix of theories, propositions and expectations that all build on these false assumptions, it turns out to be a colossus with feet of clay. For due to these false assumptions many of the theoretical assertions in this framework, even if proved to hold empirically, are in the end attributed to economic globalisation on false grounds. Consider for instance that all the findings in chapter 3 pointed in the direction that the basic arguments in the polarisation thesis are correct. However, the false assumption that the clustering of advanced producer services in all cities in the advanced economies is driven by international outsourcing in the end leads to falsely attributing a polarised occupational structure and the unemployment level that accompanies it to economic globalisation.

What seems clear, then, is that several theoretical notions in the global city theoretical framework and the global city debate, especially when combined, did not so much help us to understand the impact of the current phase of economic globalisation on the social and economic reality of cities, as led us to a crude overestimation of this impact. Yet, paradoxically, the global city theoretical framework also greatly underestimated this impact. And again, this can primarily be attributed to its architecture, as one of its central assumptions leads to a blind spot concerning the impact of economic globalisation, or to be more precise: a blind spot concerning the impact of the globalisation of labour. This lacuna is consistent with the productivist bias in the global city theoretical framework, which asserts that immigration to the advanced economies is driven by high labour demand for low-skilled service workers. In a production-driven world, cities with low demand for low-skilled labour will simply not attract immigrants.

However, we do not live in a completely production-driven world, and (immigrant) labour supply in some cities consequently outnumbers labour demand. As a result, substitution on the labour market due to immigration exists. In cities with low shares of employment in the advanced producer services, immigration leads to declining wages of, and increasing likelihood of unemployment for, less educated urbanites – be they immigrants or natives. The blind spot concerning the possibility of this substitution due to immigration in the global city theoretical framework and consequently in the

global city debate, then, led to an underestimation of the impact of economic globalisation on urban labour markets.

In sum, the central theoretical notions in the global city theoretical framework and global city debate were not very helpful for understanding the impact of the current phase of economic globalisation on the social, economic and political reality of cities. On the one hand they led to a great overestimation of the impact of international outsourcing on the economic base, occupational change and unemployment in cities. On the other hand, they led to a blind spot for labour market substitution due to the globalisation of labour. The new conceptual architecture, then, proved not to be very successful in replacing the old concepts by which sociologists tended to study cities. On the contrary, one of these old concepts, labour market substitution due to immigration, succeeded where the global city theoretical framework failed: explaining the impact of economic globalisation on the social and economic reality of cities. The only theoretical reasoning in this framework that proved unequivocally successful in explaining this impact concerned the pull-factor for the new immigration: all the available evidence in chapter 4 pointed in the direction that Dutch investment flows into newly industrialising countries spawn migration flows in the exact opposite direction.

The results presented in this study make clear that Sassen's new conceptual architecture largely failed to explain the impact of economic globalisation on urban labour markets. It primarily did so, because this framework is a grand hotchpotch of theories, propositions and expectations that assume each other's empirical validity. As a consequence, the empirical refutation of its basic assumptions makes this framework tumble down like a house of cards. This shows it is highly problematic if a new conceptual framework formulated to explain new social phenomena is not a theory of the middle range (Merton 1959). Although the global city theoretical framework is built by combining several of such theories that can be empirically tested, as a whole it clearly is not such a theory. As a result, it can only be empirically valid if all the middle range theories it is made of stand empirical testing. This proved not to be the case, and the standard research practice in the global city debate to use the global city theoretical framework as an 'analytical construct that allows one to detect the global as it is filtered through the specifics of a place' (2006c: x) is therefore highly problematic. For this

practice boils down to interpreting labour market changes on the basis of this framework and subsequently attributing them to economic globalisation. The empirical chapters in this study showed that this attribution is made on false grounds.

It needs to be emphasised here that I am not the only (and not the first) one that is highly critical of the global city theoretical framework, for there are two other strands of critique. However, both of these strands of critique do not convince me, and I will use the rest of this study to argue why this is so. The first one was formulated by James W. White (1998) and will be addressed in this section, the second one was formulated by Michael Peter Smith (1998) and will be addressed in the next section.

White considers the global city theoretical framework, which he refers to as 'the global city model' or 'the global city-dual city hypothesis', as 'economically reductionist' (1998; 451). This is because it combines reductionist Marxism – 'economic forces dominate everywhere; the mature capitalist states and multinational firms run the world' (1998: 457) – and neoclassic economic theory – 'the world is driven by the market, by utility-maximizing, rational enterprises and managers of capital who disregard and override governments, national borders, public interests, and human welfare drives' (1998: 457) – with 'modernization theory, especially its emphasis on convergence' (1998: 457). Next to being economically reductionist, White renders the global city theoretical framework ethnocentric, more specifically it bears evidence of 'American, or Anglo-American, ethnocentrism: The world's greatest cities are not all New York or London, not all countries went through a Reaganite or Thatcherite stage of urbanism, and not all states let the capitalist foxes guard the metropolitan chicken coop' (1998: 457).

I have no quarrel with White's characterisation of the global city theoretical framework outlined above. It is reductionist and Anglo-American ethnocentric indeed. However, I do not see why this is problematic. On the contrary, theory *is by definition* reductionist in that it reduces the complexity of social reality – the fact that the global city theoretical framework is *economically* reductionist is however problematic for gaining insights into the causes of urban change, as shown in the empirical chapters. Furthermore, theory *is by definition* ethnocentric in that it is only applicable to a concrete historical and cultural context. The global city theoretical framework should therefore not be discredited in advance. Instead, the question of whether changes in urban labour markets

are (primarily) driven according to the economic logic of a certain theory and whether this theory has explanatory power beyond Anglo-American cities, are empirical and call for empirical scrutiny. If the economic logic does not stand the test, labour market changes call for other explanations, and if it does not stand the test beyond Anglo-American cities, its scope simply needs to be limited.

However, this is not what White has in mind after his fierce critique of the global city theoretical framework. Instead of scrutinising the scope of its empirical worth, he suggests a great leap forward as 'there is, unfortunately, no alternative theory at this point that does specify all the causalities and optional paths at work' (White 1998: 472). What White in short supposes is a model that is so complex (so 'non-reductionist' in his own terms) that it is able to explain practically everything that has happened in urban labour markets all over the world in recent decades. Such a framework would be empirically valid indeed, but will not reduce the complexity of social reality. On the contrary, it would be just as complex as the social reality it aims to explain, which would render it completely useless. For such a framework is no theory at all, but a vast data matrix. It reminds us of the short story of Jorge Luis Borges entitled *On Exactitude in Science* (1975), which mockingly refers to an empire where the science of cartography was so exact that the maps it produced were of the same scale as the territory these maps aimed to represent. These maps were empirically valid indeed, but also quite useless.

7.4 Globalisation or neo-liberalisation? On science versus politics

Just like James W. White, Michael Peter Smith is highly critical of the global city theoretical framework. The big difference with White's critique, and my critique for that matter, is that Smith's critique does not primarily revolve around the scientific implications of this framework, but rather around its alleged political implications (White 1998, 2001). In Smith's reading, the global city theoretical framework does not primarily function as a vessel for interpreting the impact of economic globalisation on urban labour markets. Instead, in the article entitled *The Global City - Whose Social Construct Is It Anyway?*, it is accused of being a part of 'a contested political project advanced by

powerful social forces' (1998: 483). According to Smith, applying the global city theoretical framework to uncover the impact of economic globalisation on urban labour markets 'naturalizes' the 'neoliberal regime of "global governance" (…), by legitimating the "reality" of global cities as part and parcel of an unstoppable process of economic globalization. Unintentionally, [global city researchers', JvdW] epistemology thus becomes the ontology of global cities' (Smith 2001: 65).

According to Smith, then, economic globalisation is merely 'the most recent historical version of the free-market ideology' (Smith 2001: 65). If so, this study did not test the empirical validity of theories that aim to explain the impact of economic globalisation on urban labour markets, but is part of a project that legitimises neo-liberalism, or the neo-liberal world order.[28] I fundamentally disagree with that and will use the concluding paragraphs of this study to explain why. Ironically, Smith, who certainly does not consider himself as a social and cultural conservative, seems to go along with the doctrine that 'what is, is right', which is associated with the Catholic view of history and conservative thinkers like Edmund Burke (cf. Himmelfarb 1949). He for instance wonders why 'none of the world city scholars, who on the basis of their politics would surely oppose global governance on neoliberal principles, seem to have given much thought to the question of whether their research agenda and "objective" findings implicitly provide support for that very project by legitimizing the reality of global cities as part and parcel of the objective processes of economic globalization that they are studying' (1998: 487). However, 'what is', and 'what should be' are not the same, but differ fundamentally.

What is is the object of science. To be clear, it seems very naïve to believe there is an objective social reality out there that the social sciences can reveal and explain. By formulating and testing theories, we attribute selective interpretations to the social phenomena around us, which, in the end, simplify a complex reality (cf. Gouldner 1970). This is inevitable, and scholarly debates therefore revolve around the question which theory is best able to explain a certain social phenomenon and subsequently result in

28 The concept 'neo-liberal(ism)', has been used for such a wide range of ideas and policies that it practically lost its analytical value. For a concept that entails everything in the end means nothing as it has no discriminatory value. For the sake of the argument, I stick to the conceptualization of Michael Peter Smith, which boils down to classical free-market ideology.

replacing bad theories with better ones. *What should be*, on the other hand, depends on one's notion of 'the good life' and is consequently the object of politics. Which goals should be attained, and what policies should be implemented to do so – put differently: 'what is right' – is a political decision, and is not determined by 'what is'. That is not to say that the interpretations of scientists on how the world works are not related to politics, as they can inform opinions and political debates, but that science can never replace politics. In fact, changing that 'what is' because many consider it 'not the way it should be' is what politics entails. Consequently, empirical research does not necessarily legitimise that 'what is'. On the contrary, the corroboration of a certain theoretical logic can just as well be an impetus to change something, because many consider it unjustified or illegitimate.

By means of an example, I would like to conclude this section on the allegation of Michael Peter Smith that this is not a scientific study with theoretical relevance, but a neo-liberal manifesto in disguise. This example concerns the finding in this study that immigration leads to unemployment in Dutch cities – a potentially explosive finding considering the strong politicisation of immigration issues in the Netherlands recently – which according to Smith apparently needs to be interpreted as a legitimisation of a free-market logic, as it renders this logic inevitable. My finding that immigration leads to unemployment by no means justifies deregulation of the labour market, however. Assuming that unemployment is universally considered a problem that needs to be addressed, which is a political question and not a scientific one, deregulation is merely one option among many others. Social democrats, for example, will probably interpret the aforementioned finding as an indication that *more* state intervention and public spending are needed so as to be able to employ the unemployed, while nationalists, on the other hand, will probably interpret this finding as an indication that immigration should be decreased. Moreover, some nationalists will agree with the neo-liberals, while others will agree with the social democrats on the extent of state intervention in labour markets. Yet, all neo-liberals, social democrats and nationalists who underscore the basic elements of liberal democracy will strongly oppose a complete closure of borders, as a substantial share of immigration is not driven by market forces, but exists due to human rights

treaties. Many consider such immigration legitimate, even if it could result in unemployment in a completely deregulated labour market.

In sum, the finding in this study that immigration leads to unemployment legitimates neither neo-liberalism nor the implementation of neo-liberal policies. Put differently, it has no political implications in itself, but if it is considered a problem that needs to be addressed, this can be done in many different ways. Therefore, in this study, the finding that immigration leads to substitution on the labour market neither serves the political project of neo-liberalism, nor does it serve any other political project for that matter – it merely served to corroborate the empirical validity of the substitution thesis. Put differently, it has theoretical implications, i.e., implications for the tenability of a theory, and that was why it was assessed. And the same goes for all the other findings in this study. These merely functioned to corroborate or falsify the theoretical assertions. The question of whether the corroborated reasonings are most able to explain the empirical generalisation they addressed is however an empirical one. I am quite convinced that someday another researcher will falsify these assertions by the corroboration of theories that are even better able to explain the social phenomena assessed in this study.

Appendix A: Polarisation and professionalisation studies

Table A1 contains all studies known to the author that assess as to whether the occupational and / or income hierarchy in cities polarises or professionalises *on the basis of the polarisation thesis in the global city theoretical framework and / or Hamnett's professionaliation thesis*. Several studies that are informed by these theories are left out of the table because the findings can neither be directly nor indirectly categorised according to this scheme. For instance, studies that assess income inequality measured as the difference between the poorest and richest urbanites (e.g. with Gini-coefficients), instead of the absolute or relative growth of income categories, are not included.

Table A1: empirical studies on the polarisation and professionalisation thesis

Authors	City / cities	Dependents	Findings
Baum 1997	Sydney	Occupations & income	Occupational & income polarisation
Baum 1999	Singapore	Occupations & income	Occupational & income professionalisation
Beer & Forster 2002			
Borel-Saladin & Owen 2009	Cape town	Occupations	Professionalisation
Brint 1991	New York	Occupations	Professionalisation
Burgers 1996	Amsterdam, Rotterdam, The Hague, Utrecht	Employment	Professionalisation
Burgers & Musterd 2002	Amsterdam, Rotterdam	Occupations	Polarisation (Amsterdam), professionalisation (Rotterdam)
Chiu & Lui 2004	Hong Kong	Occupations & income	Occupational & income polarisation
Cox & Watt 2002	London	Informal employment	Growth informal domestic labour
Elliott 1999a, 199b, 2004	105 U.S. metropolitan areas	Low wage employment	Least low-income employment in the most global cities
Gordon & Sassen 1992	London	Income	Polarisation
Hamnett 1994a	Amsterdam, Rotterdam, The Hague, Utrecht	Occupations	Professionalisation
Hamnett 1994b	London	Occupations	Professionalisation
Hamnett 1996a	London	Occupations & income	Occupational professionalisation & income polarisation
Hamnett & Cross 1998	London	Income	Polarisation
Hamnett 2004	London	Occupations & income	Occupational & income professionalisation
Kloosterman 1996	Amsterdam, Rotterdam	Occupations & income	Occupational & income polarsation
Lemanski 2007	Cape Town	Occupations & income	Occupational & income polarisation
Ley 1996	Halifax, Montreal, Ottowa, Toronto Edmonton, Vancouver	Occupations	Professionalisation
MacLachlan & Sawada 1997	22 Canadian metropolitan areas	Income	Polarisation
Maloutas 2007	Athens	Occupations	Polarisation
May et al 2007	London	Occupations	Polarisation
Norgaard 2003	New York	Income	Polarisation
Rhein 1996	Paris	Occupations	Professionalisation
Tai 2006	Singapore, Hong kong, Taipei	Occupations	Polarisation (Singapore, Hong Kong), polarisation (Taipei)
Timberlake et al. 2008	100 U.S. metropolitan areas	Income	Professionalisation

Table A1 continued

Authors	City / cities	Dependents	Findings
Van der Waal & Burgers 2009b	Amsterdam & Rotterdam	Income	Polarisation
Walks 2001	Toronto	Occupations & income	Occupational professionalisation & income polarisation
Wessel 2001	Oslo	Income	Polarisation
Zhong et al. 2007	257 U.S. metropolitan areas	Income	No polarisation

Appendix B: Data & operationalisation

For the analyses in chapter 2 and 3 on the 22 Dutch urban agglomerations (see map B1 for their delineations), I constructed my own dataset with data that could be retrieved via the *Statline* service of *Statistics Netherlands* (Centraal Bureau voor de Statisitiek, CBS). The dataset contains information on employment shares by industry, population, and unemployment level of the less educated for these agglomerations. The maximum range of years ranges from 1995 through 2007.[29] Yet, some variables were not available for this complete range of years. The operationalisation of the variables will be outlined below, and are categorised according to the first chapter in which they appeared.

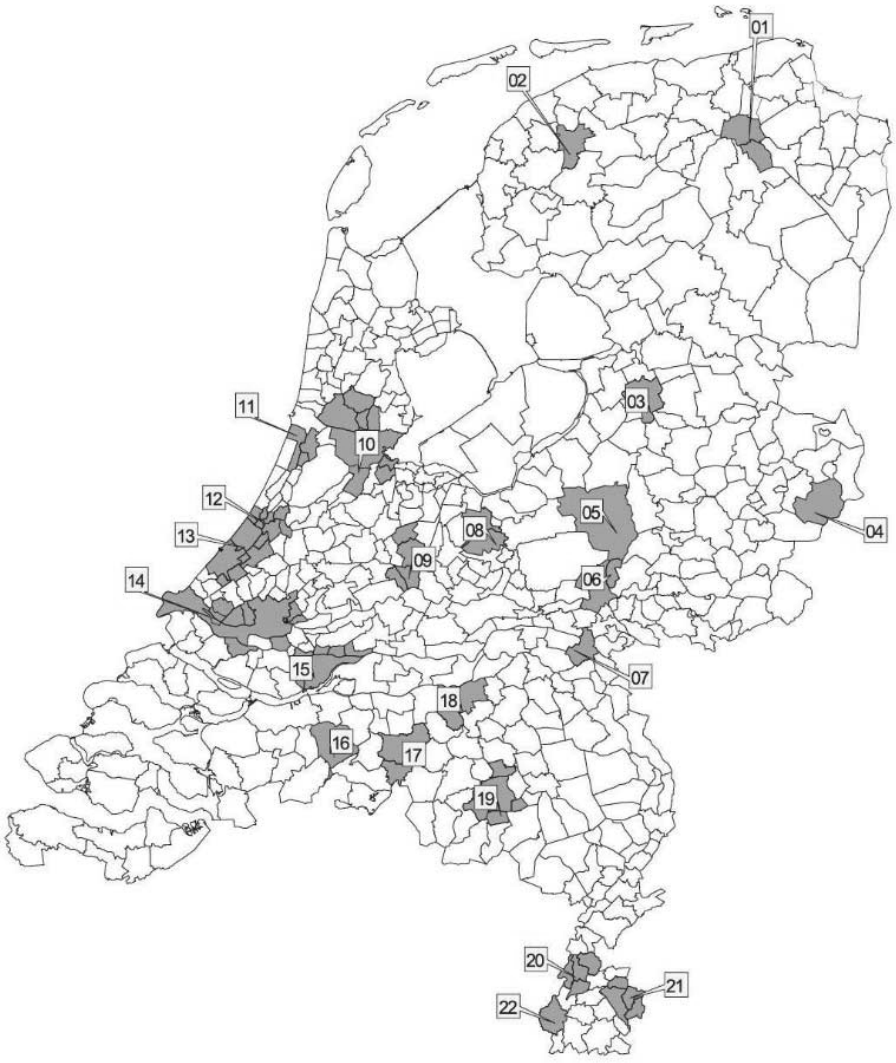
Variables introduced in chapter 2

Industry – concerns the share of employment in the manufacturing industry. It is measured as the share of the working population that is employed in firms classified in class D in the Dutch SBI 93 classification (*Standaard Bedrijfsindeling 1993*) that corresponds to the 'ISIC Rev. 3.1' (International Standard Industrial Classification of All Economic Activities) of the United Nations (*data range* 1995 – 2007).

Producer services – concerns the share of the working population that is employed in firms classified in class J (finance), and class K (real estate and producer services) in the Dutch SBI 93 classification (*Standaard Bedrijfsindeling 1993*) that corresponds to the 'ISIC Rev. 3.1' (International Standard Industrial Classification of All Economic Activities) of the United Nations (*data range* 1995 – 2007).

[29] http://statline.cbs.nl/statweb/

Map B1: the 22 Dutch metropolitan agglomerations



1	Groningen	9	Utrecht	17	Tilburg
2	Leeuwarden	10	Amsterdam	18	's Hertogenbosch
3	Zwolle	11	Haarlem	19	Eindhoven
4	Enschede	12	Leiden	20	Sittard-Geleen
5	Apeldoorn	13	The Hague	21	Heerlen
6	Arnhem	14	Rotterdam	22	Maastricht
7	Nijmegen	15	Dordrecht		
8	Amersfoort	16	Breda		

Variables introduced in chapter 3

Age 15-24 / 25-34 / 35-44 / 45-54 – concerns 4 variables that measure the share of the working population by age category. These are used as to control for non-labour market driven settlement patterns, such as the high share of students in university cities (*data range* 1995 – 2007).

Share less educated – measures the share in the working population that is less educated. It is used as to control for non-market driven settlement patterns. The share of cheap subsidised housing for instance differs by city, but is likely to be highly related to the share of less educated urbanites (*data range* 1995 – 2007).

Unemployment less educated – measures the share of the less educated working population that is currently unemployed, but is looking for a job for at least 12 hours a week (*data range* 1995 – 2007).

Working population – measures the total number of urbanites between the age of 15 and 66. As such, it indicates the total working population (*data range* 1995 – 2007).

Variables introduced in chapter 4

To assess the impact of Dutch foreign direct investments on new migration flows to the 22 Dutch metropolitan agglomerations, I had to combine data retrieved from *Statline* service of *Statistics Netherlands* (Centraal Bureau voor de Statisitiek, CBS), with data on Dutch FDI flows retrieved from UNCTAD,[30] and indicators for economic development retrieved from the World Bank.[31] The data from *Statistics Netherlands* concern the increase in the number of immigrants in each Dutch metropolitan agglomeration by country of origin between 1996 and 2009.

Gross domestic product per capita – measures the gross domestic product of the immigrant sending countries in the year 2000 divided by their population size (retrieved from World Bank).

[30] http://www.unctad.org/Templates/Page.asp?intItemID=1584&lang=1

[31] http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20535285~menuPK:1192694~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html

Growth Dutch FDI – measures the increase in Dutch FDI flows in the immigrant sending countries between the mean FDI flow in the time span 1993-1995, and the mean FDI flow in the time span 2004-2006 (Retrieved from UNCTAD).

Growth domestic product 2000 – measures the growth of the gross domestic product in the immigrant sending countries between 1999 and 2000, as a percentage of the gross domestic product in 1999 (retrieved from World Bank).

Population growth – the growth in the population in the immigrant sending countries between 1999 and 2000, as a percentage of the population in 1999 (retrieved from World Bank).

Variables introduced in chapter 5

Two datasets were used in chapter 5. The first one includes individual level data from the metropolitan areas of Amsterdam and Rotterdam, and has not yet been introduced. It is used for the analyses in tables 5.1 and 5.2, and tables C1 and C2 in appendix C.[32] Before outlining below the variables used in those analyses, the second dataset, which was used for the analysis in table 5.3, will first be dealt with. It concerns the same dataset as used in chapter 2 and 3 on the 22 Dutch metropolitan agglomerations, with one additional variable: *immigrant share* – which measures the share of immigrants in the working population (*data range* 1996 – 2007).

The first dataset is a combination of two data files; both concern census data of *Statistics Netherlands* on the Dutch population as a whole: the survey on the labour population (*enquete beroepsbevolking* or EBB) and the survey on employment and wages (*enquete werkgelegenheid en lonen* or EWL). The latter file was only used to connect wages to the respondents in the former file, which contains the remainder of the data required for the analyses in tables 5.1, 5.2, C1 and C2. As approximately 15 per cent of the Dutch

[32] A metropolitan area, a so-called COROP area, is a different delineation than a metropolitan agglomeration that is used in the analysis on the 22 Dutch urban agglomerations. The former is bigger and is based on a nodal classification principle. Each COROP-area has a central core (city) with a surrounding area measured by labour market relations such as the traffic between place of residence and place of work of urban employees.

population lives in the two metropolitan areas of Amsterdam and Rotterdam, the available number of respondents decreased sharply in both files. To realise a sufficient number of respondents for all analyses, the volumes of the year 2000 and 2005 are combined into one dataset. This yielded 2,859 less educated native respondents (Amsterdam: N = 1,070; Rotterdam: N = 1,789), and 1,345 immigrant respondents (Amsterdam: N = 576; Rotterdam: N = 769).

Immigrant share – is measured by taking the percentage of immigrants in each of the 52 industries distinguished in tables 5.1, 5.2, C1 and C2. Someone is considered a foreigner if s/he, or one of her or his parents, was born abroad. Consequently immigrants and their direct descendants are categorised as immigrants in this study. This is a common research practice in studies on the impact of immigration on wages (Longhi, Nijkamp & Poot 2005). The only Dutch study on this impact followed this procedure as well (Zorlu & Hartog 2005).

Industry – the 52 industries are categorised according to the Dutch SBI 93 classification (*Standaard Bedrijfsindeling 1993*) that corresponds to the 'ISIC Rev. 3.1' (International Standard Industrial Classification of All Economic Activities) of the United Nations. Although this classification has 62 different industries, only 52 industries were used for the analyses, because some industries are not represented in the dataset. Zooming in on two metropolitan areas by definition narrows the total range of existing industries – some industries are simply not present in these urban settings.

Rotterdam – whether there is a different impact of immigration on wages in Amsterdam than in Rotterdam will be examined with a 'city dummy'. As the city dummy codes all employees working and living in Amsterdam as 1, and all employees working and living in Rotterdam as 2, the sign of its coefficients concerns respondents in Rotterdam in comparison to respondents in Amsterdam.

Wage – is created by dividing the gross monthly earnings by the monthly hours of work. Subsequently, as *wage* has a skewed distribution, the logarithm of the quotient is computed – a standard procedure in studies of the impact of immigration on wages (Longhi, Nijkamp & Poot 2005).

Several control variables known to be relevant when it comes to determining wages have been used in the analyses in tables 5.1, 5.2, C1 and C2:

Age – age of the respondent in years.

Education – highest level of education completed by the respondent, ranging from 1 (primary school) through 6 (university).

Female – a dummy variable categorising males as 1, and females as 2.

Year – since the analyses in tables 5.1, 5.2, C1 and C2 pool two different volumes of surveys, there is a need to control for this difference. Respondents from the 2000 files were coded as 2000 while respondents from the 2005 files were coded as 2005.

Years employed – the number of years the respondent has been working for his current employer.

Variables introduced in chapter 6

For the analyses in chapter 6 two datasets were combined. The first one covers the 2004 and 2006 waves of 'Cultural Change in the Netherlands' (*Culturele Veranderingen in Nederland*). This bi-annual survey collects a sample that is representative for the Dutch population at large and is conducted by 'The Netherlands Institute for Social Research' (*Sociaal Cultureel Planbureau, SCP*).[33] From these samples I selected the autochthonous Dutch between 18 and 65 years old (working population) living in the core areas of the 22 Dutch metropolitan agglomerations. Respondents that live outside the core areas of these agglomerations could unfortunately not be selected due to data deficiencies. The 2004 and 2006 waves were combined in order to yield a substantial number of respondents (N = 770). Previous waves could not be used, as these do not allow just selecting the autochthonous population.

This first dataset was combined with a second dataset that contains city-level information retrieved from the 2004 and 2008 waves of the 'Atlas for Municipalities' (*Atlas voor Gemeenten 2004* en *2008*.) The operationalisation of the variables used in the analysis in chapter 6 is outlined below.

Cultural participation – is a scale made out of four items considering the consumption of high-status culture (see table B1 for the scale specifications and exact formulation of the questions). This is a widely-used scale for embodied cultural capital,

[33] www.scp.nl

which, contrary to education (institutionalised cultural capital), is an unambiguous indicator for cultural capital, as it is not related to one's economic position (cf. Houtman, 2003: 158) (source: Cultural Change in the Netherlands' 2004 and 2006).

Table B1: Items of *cultural participation*

Items	*Factorloadings*
How many times did you visit a classical music concert in the past 12 months? [not / once / 2-3 times / 4-11 times / once a month]	0.80
How many times did you visit a museum in the past 12 months? [not / once / 2-3 times / 4-11 times / once a month]	0.69
How many times did you visit an opera in the past 12 months? [not / once / 2-3 times / 4-11 times / once a month]	0.74
How many times did you visit a play or show in the past 12 months? [not / once / 2-3 times / 4-11 times / once a month]	0.78
R^2	57.11
Cronbach's α	0.74
N	770

Source: Cultural Change in the Netherlands 2004 and 2006 surveys

Cultural tolerance – is Richard Florida's bohemian index, for a high concentration of bohemians in a city 'indicate[s] an underlying openness to diversity' (2002: 64; 2005: 113-28). It measures the share of the urban population that is involved in the production of culture and the arts such as writers, designers, architects, composers, painters, sculptors, photographers, dancers, artists and actors (source 'Atlas of Municipalities 2004').

Ethnocentrism – is a scale constructed out of four items on opinions about immigrants and immigration. Three of these items revolve around the question who is considered most entitled to scarce economic resources – a foreigner or a native Dutchman – according to the respondent. One item asks the respondent's opinion on the number of people without Dutch nationality in the Netherlands (see table B2 for the scale specifications and exact formulation of the questions). With these items *ethnocentrism* is measured as close to the theoretical rationale of the ethnic competition theory as possible (source: Cultural Change in the Netherlands' 2004 and 2006).

Economic opportunity structure – measures the share of the less educated urbanites that is unemployed (source: *Statistics Netherlands*)

Education – measures the number of years of education of the respondent after the age of six (source: Cultural Change in the Netherlands' 2004 and 2006).

Income – concerns the net family income of the respondent (source: Cultural Change in the Netherlands' 2004 and 2006).

Unemployed – codes the employed respondents as 1, and the unemployed respondents as 2 (source: Cultural Change in the Netherlands' 2004 and 2006).

Table B2: Items of *ethnocentrism*

Items	*Factorloadings*
Suppose there are two employees that differ in one respect, but are equal in all others. If only one of them can be considered for promotion, who should it be? [a foreigner / should not matter / a Dutchman]	0.74
Suppose there are two employees that differ in one respect, but are equal in all others. If one of them needs to be dismissed because of economic reasons, who should it be? [a Dutchman / should not matter / a foreigner]	0.52
We would like to know who you consider most entitled to a house in time of shortage of housing. [foreign family / should not matter / a Dutch family]	0.79
What do you think in general of the number of people with another nationality living in our country? [too many / many, but not too many / not too many]	0.65
R^2	46.41
Cronbach's α	0.61
N	770

Source: Cultural Change in the Netherlands 2004 and 2006 surveys

Appendix C: The impact of immigration on wages in Amsterdam and Rotterdam

Table C1: Less educated natives' wages in Amsterdam and Rotterdam respectively, explained by immigrant shares in industries (multilevel regression analysis; entries are regression coefficients; estimation: maximum likelihood.

	Amsterdam	*Rotterdam*
Independents	*β*	*β*
Constant	-0.043	-0.007
Immigrant share	-0.032	-0.106***
Controls		
Year	0.522***	0.558***
Female	-0.105***	-0.106***
Age	0.216***	0.171***
Education	0.184***	0.246***
Years employed	0.075***	0.132***
Variance industry level (N = 52)	0.028**	0.031**
Variance individual level	0.274***	0.267***
Deviance	1,689.00	2,767.31
N	1,070	1,789

Source: Statistics Netherlands (*CBS*) (own calculations).
* p< .05; ** p< .01; *** p< .001

Table C2: Immigrants' wages in Amsterdam and Rotterdam respectively, explained by immigrant shares in industries (multilevel regression analysis; entries are regression coefficients; estimation: maximum likelihood).

	Amsterdam	*Rotterdam*
Independents	*β*	*β*
Constant	-0.047	-0.042
Immigrant share	-0.027	-0.065*
Controls		
Year	0.606***	0.562***
Female	-0.049	-0.071**
Age	0.206***	0.176***
Education	0.292***	0.304***
Years employed	0.120***	0.173***
Variance industry level (N = 52)	0.027	0.027*
Variance individual level	0.371***	0.254***
Deviance	1,066.41	1,132.90
N	576	769

Source: Statistics Netherlands (*CBS*) (own calculations).
* p< .05; ** p< .01; *** p< .001

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Dutch summary*

Over de invloed van economische mondialisering op stedelijke arbeidsmarkten zijn veel studies verschenen in het *global city* debat dat begin jaren tachtig door Saskia Sassen werd aangezwengeld. Ondanks deze stortvloed aan onderzoek blijft de houdbaarheid van veel theoretische noties die in dat debat centraal staan tot op heden onduidelijk. In dit proefschrift wordt beweerd dat het karakter van Sassens *global city* theorie waar deze noties uit voortkomen, zij het soms in verbasterde vorm, daar grotendeels debet aan is. Nadere beschouwing van deze theorie toont dat het geen middle-range theorie in Mertoniaanse zin is die zich op haar empirische houdbaarheid laat onderzoeken. De *global city* theorie is namelijk een verzameling (deel)theorieën die bij elkaar wordt gehouden door de veronderstelling van elkaars houdbaarheid. Dat is de reden waarom deze theorie in dit proefschrift wordt aangeduid als '*global city* theoretisch raamwerk'. In haar geheel onttrekt zo'n raamwerk of mengelmoes zich aan systematische empirische toetsing, met als gevolg dat zij in het *global city* debat voornamelijk is gebruikt als prisma om veranderingen in steden te interpreteren, en deze veranderingen vervolgens aan economische mondialisering toe te schrijven. Er is daarom over de gevolgen van economische mondialisering voor stedelijke arbeidsmarkten tot op heden weliswaar veel beweerd, maar weinig bekend.

Dit proefschrift beoogt daar verandering in te brengen. Daartoe legt het het *global city* debat uiteen in de onderzoekbare theoretische noties betreffende de gevolgen van economische mondialisering voor stedelijke arbeidsmarkten die er in besloten liggen, om deze vervolgens op hun empirische houdbaarheid te toetsen. *Het doel is om te onderzoeken of deze noties daadwerkelijk de invloed van economische mondialisering op de sociale, economische en politieke omstandigheden van steden blootleggen zoals Sassen beweert*. Daartoe worden zeven onderzoeksvragen beantwoord. De eerste vijf zijn centrale vragen in het *global city* debat. De laatste twee staan centraal in het

* Voor een uitgebreide Nederlandstalige bespreking over de uitkomsten van het onderzoek in dit boek zij verwezen naar mijn boek *Stedelijke economieën in een tijd van mondialisering. Arbeidsmarktkansen en etnocentrisme van laaggeschoolden in Nederlandse steden* (Amsterdam University Press, 2010).

mondialiseringsdebat in het algemeen, en zijn in het *global city* debat tot op heden over het hoofd gezien, maar hun beantwoording is onontbeerlijk voor het realiseren van het centrale doel van deze studie.

Om deze vragen te beantwoorden is gekozen voor Nederland als strategische casus. Van de meest open geavanceerde economieën is Nederland het meest geschikt voor de stedenvergelijkende studie die nodig is. Het kent een voldoende aantal (22) grootstedelijke gebieden, incluis de *global city* Amsterdam, ingebed in een centralistische verzorgingstaat. Door deze inbedding wordt de invloed die overheidsregulering heeft op de arbeidsmarkt constant gehouden. De onderzochte periode verschilt licht per onderzoeksvraag vanwege databeperkingen, maar verreweg de meeste analyses beslaan een tijdsspanne die grofweg loopt vanaf midden jaren '90 tot 2008. In wat volgt worden de zeven onderzoeksvragen behandeld aan de hand van de hoofdstukken waarin ze worden beantwoord.

De eerste vraag die in hoofdstuk twee centraal staat is: *wordt de economische basis van steden steeds gelijker aan die van* global cities? Hierover bestaat onduidelijkheid in het *global city* debat omdat daar twee scenario's bestaan aangaande deze kwestie. De eerste, welke direct uit het *global city* theoretisch raamwerk kan worden afgeleid, is dat stedelijke economieën steeds minder op elkaar gaan lijken. De reden daarvoor is dat het aandeel werkgelegenheid in de industrie in alle steden weliswaar afneemt, maar dat de groei van geavanceerde producentendiensten in de meest dienstengeoriënteerde steden sterker is dan in de meest industriële steden. Dit betekent dat de overgang naar een postindustrieel bestel ongelijk uitpakt voor steden, en wel zo dat voormalige industriesteden hierin steeds verder achterop raken op de meest dienstengeoriënteerde steden in het algemeen, en *global cities* in het bijzonder.

Volgens het tweede scenario zijn voormalige industriesteden juist bezig aan een inhaalslag, omdat daar de groei in de geavanceerde producentendiensten sterker is dan in de meest dienstengeoriënteerde steden. Zo bezien functioneert de overgang naar een postindustrieel bestel als een grote gelijkmaker, en gaat het economisch profiel van steden steeds meer in plaats van minder op elkaar lijken. Hoofdstuk twee toont dat de overgang naar een postindustriële economie in de 22 grootstedelijke gebieden in Nederland verloopt volgens het eerste scenario: de werkgelegenheidsgroei in de

geavanceerde producentendiensten is sterker in de dienstengeoriënteerde steden, vooral in *global city* Amsterdam. Voormalige industriesteden raken daardoor steeds verder achterop, en de conclusie is dan ook dat de economische basis van vele Nederlandse grootstedelijke gebieden steeds minder, in plaats van steeds meer op die van *global city* Amsterdam gaan lijken.

De tweede vraag die in hoofdstuk twee centraal staat luidt: *wordt deïndustrialisering en de clustering van geavanceerde producentendiensten veroorzaakt door internationale* outsourcing? De dominante redenering in het *global city* debat aangaande deze kwestie is dat de afnemende werkgelegenheid in de industrie wordt veroorzaakt door de verplaatsing van productiecapaciteit naar lagelonenlanden, de zogenaamde internationale *outsourcing*. De toename in de werkgelegenheid in de geavanceerde producentendiensten in steden wordt beschouwd als gevolg van de internationale arbeidsdeling die hierdoor ontstaat. De argumentatie hierbij is dat het aansturen van een mondiaal gefragmenteerd productieproces zo complex is dat hoofdkantoren van multinationals daarbij ondersteuning van deze diensten nodig hebben – denk hierbij bijvoorbeeld aan financiële en juridische dienstverlening. Om dicht bij deze hoofdkantoren te zijn, én om gebruik te maken van (in)formele kennisuitwisseling, clusteren deze dienstverleners in bepaalde steden. De boven genoemde ongelijke postindustriële ontwikkeling tussen steden zou volgens de dominante argumentatie in het *global city*-debat dus het lokale gevolg zijn van internationale *outsourcing* en de clustering van geavanceerde producentendiensten die dat teweegbrengt.

In de mondialiseringliteratuur bestaat na veel empirisch onderzoek echter een brede consensus dat de overgang naar een postindustriële economie zich slechts voor een klein deel zo laat verklaren. Deïndustrialisering blijkt vooral het gevolg van productiviteitverhogende technologische ontwikkelingen als automatisering. De groeiende dienstensector blijkt vooral het gevolg van veranderende nationale vraag (van goederen naar diensten) en commodificatie van zorgtaken. Slechts het deel van de geavanceerde dienstverlening in Nederlandse steden dat zich bezighoudt met de ondersteuning van multinationals – zoals op de Amsterdamse Zuidas – kan daardoor direct in verband worden gebracht met internationale *outsourcing* zoals beargumenteerd in het *global city* theoretisch raamwerk. Deze inzichten hebben grote gevolgen voor de

interpretatie van de studies naar de gevolgen van internationale *outsourcing* voor stedelijke arbeidsmarkten in het *global city* debat. Deze *outsourcing* wordt daarin namelijk steevast geoperationaliseerd met de clustering van geavanceerde producentendiensten. Het gevolg daarvan is dat bevindingen in deze studies – de arbeidsmarktveranderingen die worden veroorzaakt door de clustering van geavanceerde producentendiensten – op onjuiste gronden aan internationale *outsourcing* wordt toegeschreven.

Wat deze gevolgen zijn is onderzocht in hoofdstuk 3 aan de hand van de volgende vraag: *wat is de invloed van de clustering van geavanceerde producentendiensten op werkloosheid van laaggeschoolde stedelingen*? In het *global city* debat worden daar twee theorieën voor aangedragen: de polariseringsthese en de professionaliseringsthese. De eerste is een deeltheorie uit het *global city* theoretisch raamwerk en stelt dat de clustering van geavanceerde producentendiensten leidt tot een hogere arbeidsvraag voor zowel hoog- als laaggeschoolde stedelingen, en derhalve tot lagere werkloosheid onder de laatstgenoemden. De hooggeschoolden betreffen de professionals, de laaggeschoolden degenen die hun werk- en consumptiepatroon ondersteunen. Volgens de daar tegenovergestelde professionaliseringsthese leidt deze clustering echter tot hoge arbeidsvraag voor de zojuist genoemde hooggeschoolden, maar tot lage arbeidsvraag naar laaggeschoolden, met hoge werkloosheid onder de laaggeschoolde stedelingen als gevolg.

Uit een vergelijking van de 22 grootstedelijke gebieden in Nederland blijkt dat de gevolgen van de clustering van geavanceerde producentendiensten verloopt volgens de polariseringsthese: in steden met het hoogste aandeel werkgelegenheid in deze diensten is de werkloosheid onder laaggeschoolden het laagst, en niet het hoogst zoals de professionaliseringsthese veronderstelt. De combinatie van deze bevinding met de eerder genoemde ongelijke werkgelegenheidsgroei in de geavanceerde producentendiensten tussen dienstengeoriënteerde steden en voormalige industriesteden duidt er op dat laatstgenoemde steden nog een geprofessionaliseerde arbeidsmarkt hebben. Kort gesteld: de polariseringsthese is juist, maar vanwege ongelijke postindustriële ontwikkeling tussen steden is deze polarisering louter in steden met het hoogste aandeel werkgelegenheid in

de geavanceerde producentendiensten sterk genoeg om veel laaggeschoolden te integreren op de arbeidsmarkt.

In hoofdstuk vier wordt allereerst de theoretische notie over migratie in het *global city* theoretisch raamwerk onderzocht aan de hand van de vraag: *kan de nieuwe immigratie naar steden in de geavanceerde economieën worden verklaard door directe buitenlandse investeringen*? In dit raamwerk wordt gesteld dat de kapitaalstromen die kenmerkend zijn voor de economische mondialisering van de laatste decennia – directe buitenlandse investeringen in de vorm van productielocaties – nieuwe migratiestromen hebben veroorzaakt van industrialiserende landen naar de geavanceerde economieën. Deze stromen worden als 'nieuw' aangemerkt omdat ze ontstaan naast de reeds bestaande stromen tussen deze landen, die worden gedreven volgens de *push factor* uit klassieke migratietheorieën: onderontwikkeling en bevolkingsdruk. Directe buitenlandse investeringen zouden fungeren als een nieuwe *push factor* omdat ze leiden tot ontworteling van mensen uit traditionele werkstructuren doordat ze als loonarbeider gaan werken in fabriekshallen. Door deze ontworteling zou migratie richting de geavanceerde economieën voor deze arbeiders als optie in beeld komen. De materiële en culturele banden die ontstaan door investeringen zouden daarom migratiestromen in exact tegengestelde richting op gang brengen: van het land waarin geïnvesteerd wordt naar het land waar deze investering vandaan komt.

Uit de analyses in hoofdstuk 4 blijkt dat migratiestromen vanuit nieuwe industrielanden naar de 22 grootstedelijke gebieden in Nederland inderdaad sterk samen hangen met de investeringstromen vanuit Nederland: de migratiestromen naar deze steden zijn het sterkst toegenomen vanuit landen waar Nederlandse investeringsstromen het sterkst zijn toegenomen. En inderdaad, deze migratiestromen bestaan naast de migratiestromen die kunnen worden verklaard door klassieke migratietheorieën. Want niet alleen vanuit de landen met de hoogste instroom van Nederlandse investeringen is de grootste toestroom van migranten richting de 22 Nederlandse grootstedelijke gebieden gekomen in de onderzochte periode, maar ook vanuit landen met de sterkste onderontwikkeling en bevolkingsdruk.

In het *global city* theoretisch raamwerk wordt deze nieuwe *push factor* voor immigratie vanuit nieuwe industrielanden naar grootstedelijke gebieden steevast

gecombineerd met een nieuwe *pull factor*: de hoge arbeidsvraag naar laaggeschoolden in de dienstensector door de clustering van geavanceerde producentendiensten. De tweede vraag waar hoofdstuk 4 zich op richt luidt daarom *leidt de clustering van geavanceerde producentendiensten tot een instroom van arbeidsmigranten vanuit nieuwe industrielanden*? Dat deze clustering tot hoge arbeidsvraag naar laaggeschoolden leidt in de 22 Nederlandse grootstedelijke gebieden is weliswaar aangetoond in hoofdstuk 3, maar uit hoofdstuk 4 blijkt dit niet gepaard te gaan met een grotere instroom van migranten uit nieuwe industrielanden. Kortom, alles wijst er op dat, althans voor de Nederlandse casus, de nieuwe *push factor* van deze migratiestroom zoals opgenomen in het *global city* theoretisch raamwerk empirisch houdbaar is, maar de *pull factor* niet.

Deze bevinding maakt duidelijk dat de vestiging van migranten in Nederlandse grootstedelijke gebieden niet volledig gedreven wordt door arbeidsvraag, en daaruit volgt dat het problematisch kan zijn dat in het *global city* theoretisch raamwerk nergens wordt gerefereerd aan de invloed die migratie op arbeidsmarkten kan hebben. Volgens de substitutiethese leidt de instroom van migranten namelijk tot een zogenaamde *supply shock* in arbeid aan de onderkant van de arbeidsmarkt. Hierdoor zal de relatieve vraag naar arbeid dalen, wat zich manifesteert in dalende lonen en uiteindelijk in toenemende werkloosheid. In hoofdstuk 5 wordt daarom onderzocht of migratie leidt tot verdringing op de 22 grootstedelijke arbeidsmarkten van Nederland aan de hand van de volgende vraag: *wat is de invloed van immigratie op de lonen en werkloosheid van laaggeschoolde stedelingen*?

Er blijkt inderdaad sprake te zijn van verdringing, zij het niet in elk grootstedelijk gebied even sterk. Aangezien de vraag naar laaggeschoolde arbeid aanzienlijk hoger is in steden met een hoog aandeel werkgelegenheid in de geavanceerde producentendiensten, kan de arbeidsmarkt in deze steden een *supply shock* in arbeid beter absorberen dan steden met een laag aandeel werkgelegenheid in deze diensten. Uit de analyses in hoofdstuk 5 blijkt dan ook ten eerste dat bij een vergelijking tussen Amsterdam en Rotterdam alleen in de laatste stad migratie tot neerwaartse druk op de lonen van laaggeschoolde stedelingen leidt. Ten tweede blijkt migratie alleen tot werkloosheid onder laaggeschoolden te leiden in de Nederlandse grootstedelijke gebieden met een laag

aandeel werkgelegenheid in de geavanceerde producentendiensten. In de grootstedelijke gebieden met het hoogste aandeel van deze diensten heeft migratie dit gevolg niet.

Dit geeft aan dat de competitie tussen etnische groepen op de arbeidsmarkt aanzienlijk verschilt tussen grootstedelijke gebieden in Nederland. Volgens de etnische competitietheorie moet dit betekenen dat laaggeschoolde autochtonen in steden met het laagste aandeel werkgelegenheid in de geavanceerde producentendiensten etnocentrischer zijn dan in steden met een hoog aandeel van deze diensten. Dit is onderzocht in hoofdstuk 6, aan de hand van volgende vraag: *wordt het etnocentrisme van laaggeschoolde stedelingen veroorzaakt door etnische competitie*? Dit blijkt niet het geval te zijn. Zoals op basis van de etnische competitie theorie kan worden verwacht zijn laaggeschoolde autochtonen inderdaad etnocentrischer dan hooggeschoolde autochtonen, maar dit kan niet worden verklaard door hun zwakke economische positie en de daarmee samenhangende concurrentie met migranten om schaarse hulpbronnen zoals banen. Wat daar wel aan ten grondslag ligt is het weinige cultureel kapitaal dat zij bezitten. Op stadsniveau blijkt, zoals op basis van de etnische competitie kan worden verwacht, dat laaggeschoolde autochtonen aanzienlijk etnocentrischer zijn in steden met een laag aandeel werkgelegenheid in de geavanceerde producentendiensten dan in steden met het hoog aandeel in deze werkgelegenheid. Ook hier blijkt dit echter culturele in plaats van economische wortels te hebben: verschillen in de mate waarin een stad een tolerant cultureel klimaat heeft kunnen dit patroon verklaren, en verschillen in stedelijke arbeidskansen niet.

Aan de hand van de antwoorden op de zeven onderzoeksvragen wordt in het concluderende hoofdstuk besproken in hoeverre de theoretische noties in het *global city* debat de invloed van economische mondialisering op de sociale, economische en politieke omstandigheden van steden blootleggen. Dit is slechts deels het geval, en het blijkt problematisch dat ze elkaars empirische houdbaarheid veronderstellen. Wat zich het meest wreekt is de onjuiste veronderstelling dat de clustering van geavanceerde producentendiensten in steden in de geavanceerde economieën een gevolg is van internationale *outsourcing*. Zeker als deze gepaard gaat met de onjuiste veronderstelling dat de economische basis van alle steden gelijk wordt aan die van *global cities*. Alleen de professionals in *global cities* als Amsterdam die dienstverlening bieden aan

multinationals om mondiaal gefragmenteerde productieprocessen te beheersen en besturen kunnen aan internationale *outsourcin*g worden gekoppeld aan de hand van de theoretische noties vervat in het *global city* debat. Dit betreft slechts een fractie van de professionals die in de geavanceerde producentendiensten in de grootstedelijke gebieden in Nederland werkzaam zijn. Hierdoor is de standaard onderzoekspraktijk in het *global city* debat om de gevolgen van de clustering van geavanceerde producentendiensten voor arbeidsvraag in alle steden aan economische mondialisering toe te schrijven problematisch. De polariseringsthese blijkt dan weliswaar houdbaar, maar zij legt niet de gevolgen van economische mondialisering bloot. Integendeel, de arbeidsmarktveranderingen die zij blootlegt zijn grotendeels het gevolg van regionale en nationale processen, die vanwege de zojuist aangehaalde onjuiste assumpties in het *global city* debat abusievelijk aan economische mondialisering worden toegeschreven.

Wat zich tevens wreekt in het *global city* debat is de productivistische bias die het *global city* theoretisch raamwerk kenmerkt. De onjuiste assumptie dat we in een louter marktgedreven wereld leven heeft er toe geleid dat in het *global city* debat een blinde vlek is ontstaan voor de invloed van economische mondialisering – in de vorm van mondialisering van arbeid – op stedelijke arbeidsmarkten. Immers, als (arbeids)migratie volledig zou zijn gedreven door arbeidsvraag zou immigratie nooit tot substitutie op de arbeidsmarkt leiden. Zoals uit hoofdstuk 5 is gebleken leidt immigratie echter wel tot neerwaartse loondruk en werkloosheid.

Concluderend kan worden gesteld dat vanwege de blinde vlek voor arbeidsmarktsubstitutie door immigratie, en de onjuiste toeschrijving van de clustering van geavanceerde producentendiensten aan internationale *outsourcing*, de theoretische noties in het *global city* debat de invloed van economische mondialisering op de sociale, economische en politieke omstandigheden van steden niet zozeer blootleggen, maar enerzijds onderschatten, en anderzijds overschatten. Dit toont aan dat het gebruik van het *global city* theoretisch raamwerk als prisma om veranderingen in steden te interpreteren, en deze vervolgens toe te schrijven aan economische mondialisering – de standaard onderzoekspraktijk in het *global city* debat – problematisch is. Deze onderzoekspraktijk heeft de afgelopen decennia de gevolgen van economische mondialisering voor stedelijke arbeidsmarkten eerder aan het zicht onttrokken dan inzichtelijk gemaakt.

Curriculum Vitae

Jeroen van der Waal (Sliedrecht, 1974) obtained his master's degree in Sociology (*cum laude*) at Erasmus University Rotterdam in June 2005. Since then he worked at the same university as a PhD-student and researcher/lecturer respectively. During those years his research primarily revolved around the impact of economic globalisation on economic inequality in cities. Besides this thesis, this yielded a Dutch book, international bookchapters and publications in journals as *Sociologie* and *Urban Studies*.

His research interests are broader however, and include the ramifications of cultural change, and their impact on value orientations and voting behaviour in the west. In collaboration with various colleagues he has published several studies on these subjects in journals as *British Journal of Criminology, International Political Science Review*, *Journal for the Scientific Study of Religion*, *Politics & Society*, *Res Publica*, and *Sociologie*. Some of these studies address the impact of secularisation on religious deprivatisation, value change and voting behaviour. Others revolve around the rise of the new political culture and its impact on class voting and the rise of the penal state.

Besides these strands of research he currently focuses on the causes of 'welfare chauvinism', i.e. the inclination among native populations to exclude ethnic minorities and immigrants from welfare arrangements. The first articles on this theme are about to be published in *Journal of European Social Policy* and *Sociologie*.

For a full and up-to-date version of Jeroen van der Waals's academic activities you are kindly requested to visit his website (www.jeroenvanderwaal.com).