



UvA-DARE (Digital Academic Repository)

The Amsterdam region - A home for creative knowledge workers and graduates? Understanding the attractiveness of the metropolitan region for creative knowledge workers

Bontje, M.A.; Pethe, H.A.A.; Rühmann, P.

Publication date
2008

[Link to publication](#)

Citation for published version (APA):

Bontje, M. A., Pethe, H. A. A., & Rühmann, P. (2008). *The Amsterdam region - A home for creative knowledge workers and graduates? Understanding the attractiveness of the metropolitan region for creative knowledge workers*. (ACRE report; No. 5.1). A'dam inst. for Metro. & intern. develop. Studies.

http://www2.fmg.uva.nl/ACRE/results/documents/wp51_amsterdam.pdf

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



The Amsterdam region - A home for creative knowledge workers and graduates?

**Understanding the attractiveness of the metropolitan region
for creative knowledge workers**

ACRE report 5.1



Marco Bontje
Heike Pethe
Pia Rühmann

**The Amsterdam region –
A home for creative knowledge workers and graduates?**

**Understanding the attractiveness of the metropolitan region for
creative knowledge workers**

ISBN 978-90-75246-71-1

Printed in the Netherlands by Xerox Service Center, Amsterdam

Edition: 2008

Cartography lay-out and cover: Puikang Chan, AMIDSt, University of Amsterdam

All publications in this series are published on the ACRE-website

<http://www2.fmg.uva.nl/acre> and most are available on paper at:

Dr. Olga Gritsai, ACRE project manager

University of Amsterdam

Amsterdam institute for Metropolitan and International Development Studies (AMIDSt)

Department of Geography, Planning and International Development Studies

Nieuwe Prinsengracht 130

NL-1018 VZ Amsterdam

The Netherlands

Tel. +31 20 525 4044

+31 23 528 2955

Fax +31 20 525 4051

E-mail O.Gritsai@uva.nl

Copyright © Amsterdam institute for Metropolitan and International Development Studies (AMIDSt), University of Amsterdam 2008. All rights reserved. No part of this publication can be reproduced in any form, by print or photo print, microfilm or any other means, without written permission from the publisher.

The Amsterdam region – A home for creative knowledge workers and graduates?

Understanding the attractiveness of the metropolitan region for creative knowledge workers

ACRE report 5.1

Marco Bontje
Heike Pethe
Pia Rühmann



Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union

Amsterdam 2008
AMIDSt, University of Amsterdam

ACRE

ACRE is an acronym of the international research project ‘Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union’.

The project is funded under the Priority 7 ‘Citizens and Governance in a Knowledge-based Society’ within the Sixth Framework Programme of the European Union (contract no 028270).

Coordination:

Prof. Sako Musterd

University of Amsterdam
Amsterdam institute for Metropolitan and International Development Studies (AMIDSt)
Department of Geography, Planning and International Development Studies
Nieuwe Prinsengracht 130
NL-1018 VZ Amsterdam
The Netherlands

Participants:

- **Amsterdam** (Amsterdam institute for Metropolitan and International Development Studies, University of Amsterdam, the Netherlands)
Marco Bontje ~ Olga Gritsai ~ Heike Pethe ~ Wim Ostendorf ~ Puikang Chan
- **Barcelona** (Centre de Recerca en Economia del Benestar – Centre for Research in Welfare Economics, University of Barcelona, Spain)
Montserrat Pareja Eastaway ~ Joaquin Turmo Garuz ~ Montserrat Simó Solsona ~ Lidia Garcia Ferrando ~ Marc Pradel i Miquel
- **Birmingham** (Centre for Urban and Regional Studies, University of Birmingham, UK)
Alan Murie ~ Caroline Chapain ~ John Gibney ~ Austin Barber ~ Jane Lutz ~ Julie Brown
- **Budapest** (Institute of Geography, Hungarian Academy of Sciences, Hungary)
Zoltán Kovács ~ Zoltán Dövényi ~ Tamas Egedy ~ Attila Csaba Kondor ~ Balázs Szabó
- **Helsinki** (Department of Geography, University of Helsinki, Finland)
Mari Vaattovaara ~ Tommi Inkinen ~ Kaisa Kepsu
- **Leipzig** (Leibniz Institute of Regional Geography, Germany)
Joachim Burdack ~ Günter Herfert ~ Bastian Lange ~ Katja Manz ~ Robert Nadler
- **Munich** (Department of Geography, Ludwig-Maximilian University, Germany)
Günter Heinritz ~ Sabine Hafner ~ Manfred Miosga ~ Anne von Streit
- **Poznan** (Institute of Socio-Economic Geography and Spatial Management, Adam Mickiewicz University, Poland)
Tadeusz Strykiewicz ~ Jerzy J. Parysek ~ Tomasz Kaczmarek ~ Michal Meczynski
- **Riga** (Stockholm School of Economics in Riga, Latvia)
Anders Paalzow ~ Diana Pauna ~ Vjacheslav Dombrovsky ~ Roberts Kilis ~ Arnis Sauka

- **Sofia** (Centre for Social Practices, New Bulgarian University, Bulgaria)
Evgenii Dainov ~ Vassil Garnizov ~ Maria Pancheva ~ Ivan Nachev ~ Lilia Kolova
- **Toulouse** (Interdisciplinary Centre for Urban and Sociological Studies, University of Toulouse-II Le Mirail, Toulouse, France)
Denis Eckert ~ Christiane Thouzellier ~ Elisabeth Peyroux ~ Michel Grossetti ~ Mariette Sibertin-Blanc ~ Frédéric Leriche ~ Florence Laumière ~ Jean-Marc Zuliani ~ Corinne Siino ~ Martine Azam ~ Hélène Martin-Brelot
- **Milan** (Department of Sociology and Social research, University degli Studi di Milan Bicocca, Italy)
Enzo Mingione ~ Francesca Zajczyk ~ Elena dell’Agnese ~ Silvia Mugnano ~ Marianna d’Ovidio ~ Carla Sedinì
- **Dublin** (School of Geography, Planning and Environmental Policy, University College Dublin, Ireland)
Declan Redmond ~ Brendan Williams ~ Niamh Moore ~ Veronica Crossa ~ Martin Sokol ~ Enda Murphy

Table of contents

Executive summary	1
1 Amsterdam – A creative knowledge region	3
1.1 Introduction	3
1.2 The Amsterdam Metropolitan Area and its creative knowledge economy	4
1.2.1 The Amsterdam Metropolitan Area	4
1.2.2 Creative knowledge economy and policy	7
1.3 Creative knowledge workers and the inflow of graduates	11
1.3.1 Creative and knowledge workers	12
1.3.2 Graduates from creative disciplines and knowledge-intensive disciplines	14
2 Methodology	17
2.1 Questionnaire development	17
2.2 Approaching graduates and creative knowledge workers	19
2.3 Problems and limitations	20
3 Basic features of the samples: Graduates and creative knowledge workers compared	23
4 Results	35
4.1 Satisfaction with the region	35
4.1.1 General judgment of satisfaction with the region	35
4.1.2 Ranking reasons for living in the Amsterdam region: Comparing graduates with creative and knowledge workers	37
4.1.3 Satisfaction with amenities, infrastructure and services	39
4.1.4 Tolerance	54
4.2 Satisfaction with job and work environment	56
4.2.1 The influence of job characteristics on job satisfaction	58
4.2.2 The influence of job characteristics on regional satisfaction and plans to move	60
4.2.3 Connecting migration reasons, regional satisfaction and job satisfaction	61
4.2.4 Conclusions on job satisfaction	62
4.3 Satisfaction with neighbourhood and living environment	63
4.4 Mobility	70
4.4.1 Job mobility	72
4.4.2 Future and past mobility in relation with demographic characteristics	73
4.4.3 Relation between mobility and other factors	76
4.4.4 Residential history, city-regional satisfaction and plans to move	78
4.4.5 Creative workers and knowledge workers: A comparison	79
4.4.6 Conclusions on mobility	80
5 Discussion	81
5.1 General conclusions and policy implications	81
References	85
Appendix	89

EXECUTIVE SUMMARY

The report brings together the results of a survey of creative knowledge workers in the Amsterdam region. How do creative knowledge workers judge the living situation and what activities do they pursue in the different parts of the region? How satisfied are creative knowledge workers with their living, working environment and their neighbourhood? What role do hard and soft factor play in their assessment of the region?

164 creative knowledge workers and 71 UvA-graduates were asked in an online-survey to assess the Amsterdam region as a living and working environment. We used the Amsterdam Metropolitan Area, a group of 38 municipalities cooperating in various dimensions of metropolitan governance, as our regional entity of analysis. The survey was conducted in autumn 2007.

Creative knowledge workers and graduates have often lived in the Amsterdam region for more than 10 years, which shows that the regional population has strong social ties to the region. These social ties and job related reasons were seen as pivotal reasons for their settlement in the Amsterdam region. Soft factors such as diversity of the cultural offers or openness of the society played only a secondary role.

The survey shows that large differences exist amongst various subgroups of the creative knowledge workers. E.g. the income of creative workers and knowledge workers as well as of women and men varies significantly. Spatial differences appear in the social structure. Whereas families and high income households are more likely to be found in the suburban part of the region, low income households, female and non-Dutch creative knowledge workers and recently graduated persons tend to settle in the inner city of Amsterdam. Differences between inner city dwellers and suburban inhabitants come also to the fore, if their activity patterns are investigated. The cultural amenities are more commonly part of the weekly routines of inner city dwellers than for the surveyed suburban population. Both findings underline the importance of an in-depth understanding of the social texture of the different subparts of the region for a effective economic and planning policy for the Amsterdam region.

The report investigates the attractiveness of the Amsterdam region through three perspectives: satisfaction with the living environment of the whole region, job satisfaction and satisfaction with the neighbourhood. It relates those three fields to the overall score of the satisfaction level. The general level of satisfaction with the living and working environment as well as with the neighbourhood is high. On a scale from 1 (very satisfactory) and 10 (unsatisfactory) around 60% of the creative knowledge workers and graduates give a score of 5 and better. This overall satisfaction cannot be explained easily. Neither the judgment of the living environment, nor the judgment of the working environment, nor the assessment of the housing environment gives clear insights on which factors determine the overall level of

satisfaction. Also the analysis of soft and hard factors shows that not a single set of factors is able to explain different levels of overall satisfaction.

1 AMSTERDAM – A CREATIVE KNOWLEDGE REGION

1.1 Introduction

On 22 November 2007, Amsterdam and its surrounding municipalities decided to call themselves ‘Amsterdam Metropolitan Area’. This group of 38 municipalities had already started to cooperate in several regional development issues some years earlier, and the name Amsterdam Metropolitan Area was already used informally for some time. Formalising this name is a further significant step in metropolitan integration of the area. This decision was connected to the completion of a long-term development vision aiming at developing a competitive metropolis on the European scale (Provincie Noord-Holland, 2007). Several recent policy documents at the national Dutch level as well as in the region itself make clear that creative and knowledge-intensive industries play a crucial role in these competitiveness ambitions. The deliberate choice for a regional instead of a local development agenda once more makes clear that competitiveness for Amsterdam and its environs is increasingly a regional affair. The city of Amsterdam by itself (let alone its smaller neighbours) is too small to compete on the European or global level. Moreover, the press release announcing the official launch of the Amsterdam Metropolitan Area initiative stresses the need for an attractive living and working environment, pointing out not only the well-known ‘hard factors’ like connectivity, but also ‘soft factors’ like sustainability and diversity in living and working milieus.

The timing of our survey of residential and job satisfaction in the Amsterdam region could hardly have been better. After some years of intense debates between Florida supporters and opponents, the meanwhile well-known ‘Floridian’ assumptions about the need to attract creative talent, and the way to attract and retain them, now seem to have become ‘conventional wisdom’ for urban and regional governance in this region as well. Nevertheless, much uncertainty remains about the extent to which the ‘Florida gospel’ is valid; if it is based on the right assumptions and the right data; and if it is, if it can be generalised across the US borders towards the quite different European urban and regional context. Do workers in the creative and knowledge-intensive sectors really have different (more urban) living preferences than people working in other sectors? If so, is this true to the same extent across the entire ‘creative knowledge’ sector? And if that is true as well, can these living preferences be created and/or facilitated through urban and regional governance?

The answers to these questions have already been addressed at the local scale of the city of Amsterdam in a series of surveys and exploratory studies, both from academia and from local policy-makers. So far they were addressed much less at the regional scale of the Amsterdam Metropolitan Area. Our relatively small sample of workers in 6 creative knowledge sectors and recent higher education graduates will not be able to give definitive answers to these big questions, but it can give indications of the extent to which the Amsterdam Metropolitan Area

is currently able to meet the residential, working, amenity and leisure preferences of people working or aspiring to work in the creative knowledge field.

In the remainder of this chapter, we will briefly introduce the recent dynamics and current state of development of the creative knowledge economy and the current policy agenda of the Amsterdam Metropolitan Area. This is followed by a review of recent statistics on the size of sub-sectors within the creative and knowledge-intensive economy and on higher education graduates. These data have formed the basis for the sampling of our survey, and have been described in more detail in our previous ACRE reports (Bontje & Sleutjes, 2007; Bontje & Pethe, 2007). Chapter 2 then describes the development of the questionnaire, which was used in the same format in all 13 ACRE case study regions, and the way in which we have approached the potential respondents of our Amsterdam sample. The basic features of our respondents are described in Chapter 3. Chapter 4 reports on the results of our survey. The analysis is grouped in 4 main subjects: satisfaction with living in the region; satisfaction with job and work environment; satisfaction with the neighbourhood; and an analysis of residential mobility. The report concludes with a summary and interpretation of the main survey results, possible policy implications, a reflection on the limitations of our survey and possible avenues of further research.

1.2 The Amsterdam Metropolitan Area and its creative knowledge economy

1.2.1 The Amsterdam Metropolitan Area

The Amsterdam Metropolitan Area is the creative knowledge capital of the Netherlands. The region is characterised by the highest concentration of creative knowledge workers in the Netherlands. More than a quarter of the national employment in the creative industries (28.3%) and more than one fifth of the knowledge intensive jobs are situated in the Amsterdam region (22.6%)¹. Although those branches were – as many others in the Netherlands- hit by the economic downturn between 2000 and 2004, their economic performance has recovered above average. The general level of human capital is high. Every second professional in Amsterdam and 46 percent of the regional workforce acquired a degree from a higher education institution (university and polytechnic). The region is situated in one of the most successful economies in the European Union. After a short recession between 2001 and 2004, the economic growth rate has recovered in the Netherlands, leading to a decline of unemployment. The Dutch economy is characterised by a service orientation and a strong internationalisation (Bontje and Sleutjes, 2007). The Amsterdam region provides several higher level functions. It is a coordination centre for public and private activities, especially for financial and business services. It is a focal point for the production and dissemination of knowledge through universities and research institutions. It is the target of major tourist flows in Western Europe and accounts for a high level of cultural facilities and entertainment (Musterd and Deurloo, 2006).

¹ Data sources: CBS (2006) and LISA (2005), own calculations.

Not only the employment figures are in favour of the region, but also the so called ‘hard’ and ‘soft’ factors. The Amsterdam region is identified in the top 10 of the European investment locations due to the investment conditions and its international orientations (Cushman and Wakefield 2006). Also the strong presence of urban amenities has identified Amsterdam as one of the most attractive urban locations (Florida and Tinagli, 2004). In the Municipal Atlas of the Netherlands the city ranked first in the categories restaurant scene and historic character (*Atlas voor gemeenten* in Musterd and Deurloo, 2006). Finally, the metropolitan region is known for its tolerant atmosphere and its open climate (De Rooy et al., 2007). Also in the previous ACRE analysis, the region scored as one of the most favourable regions in Europe in terms of its development path, soft and hard factors (Kovacs et al, 2007).

The residential pattern of the creative knowledge workers as well as the location pattern of the creative knowledge industries was subject of several studies (Groenemeijer, 2002; Musterd, 2004; Bontje and Musterd, 2005; Musterd and Deurloo, 2006; DRO, 2006a / 2006b; Musterd, 2006; Musterd and Bakker, forthcoming). The activities of the creative knowledge industries are concentrated in the inner city of Amsterdam within the A10 ringroad. The highest concentration of creative knowledge workers and companies is found in an axis which runs from the city center through the Western *grachten*-belt to the Oud Zuid district (ibid.). Compared to other European cities such as Munich or Barcelona, the distribution of creative knowledge companies and the residential distribution of creative knowledge workers and even of students overlap, which makes the axis to a real ‘hot spot’ of the creative knowledge economy (Arnoldus and Musterd 2002). In spite of this strong concentration, differences between branches are also obvious. Whereas creative workers are strongly oriented towards inner city locations and prefer historic housing, knowledge workers are more likely to navigate to suburban parts of the region or allocate in newly built parts of the inner city like the former Eastern Harbour Area (Groenemeijer, 2002; Bontje and Musterd, 2005; Musterd and Deurloo, 2006; DRO, 2006a; Musterd, 2006). Small and medium sized companies locate more often in inner city locations than large companies, because they also tend to evaluate soft and hard location factors differently (DRO 2004, Musterd and Bakker, forthcoming). Other parts of the city appear to be less attractive locations for creative knowledge workers. The large expansion areas of the 20th century which were built under the General Extension Plan, however, are seldom destination of creative knowledge workers due to their mono-functional use as residential areas and despite of their unique architectural quality. Recent studies, however, observe a “creeping expansion of the creative core into the “centre periphery””, and an increasing allocation of small and medium enterprises to the outer districts, although they were traditionally drawn to inner city locations (DRO, 2006b).

Due to the space restrictions in the small 16 square kilometre inner city area within the A10-ringroad and the constant expansion of the creative branches, a regional analysis of creative knowledge becomes more important for the identification for the future policy and planning strategies. Still there is a lack of knowledge which creative knowledge branches prefer to relocate in the suburban area and how this is judged by the creative knowledge workers. Some suburban locations are already part of the creative industries allocation pattern. Hilversum, the Dutch centre of TV and broadcasting, already has a tradition of more than 50 years as a suburban creative centre. Almere, one of the youngest and fastest developing new towns in the Netherlands, emerged as a location for the software industry. Sub-centres have developed

different functions and they have an individual economic and social profile (Bol, 2007; Musterd et al., 2006; Rutten et al., 2006). Also different possibilities appear. Due to the current regeneration process in Zaanstad, this former industrial location provides scarce resources such as space. "There were things possible in the Zaan region that were no longer possible elsewhere", judged a recent report of the planning department (DRO, 2004: 31). At the same time, locations within the urban core of Amsterdam have changed their character. E.g. the IJ-banks are developed as new inner city location for the creative knowledge industries. Given this, an evaluation of the needs and the preferences of the creative knowledge workers is requested on a regional scale which is also sensitive towards the judgment of new inner city locations. Regional reporting is demanded, since the region is already a constitutive part of the everyday reality of the creative knowledge workers. Commuting figures underline the strong interdependence between the different municipalities with the city of Amsterdam. 48% of Amsterdam labour force are commuters, although large differences between occupations exist. Whereas only 20% of the accountants, bankers and ICT professionals live in the city, 60% of the architects chose a urban residential location (Groenemeijer, 2002). In addition, the tense Amsterdam housing and real estate market puts some urge on employees and employers to look to the suburban area for alternative locations.

The reasons for the current distribution of creative business in the city of Amsterdam are explored in various studies. The influential factors are listed in detail: costs, desire for plenty of work space, inspiring environment (DRO, 2004, Crok, 2004, Bontje and Crok, 2006; DRO, 2006a). "Besides offering attractive production milieus for creative and knowledge intensive industries, it is also important that there are attractive milieus where urban knowledge workers 'consume'" (DRO, 2006b: 31). The overlap of consumption and production milieus, and the local coincidence of living and working in locations with high density and mixed use are identified as basic features of locations which are attractive for the creative knowledge industries. For businesses it seems clear that hard as well as soft location factors influence the allocation pattern. Can the same be stated about the needs of creative knowledge workers? What is the interrelation between housing, working and leisure? Is the often found line of argumentation that different functions merge such as working and leisure for creative knowledge workers true for Amsterdam (Florida, 2002; DRO, 2006a)? Are there new places which combine working and leisure function at the same time? Is it true that the new meeting places which are a symbol of the hybridisation of working and leisure ('third places') gain importance in the everyday life of creative knowledge workers (DRO, 2006a)? Various studies identify for Amsterdam what determines the attractiveness of quarters for the creative knowledge workers: Historic properties are often named as an important asset (DRO, 2004, Crok, 2004). The presence of commercial amenities appears as a precondition as well as the presence of residential amenities (DRO, 2004), although it is said that the presence is more important than their use (DRO, 2006a). A recent study compared the importance of the residential environment with accessibility of amenities, type of dwelling and the working environment. It found out that the residential location and the available amenities are the most important factors that determine the attractiveness of Amsterdam for creative knowledge workers. It underlined that their needs and their preferences clearly differ from the remaining population in Amsterdam, which more often uses quantitative measures such as price and size rather than location and atmosphere (DRO, 2006a). In addition to that, tensions in the

Amsterdam housing market shape the residential pattern. They are seen as a push factor or as a threat for the incoming creative class (DRO, 2004; Bontje and Musterd, 2005).

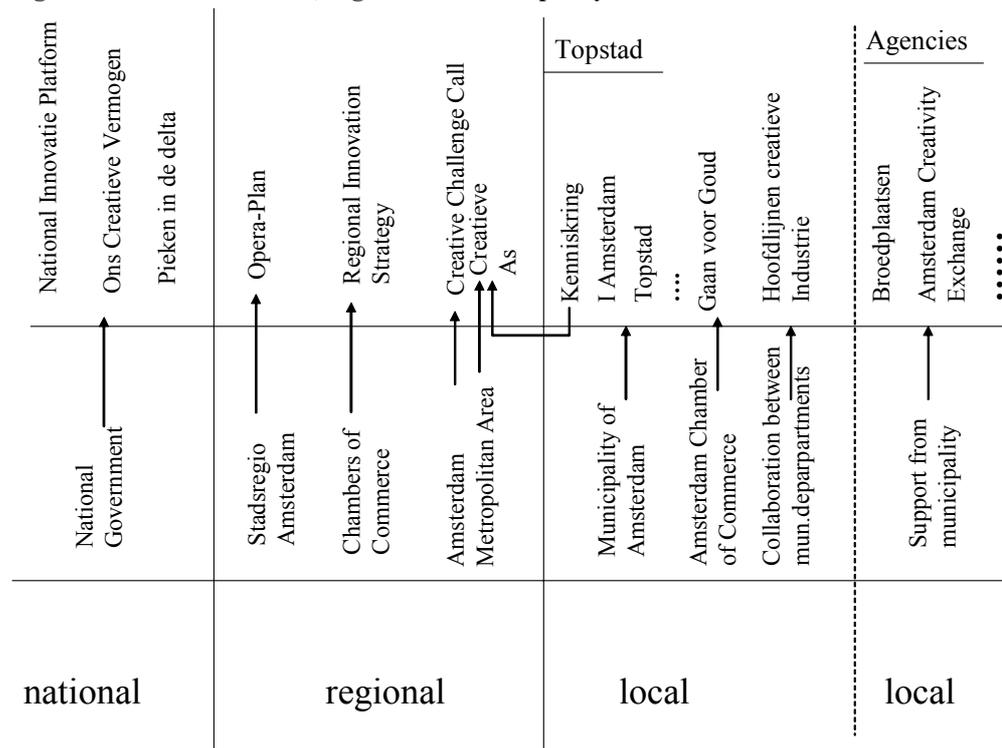
Our analysis focuses on recently graduated and creative knowledge workers in the region of Amsterdam. It maps out the different impact of the living environment, the residential neighbourhood and the working environment. What are the judgments that creative knowledge workers make when they choose their place of residence? Which region has the most favourable living environment to attract creative knowledge workers? The signs for success are positive for Amsterdam. “A tradition of innovative economic talent combined with a degree of openness, has resulted in the distinctive Amsterdam atmosphere, a major pull factor for knowledge workers and creative individuals. It gives Amsterdam the edge when it comes to culture and a tolerant image” (Musterd and Deurloo, 2006: 81). The region of Amsterdam comprises five of the Top 12 residential areas for creative workers in the Netherlands². An earlier ACRE report focussed on those long term developments and preconditions for the current situation. It underlined that the region of Amsterdam has one of the most favourable development paths in Europe (Bontje and Sleutjes, 2007). In Chapter 3 and 4 we show how the current situation in the region is judged by creative knowledge workers and graduates? First we continue our introduction with overview of the current policies for the creative knowledge economy.

1.2.2 Creative knowledge economy and policy

In the Netherlands, a policy for the creative knowledge economy has been developed at different government levels after the millennium. The national government has established policy programmes for the creative knowledge industries supporting regional collaborations between public and private actors as applicants for the budget. Some regional initiatives will be described in the following. It must be kept in mind that regional associations are always voluntary collaborations between municipalities, and that those associations are neither institutionalised by the political nor by the planning system, nor does the local population identify it self as part of a metropolitan region with a strong distinctive identity. Figure 1.1 gives an overview of the main national, regional and local programmes initiated in recent years.

² According to the *Atlas voor Gemeenten* 2004 the most popular residential areas for creative workers in the Netherlands are: Amsterdam, Utrecht, Amstelveen, Den Haag, Haarlem, Leidschendam-Voorburg, Den Bosch, Haarlemmermeer, Hilversum, Amersfoort, Delft, Alphen aan den Rijn (Marlet and van Woerkens, 2004).

Figure 1.1 – Main national, regional and local policy lines



Own figure

In 2004, the national government introduced three programmes. *‘Pieken in de Delta’* aimed to strengthen the core areas in the ‘Randstad’ for international competition (Ministerie EZ, 2004). Joint projects from local and regional, and public and private actors were requested to apply for national funding in 2006 in the so called “*Creative Challenge Call*”. In the region of Amsterdam, a loose collaboration of several municipalities and chambers of commerce (*‘Regionale Samenwerking Amsterdam’* -RSA) handed in several applications for the Northern Randstad (Noordvleugel), like the initiative for a Regional Expertise Centre ‘Creative Cities Amsterdam’. *‘Ons Creatieve Vermogen’*, a second programme, aimed to foster the interaction between creative industries and other economic branches (Ministeries EZ and OCW, 2005). Finally, the National Innovation Platform was established as a discussion platform between the government and private actors to foster the interaction between all levels of education (school, university and further education) and entrepreneurship (Innovatieplatform, 2006).

Next to regional reactions to, and national incentives from these new ‘top-down’ policy programmes, a more bottom-up development was initiated by the *Stadsregio Amsterdam*. Originally, this collaboration was the anticipated reaction on the establishment of a new regional government tier which was never realised. Instead of dissolving the organisation, the collaboration municipalities and economic organisations like the Chamber of Commerce agreed to improve in the so called OPERA-plan the accessibility and connectivity of the Amsterdam region by air and water and via technical networks (ROA, 2004).

The project aims at the regional level. It wants to bring different municipalities with different economic profiles together, and it aspires to lever their economic interaction, to improve their visibility to investors from abroad and to avoid intraregional competition.

While the right level for regional co-operation is still debated, a broad consensus seems to have been reached in recent years. The *Stadsregio* might still be the most formalised regional institutional arrangement, but actual regional co-operation has crossed its borders and now mostly takes place in the area called ‘Amsterdam Metropolitan Area’. This area includes 38 municipalities with more than 2 million inhabitants and more than 1 million jobs (see Figure 1.2, p. 11). The Amsterdam Metropolitan Area has become the international brand name of the before-mentioned RSA area.

At the local level, various policies and initiative for the creative economy have developed, too. In Amsterdam, various working programmes for the current legislative period of the city council were developed, and various associations were established by the administration and private economic associations.

One of the first documents which was in favour of a direct support for the private creative industry was introduced in 2003 by the social and cultural department of the city of Amsterdam (Long-term vision on Culture Amsterdam 2015). Different reports by various municipal departments and external research institutions have been prepared (see literature cited above). Furthermore, the municipality of Amsterdam supported various agencies that address and manage the needs of various creative knowledge workers. For instance, *Amsterdam Creativity Exchange* was an initiative which was established by the creative industries themselves, but is partly funded by the municipality of Amsterdam. It serves as a networking platform for creative entrepreneurs and workers in Amsterdam. Another well known example is the *Broedplaatsen*-agency which helps artists to find affordable working space in the city. Although those initiatives were relatively early compared to other cities in continental Europe, a single policy programme was not passed by the city government earlier than 2007, since it lacked support in the former city government.

Although various smaller, private and public initiatives exist (for detailed description see Hoving, 2007), two larger policy programmes are highlighted in the following. Whereas the first programme (*Topstad*) is an umbrella programme for the next period of governance of city council and comprises various branches and a wide range of policy issues, the latter, *Hoofdlijnen Creatieve Industrie*, addresses the needs of the creative industries specifically.

The *Topstad* programme (Gemeente Amsterdam, 2006) is one of three heading programme lines of the new city government and it aims to bring Amsterdam back into the top 5 of European business locations. The *Topstad* programme brings together existing policy issues, but also specifies new lines. Various parts of the *Topstad* agenda foster and support different parts of the creative knowledge economy. Examples of measures are financing services for the consulting of small and medium businesses, and developing Amsterdam as a business location for investors and creative knowledge workers. The *Topstad*-programme comprises different pillars which aim at different policy fields. The *Kenniskring*-pillar, for instance, supports the exchange and collaboration between knowledge intensive business and educational and research institutions, and promotes the expansion of ICT infrastructure. The *I*

Amsterdam-programme line is a regional city marketing programme for tourism and the allocation of new businesses. It also supports fairs, congresses, and events like the Amsterdam Fashion Week and the Cross Media Congress, PICNIC.

Collaboration between different municipal administrations (economy, spatial planning, statistics, culture and society and housing) led to the development of a specific programme line for the creative industry for the current legislative period 2007-2010 (Gemeente Amsterdam 2007). It was passed by the city council in May 2007. Although it addresses the creative city policy through various fields such as education, youth work and business services, a new business agency for the creative industries is one of the most important outcomes. It is set up as a regional development agency and it is planned to work as a one stop agency for the creative businesses in the region. That means that other municipalities from the region of Amsterdam contribute to the budget and that they hope that this agency will strengthen the Amsterdam region as a business location by bundling, monitoring, consulting, networking and acquiring new resources. Although those municipalities applied for funding as Noordvleugel region before, it is felt that this new agency will strengthen the voluntary collaboration between the regional communities. It is hoped that this agency for creative workers and entrepreneurs can identify new concepts for the regional allocation of creative companies and access funding for this endeavour from the national government.

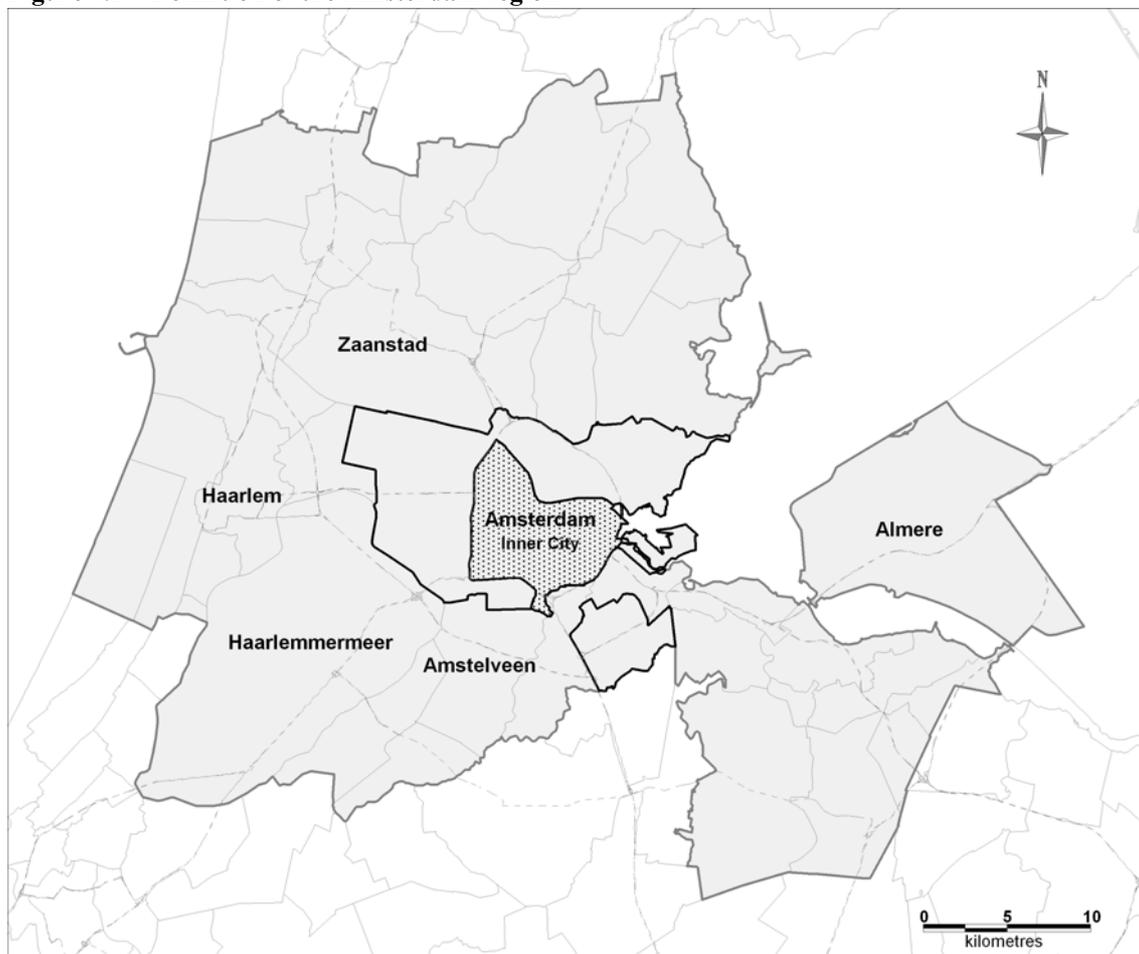
In addition to that, the Chamber of Commerce, which is involved in most activities described above, designed an own strategy to strengthen the regional economy. The *Gaan voor Goud* programme (Kamer van Koophandel Amsterdam, 2004) developed a vision for future development. In collaboration with the Chamber of Commerce Flevoland and Gooi en Eemland the so called *Regional Innovation Strategy* was developed (Kamers van Koophandel Amsterdam, Flevoland & Gooi- en Eemland, 2006). This programmes aims to improve the conditions for innovations for the knowledge intensive industries such as ICT, life sciences as well as for the creative industries. Linkages between regional clusters of specified branches are supported by creating networks and organising events. The programme does not want to create a new institutional layer rather it aims to coordinate existing regional institutions.

The needs of the creative knowledge industries are addressed by different programmes, but the quantity of programmes is also critical judged. Bontje and Pareja write: “The largest problem as perceived by most policy and business representatives is that there are already too many different institutions responsible for parts of the regional-economic development. Therefore it is encouraged to form a ‘board of directors’ representing the relevant existing institutions” (Bontje and Pareja, 2007).

1.3 Creative knowledge workers and the inflow of graduates

The previous ACRE-report described the importance and distribution of creative knowledge workers and graduates in the region of Amsterdam (Bontje and Pethe 2007). For the analysis, data from Statistics Netherlands (CBS) and the national business monitor LISA were used. Samples for the creative knowledge workers and graduates were defined by using employment figures as an indicator of the importance of the branches. Since the international comparison of other project cities is one of the aims of the ACRE-project, small modifications are necessary to guarantee the highest degree of comparability. The Amsterdam Metropolitan Area, the region we study in the ACRE project, is outlined as the marked territory in Figure 1.2. In the remainder of this report, the Amsterdam Metropolitan Area will be referred to as ‘the Amsterdam region’.

Figure 1.2 – Definition of the Amsterdam region



Source: Own map, cartography: K Pfeffer

1.3.1 Creative and knowledge workers

The creative knowledge workers are split into two subgroups: creative workers and knowledge workers. For each field, the three most important branches are identified and matched with the results in other cities.

In terms of their quantitative importance, both subgroups represent a different share of employment in the city. In the Amsterdam region 246,971 creative knowledge workers were employed, of which 31.5% work in creative branches. Thus, the importance of the knowledge workers is higher, since they amount to 68.5% of the workforce. What are the most important branches in both fields?

The top 5 branches in the creative field are in 2005: software design (18,568 employees), publishing (10,255 employees), radio and television (8,978 employees), advertising (8,604), and music and the performing arts (6,482). For reasons of comparability with other ACRE regions, software design (code 722), advertising (code 74401) and film, radio, video and motion pictures (code 921 and 922) are selected as target branches for the survey. The survey target group includes 46.4% of the workforce of creative workers in the region of Amsterdam.

The top 5 branches in the knowledge economy in the Amsterdam region are in 2005: legal and accounting (62,112 employees), finance (28,935 employees), labour recruitment (10,069 employees), higher education (9,101 employees), and telecommunications (8,647 employees). Again, the selection is modified to guarantee comparability with other European cities and law, accounting and opinion research (code 741), finance (code 65) and research and education (code 731) are selected as sample branches. The survey target group contains 59.2% of the workforce of the knowledge economy.

The selection scheme which is shown in Table 1.1 was used to determine the sample size for each branch. In total, the aim was to include 150 creative knowledge workers in the survey.

Table 1.1 – Selection of interviewees by branch and spatial distribution

Branch	Employees	Representation Interviewees	Spatial distribution of interviewees			
			Inner city	Remaining city	Subcentre	Suburban region
Software	18568	34	9	7	10	8
Film and radio	13453	25	6	1	1	17
Advertising	8604	16	7	2	4	3
Law	62112	42	15	6	11	10
Finance	33984	23	10	8	2	3
Higher education	14199	10	4	4	1	1

Data source: LISA; own calculations

Before a detailed methodological account is given in Chapter 2, we will now shortly summarise recent development trends and the spatial distribution of the selected branches.

The general development of the creative industries was very dynamic in the metropolitan region during the period 1996-2005 (cf. Bontje and Sleutjes, 2007). The number of companies increased by 65% and the number of employees rose by 48%. The three selected branches participated in this growth to a different extent. Software design expanded exceptionally, quintupling employment and quadrupling the number of businesses. Apart from hardware consultancy that only adds up to less than two thousand employees, this steep increase is the strongest of all creative and knowledge branches. Advertising and film and radio followed the average trend.

Compared to the creative economy, the development of the knowledge economy was more moderate, but still well above the general economic development in the metropolitan region Amsterdam. The employment grew by 29%, the number of companies even steeply increased by 52%.

Law was the leading branch in the knowledge economy. One third of all knowledge workers are employed in this industry and their number has doubled within the last decade. The number of companies in this branch expanded with 81%, which is also far above average. The remaining two selected branches, finance and higher education, performed less successfully than the overall economy in the Amsterdam region. Whereas the economic development in banking was positive in terms of employment, the number of employees and companies in higher education and financial leasing were reduced.

The inner city was the most important location for companies of all selected branches apart from radio and television. The largest part of the workforce, however, is not so much oriented towards inner city areas. The majority of professionals in advertising works in inner city areas, but in advertising the suburban area is also a focal point for employment. Motion picture and video companies and employees are nearly equally distributed to inner city and suburban locations. Since the company size tends to be larger in the remaining part of the city, it is hardly surprising that the majority of businesses are more likely to be found in the inner city districts. Professionals in software engineering and in radio and television companies appear to gravitate towards the suburban area of the Amsterdam region. Apart from suburban sub-centres all parts of the metropolitan region are represented in 2005.

The most important working locations of knowledge workers are found in the urban core in Amsterdam region. The majority of legal and financial professionals works in the inner city of Amsterdam (exemption: financial leasing), but the suburban area is increasingly competing with the inner city in the case of legal professionals and the outer city boroughs in the case of banking employees. The outer city district of Amsterdam had already been established as a focal point for employees in higher education. In conclusion, the major part of knowledge workers tends to navigate towards urban locations. The regional distribution of the companies shows a slight dispersion. The majority of companies are situated in inner city in higher education. Although finance and law show the highest business activity in the suburban area, this is followed by inner city locations.

1.3.2 Graduates from creative disciplines and knowledge-intensive disciplines

In addition to the survey of creative knowledge workers, recently graduated young professionals are interviewed. Here, the sample is also divided into two groups: graduates from art academies and graduates from all other academic fields. Before the sampling procedure is explained in detail, a short introduction about the importance of highly skilled professionals in the Dutch workforce and the main patterns of the academic outflow of universities in the Netherlands and in the Amsterdam metropolitan area are given.

As mentioned before, the workforce in the Netherlands is highly skilled. 30 percent of the active population acquired tertiary education in this country. The general level of qualifications is higher in the metropolitan region than in the rest of the country. Every second professional in Amsterdam and 46 percent of the regional workforce passed higher education (university and polytechnic) successfully. The active population is highly geared to the urban labour market. 72% of the active highly skilled professionals work within the city of Amsterdam, whereas only 28% perform their tasks outside the city.

The majority of the workforce with higher university degrees in the Netherlands studied in the field of health science (42%), followed by economy (27%) and technical subjects (16%). The last figures about the outflow of students from Dutch universities state that 111,300 students graduated at Dutch universities in 2005 successfully. 75,730 persons graduated in fields which are relevant for the creative and knowledge workforce. Five groups of disciplines are identified to determine this new inflow in the labour market: social sciences, economy and law (44,320 graduates), art and humanities (9,460 graduates), engineering (9,170 graduates), natural sciences (7,540 graduates) and personal services, transport, environment (5,240 graduates). The faculties of education and of health sciences examined some eighteen thousand young academics each in 2005. The definition of the creative and knowledge intensive workforce which is applied in this study does not include health or educational occupations. Due to this, those graduates are excluded in the further analysis.

In Amsterdam two universities account for the majority of graduates: Free University and University of Amsterdam. In 2005, 10,241 graduates finished their degrees in both universities. The majority were registered at the faculty of social sciences, but compared to the national data the number of engineering graduates is lower (see Table 1.2).

Table 1.2 – Graduates of University of Amsterdam and Free University by faculty in 2005

Faculty	Sub-fields	UvA and VU graduates	Percent	UvA graduates	Percent
Education		525	5.1	305	5.3
Humanities		1275	12.5	994	17.2
Social Sciences Total		5762	56.3	3300	57.2
	<i>Social Sciences</i>	<i>3054</i>	<i>53.0</i>	<i>2007</i>	<i>90.9</i>
	<i>Economy</i>	<i>463</i>	<i>8.0</i>	<i>200</i>	<i>9.1</i>
	<i>Journalism</i>	<i>43</i>	<i>0.8</i>	<i>43</i>	<i>2.0</i>
	<i>BA and Accounting</i>	<i>1328</i>	<i>23.1</i>	<i>581</i>	<i>26.3</i>
	<i>Law</i>	<i>866</i>	<i>15.0</i>	<i>468</i>	<i>21.2</i>
Natural Science		798	7.8	428	7.4
Engineering		27	0.3	4	0.1
Health		1759	17.2	684	11.9
Planning		88	0.9	45	0.8
Environmental Sciences		7	0.1	7	0.1
TOTAL		10241	100.0	5767	100.0

Data Source: University of Amsterdam

For the calculation of the distribution of prospective questionnaires, data of the output of the Amsterdam universities was used.

Table 1.3 shows the selection scheme which provides a representative sample for all fields of study.

Table 1.3 – Selection of graduate interviewees by origin and academic subject

Graduate interviewees	Faculties				
	Social Sciences, Economy and Law	Arts and Humanities	Engineering	Natural Sciences	Personal services, transport, environment
25	17	5	0	2	1

Source: Own Calculations

The outflow of art graduates is very low in absolute terms in the Netherlands, although other related studies such as architecture or education for art teachers educate account for more than eight thousand students. In 2005, 120 graduates left the academy, 50 percent of which is non-Dutch origin. Half of them receive the degree from the Rietveld academy in Amsterdam. Therefore, a survey of 25 alumni of the Rietveld will provide insights in their judgment of the situation in the AMA.

2 METHODOLOGY

2.1 Questionnaire development

The questionnaire was developed and led by members of the Dublin team. The creation of the questionnaire entailed a number of different steps which involved collaboration both within the team as well as with members from the entire ACRE project. Below is an outline of the different steps followed in the formulation of the questionnaire, from its conception to the final version. A copy of the questionnaire is available at www2.fmg.uva.nl/acre/results/documents/WP5_questionnaireAmsterdam.pdf.

The objective of this particular section of the project and, more specifically, of the questionnaire, was to understand the drivers behind the decisions of higher educated graduates and workers in creative and knowledge-intensive industries to find a job at a specific location in the region. A second and interrelated objective was to explore the role that both hard and soft factors play in workers' and graduates' decision to live in a particular location in the region, as indicated on guidelines and descriptions provided in the ACRE proposal.

With these general objectives in mind the questionnaire was divided into 4 categories:

1. Satisfaction with the city: One of the key arguments in the debate on knowledge and creative cities, is that what are termed 'soft factors' are increasingly important in both the location decisions of firms/organisations as well as individual workers. In particular, it is argued that workers in the creative sector place a high value on what are termed 'soft factors', by which is meant for example the atmosphere of a metropolitan region, the variety of attractions and interests that are to be found there. The idea behind the creation of this section of the questionnaire was to find out how satisfaction of workers and graduates were with different aspects of the metropolitan region. In developing this section, it was intended to achieve an overall evaluation of the metropolitan region.
2. Satisfaction with job and work environment: In the knowledge economy, and in particular in the creative economy, there is a suggestion that the work-life of the knowledge worker is more flexible, creative and interesting than other types of jobs. This section sought to address issues of satisfaction with respect to the respondents' jobs and general work environment.
3. Satisfaction with neighbourhood/area and dwelling: Although a person can be generally satisfied with the city in which s/he lives, this satisfaction does not necessarily translate into other spheres of their life. Given that the neighbourhood in which people live is a central element to people's satisfaction, the Dublin team

thought it would be pertinent to address issues of neighbourhood and, more concretely, dwelling satisfaction.

4. Background data: Background information is essential in any questionnaire, as it is what provides a basis for the analysis.

The formulation of many of the questions required drawing from current research on, for example, life satisfaction and quality of life issues. Upon completion of this task, the Dublin team met to share/discuss the questions produced and think about possible omissions. Through a deliberative process the Dublin team began by identifying and discarding overlapping questions. Once the overlaps were addressed, the challenge was to identify gaps in each section.

The Dublin team piloted the questionnaire (sample of 12) locally and made adjustments from the feedback. Once the pilot questionnaire was implemented, a number of problems were identified with the existing draft. The postdoctoral researcher, who conducted the pilot test, shared the experience and addressed some of the existing problems of the questionnaire to the entire Dublin team. The team agreed that substantive revisions of some sections of the questionnaire had to be made and some questions had to be rephrased. As soon as the post-pilot editing was completed, the Dublin team met once again and went through the entire questionnaire to make sure it was substantively, grammatically and linguistically precise.

Upon completion of the first draft, the questionnaire was sent to the management team (Amsterdam). The questionnaire was then returned to the Dublin team with some comments and suggestions. Changes and edits were made accordingly. At this point, the questionnaire was ready for distribution to all the teams. During the project meeting in March 2007 (Sofia), the Dublin team gave a general introduction to the rationale behind the structure and logistics of the questionnaire. In addition to the presentation, each of the 12 teams was given a copy of the first draft of the questionnaire. After the presentation, each team was given a chance to discuss, suggest and provide constructive comments on the existing draft of the questionnaire. After this general 'questions-answers' session in the conference room, a consensus was reached over how to proceed with the existing structure of the questionnaire: each team was to provide comments and suggestions on how to change the questionnaire to fit the broad objectives of the research as well as to account for the particularities of their individual case study. The teams had just over one month to provide comments.

Once the agreed deadline was reached, the Dublin team met to discuss the received suggestions. Some of the suggestions were relatively straightforward and required minor editing. Others suggestions, however, required extensive thought and, in some cases, major substantive revisions. In the majority of cases, the suggestions and recommendations from the various teams were incorporated to the questionnaire. This, however, extended the size of the questionnaire significantly (more than double the original size), and we were thus faced with a problem of size/length of time per interview. After the recommendations were added to the questionnaire, a first draft was sent to the coordinating team – Amsterdam. The questionnaire was then fully revised and significantly reduced in size and then approved by the coordinator and the coordination team. The Dublin team was asked to ensure that the teams restrain from changing elements of the questionnaire, as it would make future comparisons difficult.

Once the coordination team fully revised the questionnaire, the Dublin team edited the questionnaire in accordance to the recommendations made and posted it on the internal project web site. This was done in May 2007. However, two months after the questionnaire had been posted one of the teams noticed a potential minor problem with one of the questions (question A2). The team raised the issue with the coordination team, who then asked the Dublin team to change the question in accordance to the suggestion made. Once this suggestion was incorporated, the new version of the questionnaire was posted online (extranet) in July, 2007.

2.2 Approaching graduates and creative knowledge workers

As mentioned before, our targets were to have at least 150 respondents working in one of the 6 selected creative and knowledge-intensive industries, as well as 50 respondents who recently graduated at higher education institutes. The more detailed break-up of these targeted respondents groups has also been introduced earlier in this report. In this section we will focus on the ways in which we distributed the questionnaire and the response rate we eventually reached.

The fieldwork was conducted by the statistical office of the municipality of Amsterdam, Dienst Onderzoek and Statistiek. We approached the creative knowledge workers through their companies. A representative sample of companies in the selected branches was targeted. In our approach, we distinguished between large companies, with 100 or more employees, and small and medium-sized companies with less than 100 employees. The large companies were approached by phone, the smaller companies by letter. Since in large companies finding the right contact person is notoriously difficult, we approached them by phone before sending the letter and/or the questionnaire. We offered two options to fill out the questionnaire to interested companies: they could either ask for paper copies of the questionnaire including return envelopes, or receive passwords to access a web survey. In addition, some locations with large concentrations of creative knowledge workers in our selected sectors have also been visited to approach creative knowledge workers directly instead of through their company.

The graduates were selected through the alumni administrations of their higher education institutes. The Alumni Association of the University of Amsterdam was so kind to enable us to draw a representative sample from their alumni database. We asked for graduates who finished their studies between 2001 and 2006 and who continued to live in the Amsterdam region (see Figure 1.2). The sample of the university graduates was divided into two groups. 25% of the UvA graduates studied subjects which are related to the creative industry. The remaining sample represents the main fields of studies in the Netherlands. Due to technical reasons we were not able to control for nationality and ethnic origin. Since the graduates were randomly selected, it can be assumed that there is no methodological bias in the procedure. Since many foreign graduates tend to return to their home country after finishing their studies, the sample still might under-represent the diversity of students who acquired their degree in Amsterdam. The selected alumni received a letter and a password to the web version of the questionnaire. For the art school graduates, we approached the Rietveld Academy, which sent an e-mail to 300 alumni of that institute with a separate link to the online survey.

Altogether, we approached:

- 2254 small and medium-sized companies in the selected creative and knowledge-intensive branches by letter;
- 156 larger companies in those branches by telephone;
- 444 recent graduates of the University of Amsterdam by letter;
- and 300 recent graduates of the Rietveld Academy by e-mail.

This resulted in the participation of 71 recent graduates from the two higher education institutes (46 of the University of Amsterdam, 25 of Rietveld Academy); and 164 workers in the selected creative and knowledge-intensive industries. We had expected in advance that it would be hard to reach the targeted numbers, since response rates of questionnaires in the Amsterdam region are most often relatively low compared to other Dutch regions and other countries. However, the response rate we eventually reached (6.8% with the companies; 9.5% with the graduates) was below our expectations. Companies which received the survey criticised the length of the questionnaire. Companies in the suburban part of the region did not identify themselves as part of the Amsterdam region, and creative workers missed the answers which addressed the situation in suburban municipalities.

2.3 Problems and limitations

Various research questions can not be sufficiently answered. Two reasons come to the fore. First, the overall number of cases is limited to just over 200. That means that only few meaningful subdivisions are feasible without leaving the realm of scientific accountability. Due to this fact, the analysis was not always able to portray the differences between creative and knowledge workers, or between persons who live in the core city or in the suburban belt; and it was often not possible to make detailed analyses about the effects of age, gender, income, etc.

Second, several methodological problems occurred during the fieldwork. Inhabitants outside of Amsterdam do not always identify with an ‘Amsterdam region’, because they conceive it as an artificial creation without identity. If approached for the survey, many companies had difficulties to identify themselves as a constitutive part of the Amsterdam region. Local or national identities superimpose weak regional ones. The motivation to participate in a regional survey, however, declines. Companies also criticised other points. Often company representatives rejected to contribute to the ACRE research after they were informed about the length of the questionnaire. They feared that filling the questionnaire would consume too much working time from their employees. The questionnaire can be shortened, but at the same time other ways of distributing would be wise complementation in the field work strategy. At the same time, it would also save human resource managers time and effort to determine suitable respondents for the survey. Creative knowledge workers who lived outside of Amsterdam often mentioned problems to find a suitable category for answering. To put it in a nutshell, a regional survey faces various problems in addressing people, but also in providing suitable short answers.

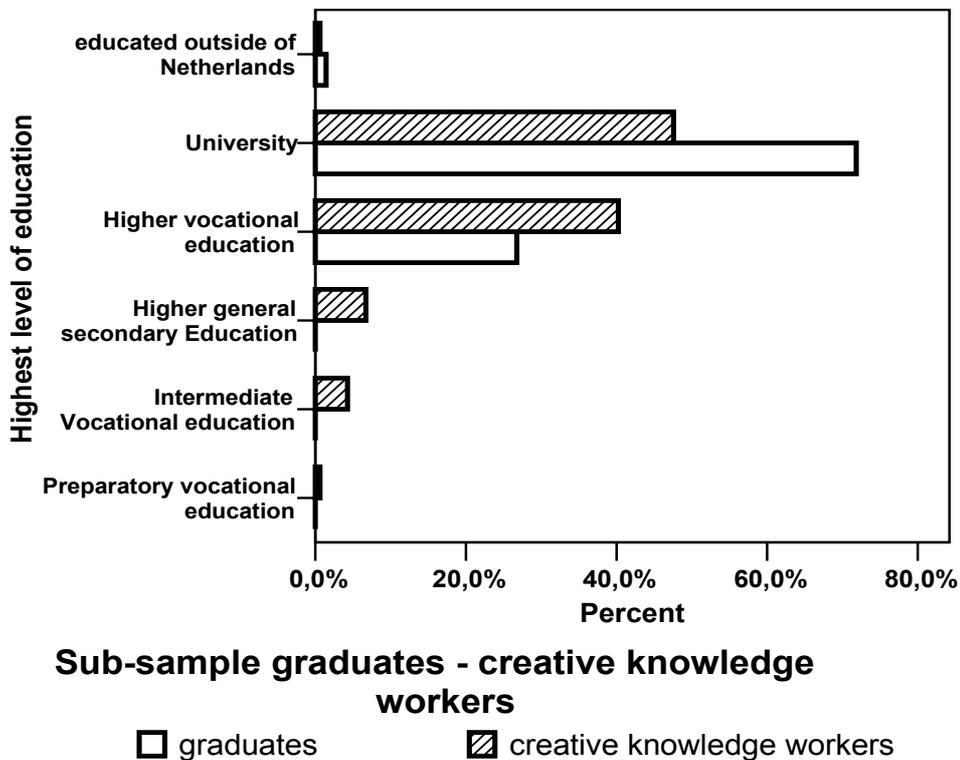
Maybe more direct ways of approaching respondents – at home, at job-related events or in their lunch breaks – would have resulted in a higher response. However, some attempts to do this also led to disappointing results. One of the members of our Local Partnership, with an extensive survey experience, suggested that the instrument of multiple-choice questionnaires may no longer be adequate to involve and interest respondents. Maybe we should think of other survey designs, including provocative statements or inviting respondents to choose their preferred policy measure or programme. Maybe we should also think of other ways than surveys to reach and engage our target groups.

3 BASIC FEATURES OF THE SAMPLES: GRADUATES AND CREATIVE KNOWLEDGE WORKERS COMPARED

In this part of the report, we want to give a short overview about the demographic structure of the sample and highlight the most important features of the investigated group. We compare those results with other available data source. This way we gain an assessment on the validity of the sample. A main source is the forthcoming report by Oosteren and Fedorova who used the regional survey of the active population (Regionale Enquête Beroepsbevolking (REB)) of the department of statistics of the city of Amsterdam (Oosteren and Federova forthcoming). The comparison, however, can only provide us with a first estimate, since the definition of the creative knowledge workers is slightly different in Oosteren's and Federova's data and the data is only given for the city of Amsterdam.

The group of creative knowledge workers which is approached by the ACRE survey in the Amsterdam region can be characterised with the following features (see also appendix). The majority of the creative knowledge workers are between 25 and 55 years (79%). Male participants are slightly overrepresented (66%), because they represent only 61% of creative workers and even 52% of knowledge workers in Amsterdam.

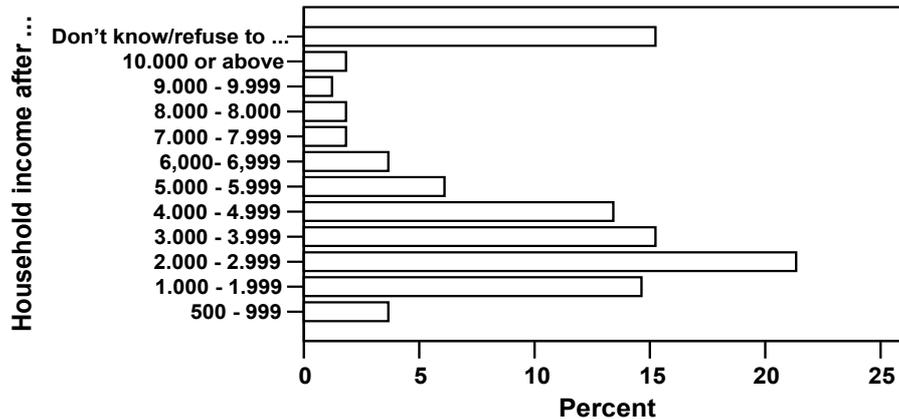
Figure 3.1 – Highest level of education – graduates and creative knowledge workers (N=233)



Source: Own survey

Due to the definition of the sample, all graduates received **university education**. A small group of creative knowledge workers perform highly skilled activities, although they did not receive a university degree. REB data also confirms this outcome (Oosteren and Federova forthcoming, 5). In other words, not only formal higher education degrees, but also training on the job can qualify creative knowledge workers to perform their highly skilled activities.

Figure 3.2 – Household income of creative knowledge workers (N=164)



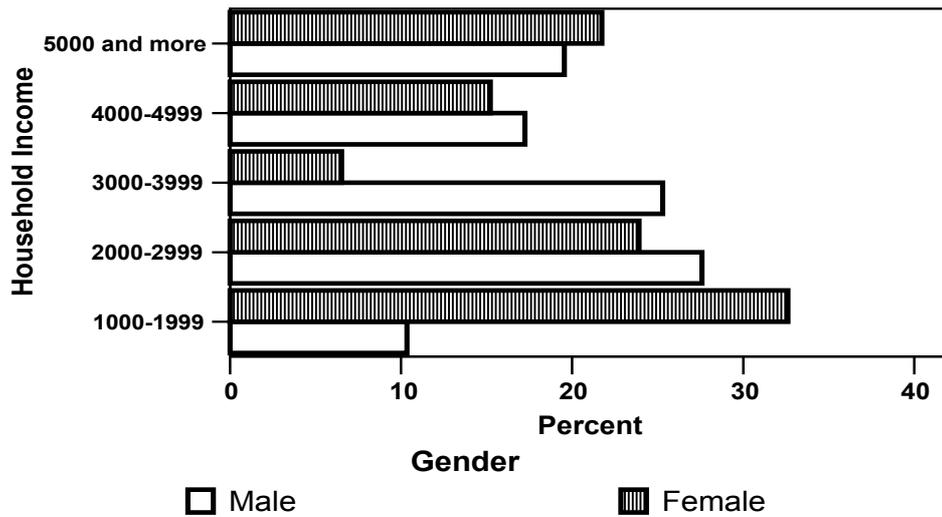
Source: Own survey

The household **income** of the majority of the surveyed creative knowledge workers ranges from 1000 and 2999 Euros (36%). Creative knowledge workers can rely on a significantly higher income than the average Amsterdam households (cf. Onderzoek en Statistiek 2007, 196)¹. Compared with the REB, the low income groups up to 1999 € are underrepresented in the sample, whereas the share of creative workers with an income between 2000 and 2999 € is slightly larger and the share of knowledge workers in this income group is smaller compared with the REB data. Higher income groups with a household income of more than 3000 € are slightly overrepresented in this survey. Overall differences between income structure of creative knowledge workers in Amsterdam in the REB survey and in this sample are visible. Interpretations should be treated with caution.

Gender has still a strong influence on income and work participation in the Netherlands (Joumotte 2004; CBS 2007a; CBS 2007b). Women earn on average less due to shorter working hours and pay differences. This phenomena is also visible for the income structure of creative knowledge workers. Women earn significantly less than men in our sample (0% significance level). This effect cannot be explained by lower working hours which do not have a significant effect here, neither can it be explained by a higher share of female creative workers. Instead of that, household size might have an effect, although it is not significant. Female creative workers are more often single which explains in parts their lower household income. In addition to that, half of the interviewed women are in one age group between 25 and 34 years which is a significant difference to the male workers.

¹ Income distribution in Amsterdam: 55% of household less than 1317 €, 23% of households between 1318 € and 1833 €, 18% of households between 1834 € and 2467 €, 13% of the households between 2468 € and 3325 €, 15% of households more than 3326 € (data source O+S 2007, 196, own calculations).

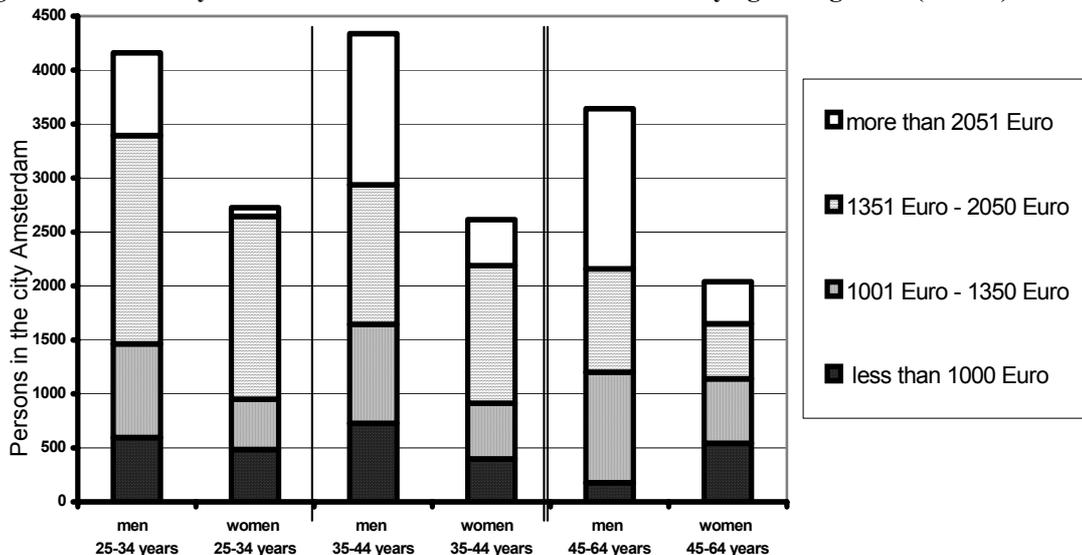
Figure 3.3 – Income difference of female and male creative knowledge workers (n=133)



Source: Own survey

The REB data (see Figure 3.3) confirms a different income structure for both genders. The income of men and women who are between 25 and 34 years of age is similar. This income distribution changes, when they reach 35 years of age. Whereas older women are overrepresented in the lowest income groups, they are less often represented in the higher income groups above 2051 € per month. This phenomenon is reinforced by the fact that the division of labour between men and women increases by age. Compared to the smaller ACRE-survey, however, the REB-data shows that the working time for both genders is significantly different, because women work more often less than 25 hours per week. Although the final reasons for the income differences can not be identified at this moment, both samples indicate that the labour and income participation varies between both genders.

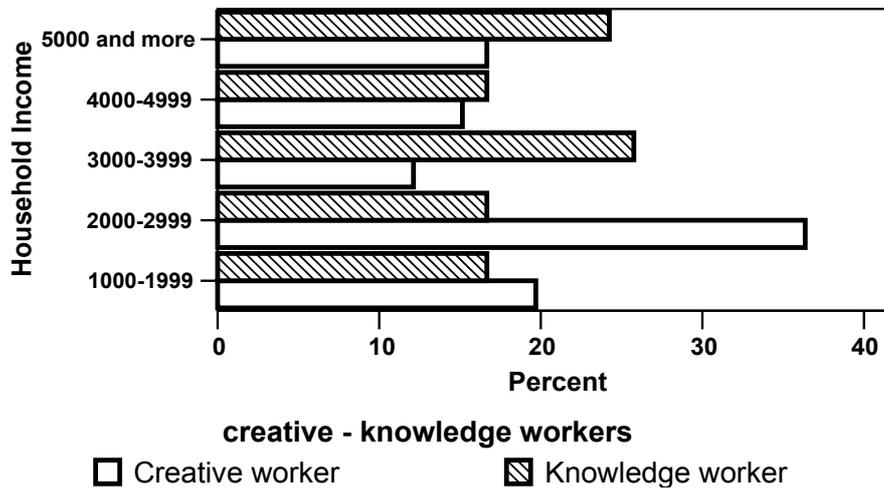
Figure 3.4 – Monthly individual net income of creative workers by age and gender (n= 364)



Data source: REB – Dienst Onderzoek en Statistiek; own calculations.

In addition to that, creative and knowledge workers are also characterised by significant income differences in the REB-data (Oosteren and Federova forthcoming). This fact is also confirmed in our survey, in which knowledge workers earn a higher income than creative workers.²

Figure 3.5 – Household income in € after tax of creative and knowledge workers (N=185)



Source: Own survey

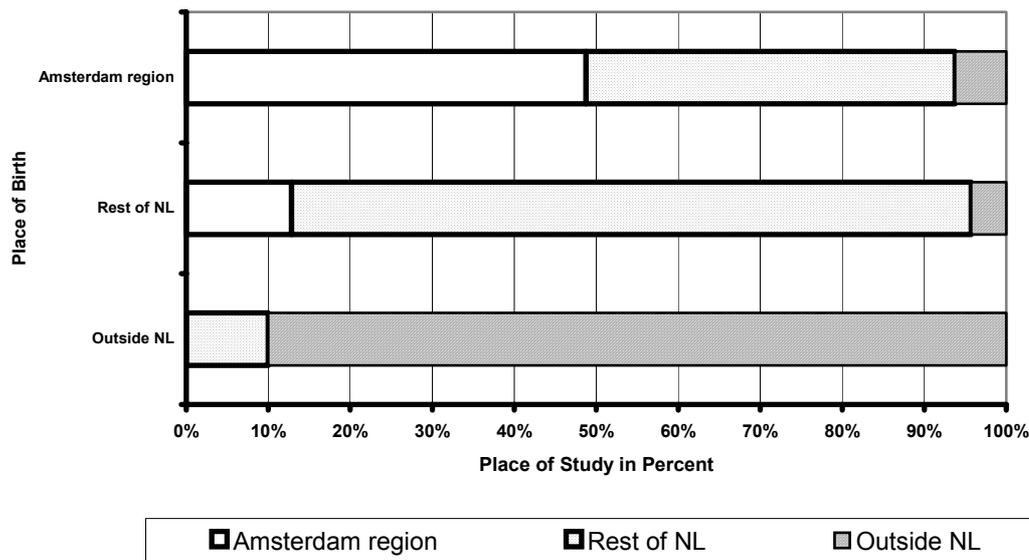
To sum it up: although large income differences exist between different subgroups of creative knowledge workers, creative knowledge workers in the Amsterdam region are part of the higher income groups with a high purchasing power. In particular, knowledge workers have a large degree of freedom of choice as consumers and dwellers.

The largest group of creative knowledge workers live with their spouse (47%). Only a small group are singles (17%). Compared with the REB data, singles are under-represented in the survey, whereas cohabiting couples without children are over-represented³. The share of persons without children is similar, since the majority of the surveyed creative knowledge workers do not have children (67%).

Nine out of ten persons have the Dutch **nationality** (93%) and an almost equal share were also born in the Netherlands (89%). The majority of them originate from places outside of the Amsterdam region (59%), but more than one fourth has always lived in the Amsterdam region (30%). Nearly half of the interviewed creative knowledge workers graduated in Amsterdam (50%). In other words, higher education institutions are able to attract substantial numbers of creative knowledge workers outside of the Amsterdam region.

² The result of chi-test does not prove a significant difference in the 5% range of significance, but the likelihood of a misinterpretation of existing differences lies at 5.6 percent which is very close to the common 5 percent range.

³ According to REB-data, 40% of creative workers and 33% of knowledge workers in Amsterdam are single households. Couples without children amount only to 28% of creative workers and 31% of knowledge workers (Oosteren and Federova forthcoming, 6).

Figure 3.6 – Place of Birth and Study of creative knowledge workers (n=160)

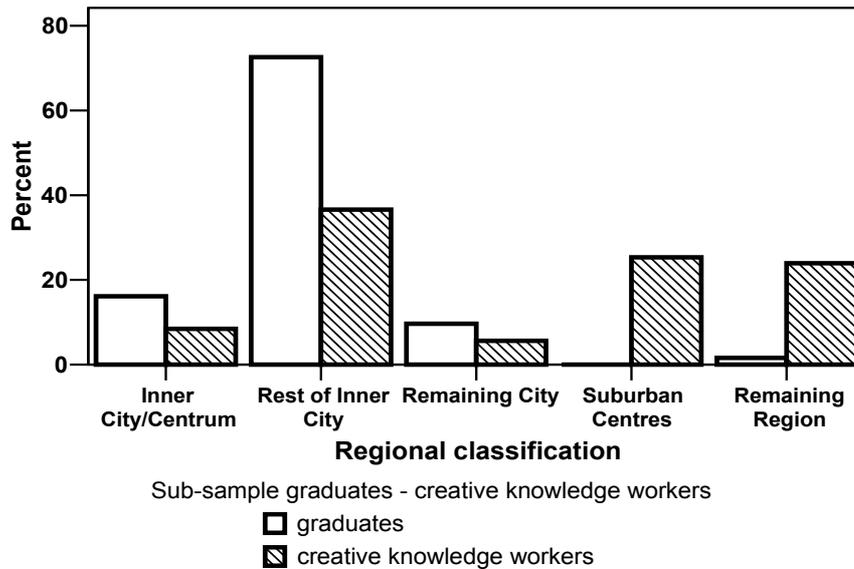
Source: Own survey

The **graduate sample** varies from the sample of creative knowledge workers. Of course, the graduates are younger (80% between 25 and 34 years), and less often married (45% single). They are more often female (60%). Due to their lower work experience, their smaller household size, gender, their monthly income is considerably lower. E.g. 52% of the graduates earn between 1000 and 1999 Euros compared to 18% of the creative knowledge workers. Graduates have more often a non-Dutch background (19%). The ratio of foreign graduates is representative for the Netherlands (20%), although persons from non-Western countries are slightly underrepresented (see above). 20% lived outside the Netherlands before they moved to the Amsterdam region. The share of graduates who were born outside the Netherlands and in the Amsterdam region is nearly the same. Although one fifth of the graduates moved to Amsterdam between 2 and 5 years prior to the survey, the overwhelming majority (79%) has lived in the Amsterdam region for longer than 5 years. In other words, most of the interviewed persons, graduates and creative knowledge workers are familiar with the local situation.

The **regional distribution** of the creative knowledge workers (Figure 3.7) is nearly even (51% city of Amsterdam and 49% suburban fringe). The workplaces of 58% of creative knowledge workers, however, are situated in the suburban fringe of the AMA (data source LISA 2005). Presumed that the distribution of the workforce is similar to the residential pattern, creative knowledge workers who live in the city of Amsterdam are slightly overrepresented. No significant differences appear in our sample between the residential location of creative and knowledge workers, but significant age and gender differences exist between different parts of the region (for details see page 62ff). Nearly two thirds have lived longer than 5 years in the Amsterdam region (63%). Most of the surveyed creative knowledge workers are owners of their **dwelling** (69%), whereas one third rent their accommodation mostly on the private market (29%). Creative knowledge workers are more likely to live in

owner-occupied housing than the average population in the AMA⁴. The burden from their mortgage or monthly rent is for 80% of the interviewees less than 30% of their monthly income. On average Amsterdamers spend 21% of their income on rents and 18% on mortgage costs (Dienst Wonen 2006, 50 and 52). This share decreases with increasing income. Although creative knowledge workers earn above average, they do not appear to spend a smaller share on housing than the rest of the population.

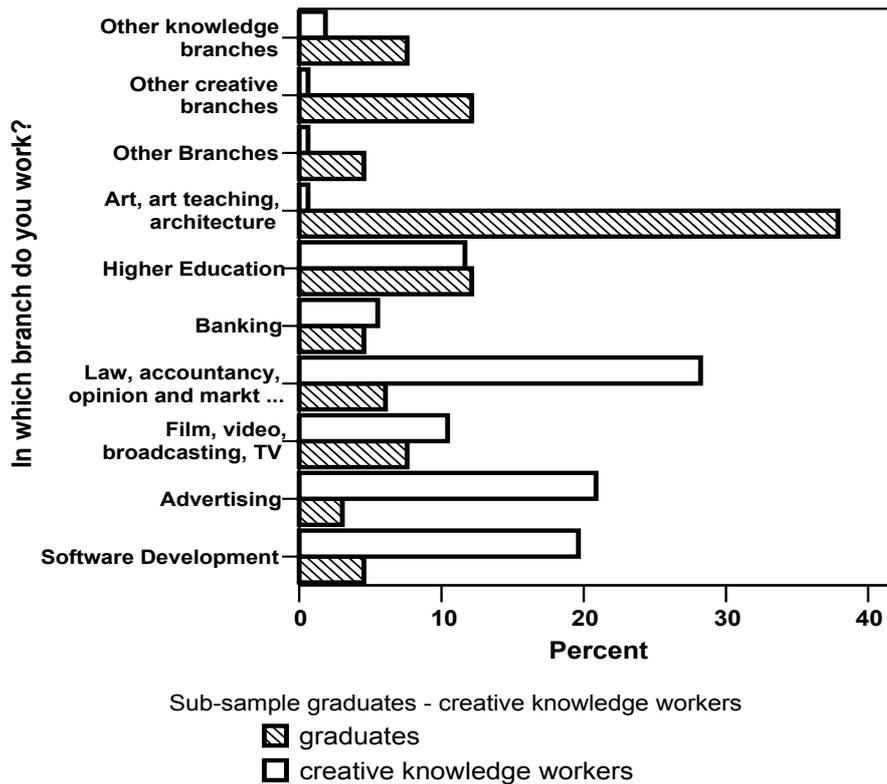
Figure 3.7 – Regional distribution of creative knowledge workers in the Amsterdam region (N=2004)



Source: Own survey

The **graduate sample** shows again different patterns, especially in terms of their regional distribution and their housing situation. Nearly all graduates (99%) live in the city of Amsterdam and they are mostly situated in the inner city (65%) and in the very centre (Stadsdeel Centrum 28%). Due to their age, home ownership is a less common form of housing. Interestingly, a share of 39% of the graduates live in social housing which is lower than the average distribution in Amsterdam, but higher compared to the creative knowledge workers. Given this, it is not surprising that the financial monthly burden for their accommodation is slightly lower than for the creative knowledge workers. Interestingly, both graduates and creative knowledge workers stated more often that they are living in the inner city than their actual living address would justify. The comparison between their own statement and their given residential postcode indicates that graduates and creative knowledge workers are actually living more often in the outer urban fringes, although they often state to live in the city centre or the rest of the core city. This shows that their ‘mental map’ is biased to more popular inner city neighbourhoods.

⁴ “52 per cent of Amsterdam’s housing stock belonged to the social rented sector, in comparison to 40% in the region and only 34% in the Netherlands” (Bontje and Sleutjes 2007, 49).

Figure 3.8 – Creative knowledge workers by branches ($n_{\text{graduates}} = 71$, $n_{\text{ckworkers}} = 164$)

Source: Own survey

Figure 3.8 shows in which **branches** the surveyed creative knowledge workers work. Law and accountancy is the most important field for the creative knowledge workers. Due to the different sampling methodology, the largest groups of graduates works in art related fields. A small group works also outside of the selected creative knowledge branches.

Table 3.1 – Representation of creative knowledge branches in the Amsterdam region

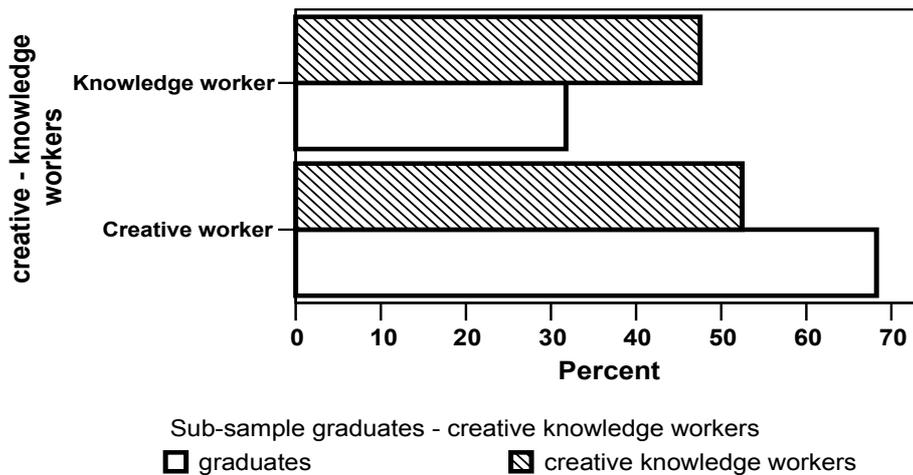
Branch	Employees	Share
Software	18568	12%
Film and Radio	13453	9%
Advertising	8604	6%
Law	62112	41%
Finance	33984	23%
Higher Education	14199	9%
TOTAL	150920	100%

Data source: LISA regional monitor, own calculations

If the branch structure is compared to the structure in the Amsterdam region (Table 3.1), more differences appear. Creative branches are overrepresented. Knowledge branches such as law and banking in particular are under-represented. Due to this, this survey cannot be used to make representative claims about individual branches. The applied sampling methodology explains this bias. Since the survey aimed at an equal presentation of creative and knowledge companies, differences in the size of companies in different branches are reproduced by the

survey. A smaller company size of banks lead to a smaller share of banks in the survey. As described in page 12f, only a minority of creative knowledge workers (31,5%) is employed in creative branches. Although this strategy does not allow to make representative claims about individual branches, it enables us to analyse the situation of creative and knowledge workers separately. A representative sampling method would run into danger that no claims can be made about the situation of creative workers, since the small size of this sub-group would not allow a meaningful interpretation of several statistical tests.

Figure 3.9 – Sub-samples: graduates and creative and knowledge workers by creative or knowledge branches (n_{graduates} =63;n_{creative knowledge workers} =162)



Source: Own survey

In terms of their **employment status**, the employment situation of the creative knowledge workers in our sample differs compared to the rest of the working population. The share of self employed entrepreneurs is about one half (52%), which means that creative knowledge workers in our sample are more than three times as often self employed compared to the average labour force in the Netherlands⁵. Oosteren and Federova state in their report that the share of self-employed creative workers amounts to 51% in Amsterdam in 2007, but the share of self-employed knowledge worker accounts only for 12% of the work force (Oosteren and Federova forthcoming, 5). This means that self-employed knowledge workers are over-represented in the sample. Two thirds of the employed persons can rely on a permanent labour contract (68%). Half of interviewed creative knowledge workers have worked longer than 5 years for their employers (49%), whereas 16% have changed their employer within the last year. Most of the creative knowledge workers occupy an executive position (79%). Small sized enterprises (0-10 employees) are often employers for creative knowledge workers (41%), but one eighth works in large companies with 100 to 250 employees (13.5%). Higher educated persons generally **commute** across longer distances, which is also true for the interviewed creative knowledge workers. More than half of them commute further than 10 kilometres (53%). They use more often private transport carriers (57%) than public transport,

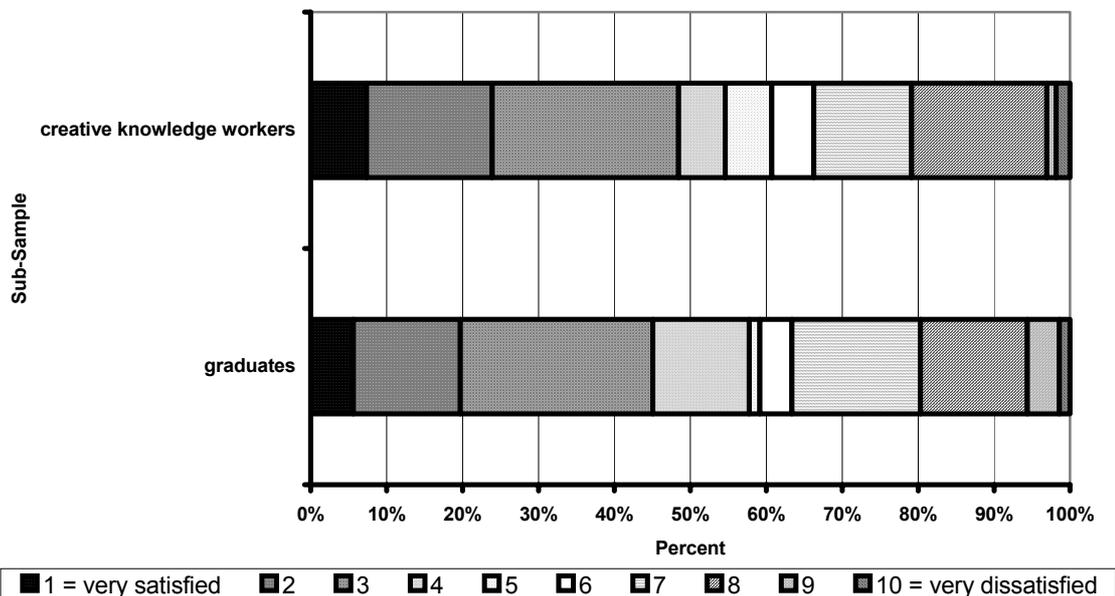
⁵ Share of self-employed in the Netherlands 14% in 2006 (www.cbs.nl).

but walking and cycling are of larger importance than automobiles. The place of residence and the place of working is only for a small minority (8%) in walking distance.

Due to the different sampling methods, the **graduate sample** also reached some unemployed persons (7%), which are not addressed in the other sample. Graduates also show different employment patterns in terms of the form and duration of the contract, working level and company size. Due to their young age, it is not surprising that nearly two thirds work in a non-executive position (62%) for a relatively short period (78% up to 4 years). Small companies are more typically their employers (42% in companies with up to 10 employees). Their job security is much vaguer, because only 34% of the graduates work on a permanent contract. Temporary work contracts and self-employment are main forms of employment for this group. After the labour market reform in the late 1980s, employment agencies are more common in the Netherlands than in many other European countries. A high share of temporary contracts is not specifically related to the investigated branches, but is a normal feature in the career of young professionals.

As expected, the commuting distance of the graduates is relatively short compared to the creative knowledge workers. Only 28% travel daily a more than 10 kilometre distance. In spite of that, the young professionals use public transport more often (63%), cycling (24%) is a more common practice than the use of cars (10%).

Figure 3.10 – Overall satisfaction with the AMA by graduates (n=71) and creative knowledge workers (n=164)



Source: Own survey

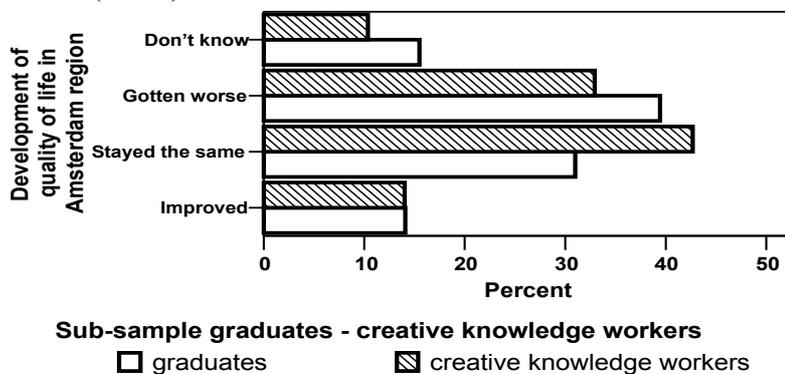
The **situation in the Amsterdam region** is generally positively judged. 60% give the region satisfactory marks below 5 and better. This positive judgment is shared by both groups, graduates and creative knowledge workers. For the sample of creative knowledge workers, this positive attitude is also documented by the fact that only 10% of the interviewees state a plan to move out of the region within the following three years. Satisfaction of creative

knowledge workers with their neighbourhood is even higher, because more than 95% state that the situation in their neighbourhood has met their expectations (96%). Compared with this, job satisfaction scores lower, but still, the vast majority of our respondents is satisfied about their job, too. The overall job satisfaction of creative knowledge workers is 84%; the graduates hardly score lower with 73%. Creative workers articulate dissatisfaction to a significant higher degree than knowledge workers⁶. This does not have any significant effect on their plans to change their position, but 43% of all creative knowledge workers plan to change their position within the following three years.

In addition to that, the respondents were asked about their assessment of the current **development**. At the first glance, the results appear to be peculiar, because half of the creative knowledge workers who conceive a downturn in the quality of life are also satisfied with the region. Looking at their future plans, this assessment becomes clearer. The level of satisfaction does not have an impact on their judgment of the current situation, but it influences their mobility plans. Persons who perceived a negative development lately are significantly more likely to leave the region (level of sig. 4.2%). Not the current situation explains their future plans, but their perception of recent trends. Although Figure 3.11 indicates that the situation of graduates and creative knowledge workers is able to explain this phenomenon, the differences are not statistically significant. This is not to say that differences between graduates and creative knowledge workers do not exist as the next paragraph indicates.

Future mobility plans are more often stated within the group of the graduates. Nearly 20% expect to move out of the Amsterdam region, despite their high level of satisfaction with the Amsterdam region. Job mobility rather explains this outcome. This is also mirrored by the fact that nearly two thirds of the interviewed graduates expect to change their employer in the next three years. The level of satisfaction with their neighbourhood is slightly lower than for the creative knowledge workers, but with a ratio of 92% still very high. A potential low level of satisfaction with the residential environment cannot explain the overall satisfaction with the AMA.

Figure 3.11 – Perception of the development of the AMA by graduates (n=71) and creative knowledge workers (n=164)



Source: Own survey

⁶ Level of significance in creative worker sample is 2.7% and 0.6% in graduate sample.

The comparison of the ACRE survey and other data shows that the ACRE survey is not entirely representative. The sample is slightly biased in relation to household size, income, employment status and branches. Although this might lead to some restrictions in the interpretation of the results, most other variables correspond to the main data feature of other sources. So our sample can give valuable insights into the situation of creative knowledge workers in the AMA.

In conclusion, a first evaluation of the main demographic, residential and employment features shows that creative knowledge workers earn considerably more than the average income in the AMA. Their different social status is also underlined by the fact that creative knowledge workers more often live in owner occupied housing. In spite of those facts, creative knowledge workers must not be conceived as an unified social entity or class, but as a heterogeneous group with distinctive social and gender differences. Significant income differences exist between female and male creative knowledge workers, but also between creative and knowledge workers. Given the fact that the ACRE-sample does not comprise data of unemployed creative knowledge workers and that singles and low income groups are slightly under-represented in the survey, it must be assumed that those differences are even larger in reality. Creative workers get less income than knowledge workers. Female creative workers receive a lower income than male workers. The access of women to creative knowledge occupations is still not sufficient, especially for older age groups (above 34 years). This result raises various questions. How can creative workers and knowledge workers equally profit from the economic shift to a creative knowledge society? How can a continuously growing female workforce participate in the creative knowledge society? How do the income differences influence the judgment of the living environment and how does it influence the needs of those persons?

A second result is surprising. The majority of the creative knowledge workers has lived in the AMA for a long period of time. Rather than to identify creative knowledge workers as hypermobile, global nomads, they should be seen as a group with a strong regional attachment. I. e. they have a detailed knowledge about the region and they are familiar with the changes and problems of the AMA. Due to their long stay, they are also presumably more satisfied with their environment. Higher education institutions in the AMA have a strong contribution in the creation of this regional workforce. Creative knowledge workers are often attracted to region during their education, and then, they have stayed on. This regionally embedded group of creative knowledge workers is complemented by a smaller, international group. This pattern also raises questions on the interrelation between the two groups, but also on the differences. How do both judge the region? What are their claims and their use of the urban environment?

Finally, a last, positive result should be mentioned. The general satisfaction with the AMA is assessed positively. At this point of the analysis, however, the general level of satisfaction cannot be related back to job or residential satisfaction. The general satisfaction is also not related to mobility. Instead of this, the perception of the recent development trends in the AMA appears to have a stronger impact on the mobility of creative knowledge workers. In addition to that, career mobility seems to determine inflows and outflows to and from the AMA more than the attractiveness of the region. I. e. hard factors such as the condition of the labour market have still maintained its importance.

4.1 Satisfaction with the region

The satisfaction of creative knowledge workers with the AMA is discussed in this part of the report. How is it related to soft and hard factors? Is it true – as Florida claims – that the people climate is an important precondition to attract creative knowledge workers to urban regions? Which amenities are crucial for this endeavour? How important is tolerance and the acceptance of social diversity in this respect? Or do hard factors such as the labour market determine the fate of metropolitan regions as Scott (2006) pointed out? Which role do personal or family bonds play in this respect? Are creative knowledge workers in the AMA characterised by weak personal ties as Florida would claim? How do the differences in income and in origin which are described in the chapter above translate into differences in the regional satisfaction? Finally, does a high satisfaction with the living environment also translate in a high attractiveness of the metropolitan region? Are there other factors which account for a substantial inflow and outflow of talent which are not related to a satisfaction with the living and working environment?

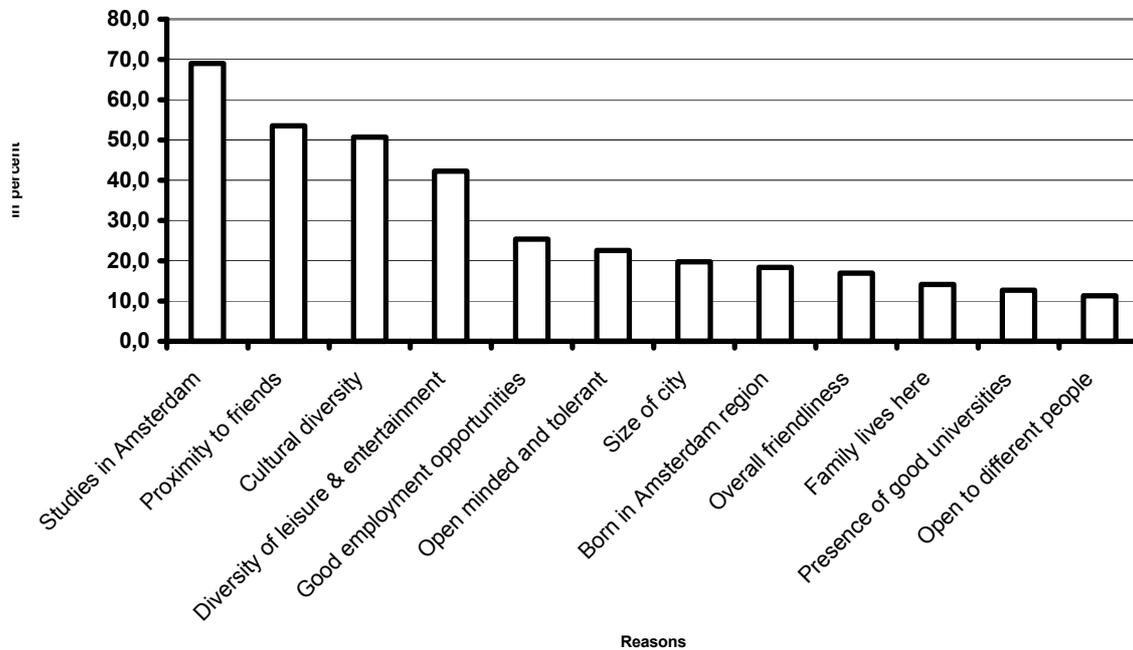
4.1.1 *General judgment of satisfaction with the region*

In the following, we will analyse the conditions for the attractiveness of the Amsterdam region for graduates and creative knowledge workers in detail. Firstly, reasons are introduced why creative knowledge workers and graduates chose to live in the Amsterdam region. Then, the satisfaction with the region, working environment and their place of residence are compared in order to map out the rationale of creative knowledge workers and graduates behind their location preferences. In the last part, various other possible factors on their location choice are investigated. In doing so, we want to control for external influences which are not related to a judgment of the regional attractiveness, but appear due to other factors like long commuting times or an influence of a dysfunctional housing market.

Most graduates, of course, referred to their previous studies when they are asked about the **reasons for living in the Amsterdam region**. Then, some soft factors are mentioned such as the proximity to friends, cultural diversity and leisure entertainment. Hard factors, however, are less relevant. Only 25% of the interviewed graduates mention the good labour market. This is followed by the size of the city (20%) and the presence of good universities (13%). Surprisingly the physical environment in terms of the architecture or the natural environment is not selected at all. Also the traffic infrastructure is hardly taken into account. Due to the tension in the housing market, it is hardly surprising that all factors related to this (housing accessibility, affordability, and quality) are scored lower by the Amsterdam graduates (Figure 4.1).

Interestingly enough, family and friendship bonds are mentioned first. They accounted for nearly 40% of the answers. Various soft factors, which still accounted for a third of the answers, and the studies in Amsterdam are brought up later.

Figure 4.1 – Reasons to live in Amsterdam, graduates *



Source: Own survey

* A maximum of 4 reasons could be mentioned, ranked in order of importance

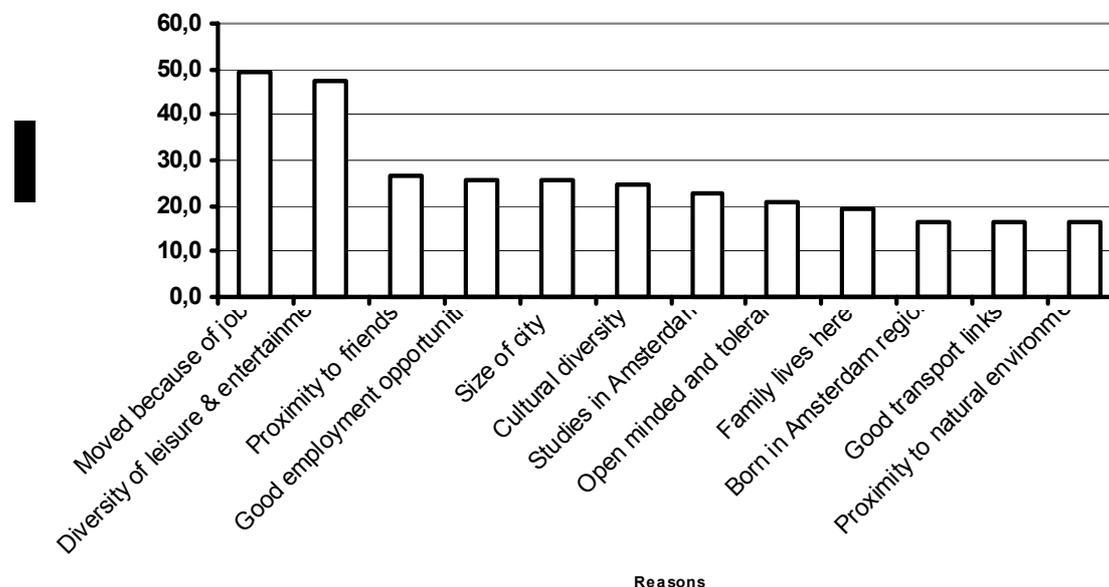
The results for the graduates who originate in the Amsterdam region and those who came from other parts of the Netherlands do not differ strongly. For the latter the proximity to friends and the size of the city is of greater relevance. The good employment opportunities are given more importance in the ranking, but overall the labour market did not receive higher importance. Soft factors like tolerance are not judged differently. For graduates who came from outside of Netherlands to the Amsterdam region, their studies in Amsterdam are slightly more emphasised.

If the attraction of the Amsterdam region is compared to the attractiveness of the labour market of the city and graduates are asked to decide for the most important factor, nearly two thirds (63%) identified the attractiveness of the city as the pivotal point.

As could be expected, creative knowledge workers most often moved to the Amsterdam region because of their job (Figure 4.2). Almost 50% of the respondents gives this answer, most often as the first reason. Very close to this score, however, is the diversity of leisure and entertainment. These two reasons clearly stand out compared to all other possible reasons. They are followed by a quite diverse array of reasons that all score around 20%. Interestingly, with the exception of the job and further employment opportunities, soft factors like cultural diversity and open mindedness, and personal reasons like proximity to friends and family, score better than hard factors like transport links. Again, factors related to the housing market

are hardly mentioned. When asked to choose between work-related reasons or the attractiveness of the city, however, a clear majority of creative knowledge workers (73%) chooses work as the pivotal dimension in their choice to live in the Amsterdam region.

Figure 4.2 – Reasons to live in Amsterdam, creative knowledge workers *



Source: Own survey

* A maximum of 4 reasons could be mentioned, ranked in order of importance

4.1.2 Ranking reasons for living in the Amsterdam region: Comparing graduates with creative and knowledge workers

In Figure 4.3, all mentioned reasons for living in the Amsterdam region are compared between creative knowledge workers and graduates. The ranking order of the table is according to the most mentioned reason of the creative knowledge workers. The N indicates the total amount of mentioned reasons; each respondent could indicate 4 reasons for living in the Amsterdam region.

It is not surprising that the most mentioned reason for creative and knowledge workers is that they moved because of their job, while for graduates, it is that they studied in the Amsterdam region. Below that first reason, however, both groups seem to have many reasons in common. Both groups apparently consider diversity in leisure and entertainment, proximity to friends, good employment opportunities, city size and cultural diversity important. For the workers, the diversity in leisure and entertainment even seems to be almost equally important as the job. The presence of good universities; language (probably due to the majority of Dutch in our sample); and diversity of the built environment are surprisingly low in both categories. There are also very little people that chose Amsterdam because of its gay- and lesbian-friendliness.

This might be related to a loss of attractiveness of Amsterdam for gays and lesbians because of several violent incidents in recent years; but maybe it is also simply because most respondents do not see it as an important consideration in their choice of residence. Other factors with low scores are less astonishing: higher wages are hardly mentioned since inter-regional wage differences in the Netherlands are negligible (and we do not have that many foreigners in our sample either); safety for children apparently does not concern our respondents much, since the majority of them are either single or childless couples; and the weather and climate of Amsterdam would probably rather be a push- than a pull-factor.

Figure 4.3 – All mentioned reasons for living in the Amsterdam Metropolitan Area

Reason	Workers (N=629)		Graduates (N=277)	
	%	Rank	%	Rank
Moved because of job	10.5	1	1.8	13
Diversity leisure / entertainment	9.9	2	10.8	4
Proximity to friends	7.6	3	13.7	2
Cultural diversity	6.5	4	13.0	3
Good employment opportunities	6.4	5	6.5	5
Size of city / region	6.0	6	5.0	7
Studies in region	5.9	7	17.7	1
Born in region	5.7	8	4.7	8
Family lives in region	4.9	9	3.6	10
Proximity to natural environment	4.8	10	0.4	19
Housing quality	4.0	11	0.4	19
Open minded and tolerant	3.8	12	5.8	6
Good transport links	3.8	12	1.8	13
Overall friendliness	3.5	14	4.3	9
Presence of good universities	2.1	15	3.2	11
Housing availability	2.1	15	0.4	19
Housing affordability	2.1	15	0.4	19
Safe for children	1.9	18	0.0	24
Open to different people	1.7	19	2.9	12
Moved because of partner's job	1.7	19	0.7	16
Diversity of built environment	1.6	21	0.7	16
Language	1.4	22	1.4	15
Gay / lesbian friendly	1.1	23	0.7	16
Higher wages	1.0	24	0.4	19
Weather / climate	0.0	25	0.0	24

Source: Own survey

If we only focus on the most important reason for living in the Amsterdam region (leaving aside the second, third and fourth mentioned reasons), the order of reasons changes considerably in both groups and the differences between the groups are growing as well (Figure 4.4). With the creative knowledge workers, moving to the region because of their job stands out much more clearly as *the* reason. Personal reasons related to place of birth and nearness to family and friends become more important. ‘Good employment opportunities’ is apparently much less often mentioned as the most important reason than as the second, third or fourth reason.

For the graduates, moving to the region for their studies stays at no. 1, but proximity of friends is almost as important. Remarkably, cultural diversity is just as often mentioned as good job opportunities (sharing 3rd place). Graduates show less variation in their most

important reason for living in the Amsterdam Metropolitan Area than the workers in the creative and knowledge-intensive industries.

Figure 4.4 – Most important reason for living in the Amsterdam Metropolitan Area

Reason	Workers (N=154)		Graduates (N=67)	
	%	Rank	%	Rank
Moved because of job	29.2	1	1.5	10
Born in region	9.7	2	6.0	5
Proximity of friends	9.7	2	22.4	2
Family lives here	6.5	4	4.5	6
Diversity leisure / entertainment	4.5	5	3.0	8
Overall friendliness	4.5	5	4.5	6
Cultural diversity	4.5	5	10.4	3
Good employment opportunities	3.9	8	10.4	3
Open minded and tolerant	3.9	8	0.0	12
Moved because of partner's job	3.2	10	1.5	10
Studies in region	3.2	10	26.9	1
Housing affordability	3.2	10	0.0	12
Proximity to natural environment	2.6	13	0.0	12
Size of city / region	1.9	14	3.0	8
Good transport links	1.9	14	0.0	12
Housing availability	1.9	14	0.0	12
Presence of good universities	1.3	17	3.0	8
Gay / lesbian friendly	1.3	17	0.0	12
Housing quality	1.3	17	0.0	12
Higher wages	0.6	20	0.0	12
Open to different people	0.6	20	3.0	8
Safe for children	0.0	22	0.0	12
Language	0.0	22	0.0	12
Diversity built environment	0.0	22	0.0	12
Weather / climate	0.0	22	0.0	12

Source: Own survey

4.1.3 Satisfaction with amenities, infrastructure and services

The importance and satisfaction with amenities, infrastructure and services in Amsterdam will be analysed in three steps. First, the use of amenities will be described and second the respondents' judgment of the existing amenities and infrastructure/public services will be discussed. In a final part, this will be compared with the worries of the respondents.

First the main data features will be introduced, and then, an in-depth analysis of each topic will be described. Demographic variables often have an high impact on the judgment of situations, preferences and life course of individuals. Since significant income differences exist for creative and knowledge workers, but also between the sexes, it can be expected that the assessment of the region is also influence by the social diversity in our sample. Other independent variables such as duration of residence, place of residence or commuting times will be tested.

Due to the small number of cases in the ACRE survey, the number of categories is often reduced in order to calculate meaningful statistical tests such as chi-quare tests. E.g. the categories 'very satisfied' and 'satisfied' are merged into the one category which is also

labelled ‘satisfied’. Although the information is reduced, it allowed a meaningful test of interrelations between various variables. Where statistical tests showed significant results, they will be discussed in the following part. In addition, the degree of satisfaction with a certain place generally increases the longer a person has lived at this place. Former research demonstrated that the locational preferences vary by occupation and soft and hard factors come into play differently (Musterd and Bakker forthcoming). Can this observation be confirmed here?

Use of amenities

Figure 4.5 shows a ranking of the most popular activities. Visiting friends and walking through the inner city are by far the most popular activities of the creative knowledge workers. The graduates select pubs and bars on the third rank, whereas the older and wealthier creative knowledge workers rather meet in restaurants at a lower level of frequency. This is followed by the visit of parks and natural reservoirs. All other items are part of the weekly routine for less than 20% of the respondents (see Figure 4.6). A larger group of graduates specialised in the field of arts. So it is not surprising that visits of museums are more important. Various sorts of social, political and religious activities are found at the bottom end of the list. The reluctance of creative knowledge workers and graduates to engage in the civil society is often described by Florida and others. It is also apparently a feature of the life of creative knowledge workers in the Amsterdam region.

Figure 4.5 – Use of amenities – ranked by weekly use

	Creative knowledge workers	Graduates
	Rank	Rank
Visiting friends	1	1
Walking around city centre	2	2
Eating out	3	5
Going to parks	4	4
Going out to pub/bar	5	3
Visiting national parks	6	8
Going to sport events	7	9
Going to movie, theatre, and/or concert	8	7
Going to museum, art gallery	9	6
Participation social activities	10	12
Participation religious activities	11	14
Going out to nightclub	12	11
Participation residents’ organisations	13	15
Participation political activities	14	10
Going to festivals	15	13

Source: Own survey

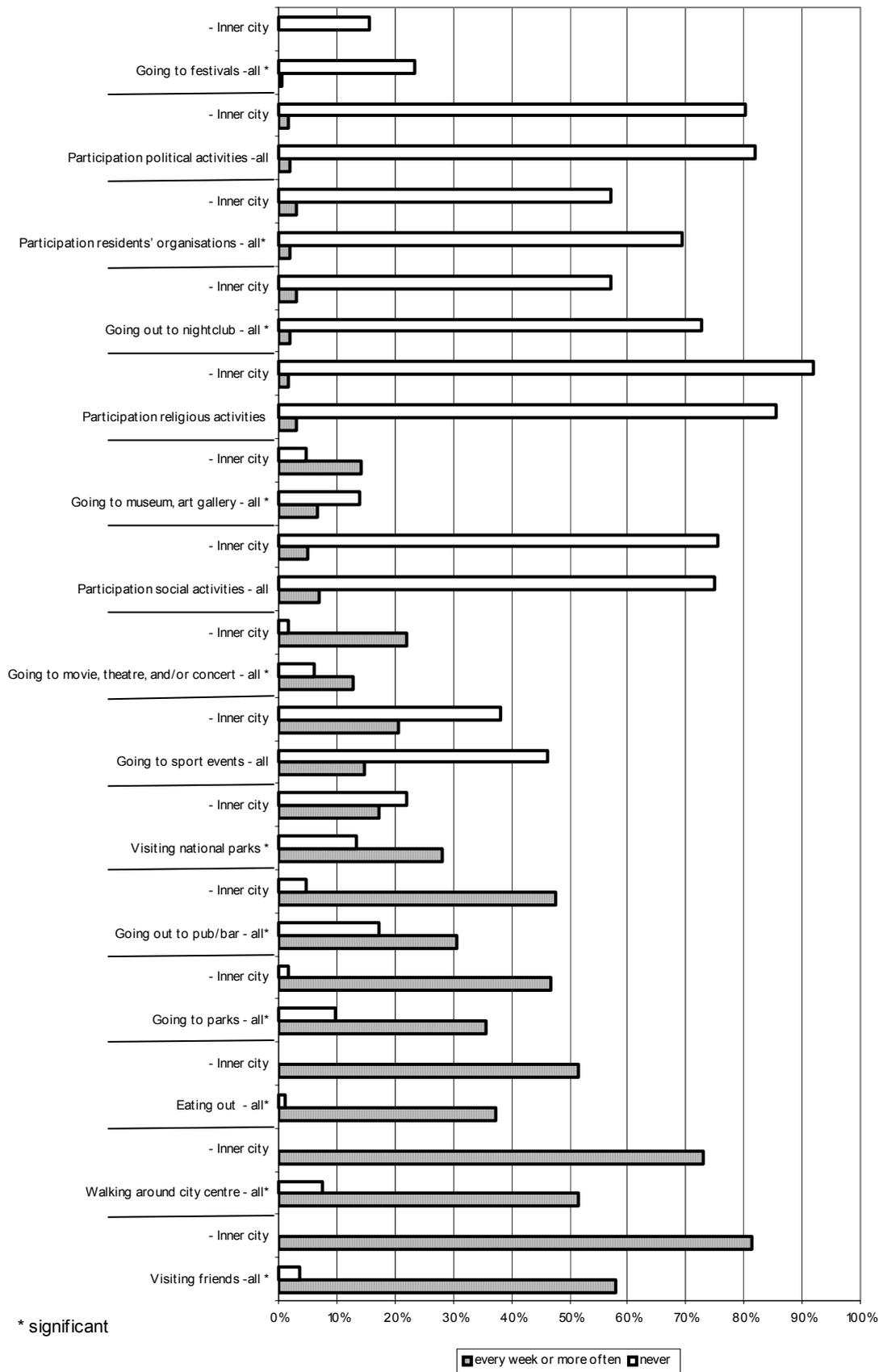
The use of the amenities is significantly dependent on the place of residence (see comparison between inner city and suburban areas in Figure 4.6). Inner city dwellers are more active and make use of the offered facilities more often. This is true for all urban amenities such as cafes, restaurants, cinemas, concerts, museums, festivals and night clubs. What is rather surprising is

the fact that their social activities are also more frequent. 81% of the inner city dwellers meet their friends more than once a week. They are even more involved into residential organisation, although on a low level. Those differences are more obvious, when the age of the surveyed persons is taken into account. Visits to cafes, restaurants, night clubs, festivals and very importantly friends and inner city walks are more often part of the weekly routines of younger creative knowledge workers. Household status and gender also have a small influence on the rate of frequency. Women visit significantly more often their friends and they go more often to the cinema and sport events. Although it is not significant, they also visit more often museums. Singles also watch more often films and go to nightclubs, whereas parks and religious activities are significantly more often on the schedule of creative knowledge workers with children. Outdoor activities such as excursions to national parks or peripheral green areas are significantly more often done by creative knowledge workers who live in suburban areas (natural areas) or suburban centres (parks). The residential location does not have any impact on the frequency in which sport events are visited. Although large income differences exist between female and male creative knowledge workers and creative and knowledge workers, those income differences do not translate into other use patterns. To sum it up, the weekly use of urban amenities and parks is strongly dependent on the place of residence. Urban amenities are significantly more often consumed by inner city inhabitants. They also maintain stronger personal networks. Activities in nature, however, are significantly more popular amongst the suburban populations. In other word, both groups, inner city dwellers and suburban dwellers, have a specific set of activities. The urban and the suburban environment cannot be substituted. It rather seems that both groups gain maximum benefit at their current place of residence, although in a different way. The following part will discuss their level of satisfaction in more detail.

Satisfaction soft factors

How satisfied are the creative knowledge workers with the **urban amenities**, the **urban infrastructure** and **public services** in Amsterdam? The level of satisfaction is very high with most of the presented amenities in the Amsterdam region, because 58 to 88% of the creative knowledge workers consider the offered services and amenities satisfactory. The highest value has the quality and range of restaurants, of which 88% of the creative knowledge workers give a positive evaluation. This is followed by the architecture of the city, quality and range of art galleries and museums, quality and range of festivals and quality of pubs. Small differences exist between the judgment of graduates and creative knowledge workers. The degree of satisfaction is higher for graduates when the quality and range of cinemas, pubs and art galleries or museums are assessed. The judgment of cinemas varies significantly with the age of the surveyed respondents, but not significantly between both sub-sample groups.

Figure 4.6 – Frequencies of activities – all and inner city respondents (creative knowledge workers)



Source: Own survey

Three issues are subject of criticism, although on a very moderate level. One out of ten creative knowledge workers (13%) and one out of five graduates are not content with the quality of public places. Since walks in the inner city are one of the favourite activities of the investigated groups, this issue appears to be crucial for a judgment of a metropolitan region. On the other hand, cities which grew before the 20th century and maintained their urban layout often face similar problems. It is difficult to create new parks by changing the existing urban land-use. Two other issues are also criticised, but less often actively used. 9% of the creative knowledge workers are unhappy about the offered sport facilities. Gender has an impact on the judgment, but below a significance level. 8% criticised the quality and range of pubs in the AMA. At the same time, large groups do not pay attention to those facilities.

To sum it up, social ties within the city, public places and parks and restaurants and pubs appear to have the most important influence on the weekly routines. Often the use of cafes and restaurants as a second home of the creative class is underlined. Sometimes creative knowledge workers are even criticised for having a ‘consumerist’ attitude. Obviously those accounts conceal the fact that the social embeddedness and the non-monetary activities like walking are also important aspects in the life of the creative knowledge workers. The supply with various sorts of amenities in the Amsterdam region is satisfactory.

The assessment of various soft factors is not significantly influenced by **demographic variables** such as gender, age or income. Only the judgment about existing sport facilities and about cinemas vary significantly. Women are more content with the offered sport facilities. Younger respondents are significantly less satisfied with the quality and range of cinemas.

The **place of residence** has an higher impact on the level of satisfaction. Due to a higher number of subcategories for the different parts of the region, statistical tests could not be calculated. Instead, the data features are described. The level of satisfaction about the quality and range of art galleries, shopping centres, pubs in sub-centres is below average. Unfortunately, case numbers are too low for a valid description of the quality and range of restaurant, although it appeared the persons living in the inner city are more content with the situation. Surprisingly, the judgment about the quality and range of cinemas did not differ so much between different locations. Overall, those consumption amenities are seen more critical in suburban centres. They might be conceived as part of previous urban city life.

A relatively high share of disappointed suburban dwellers is disappointed about social organisations. Amsterdammers are more satisfied with the range of tourist attractions (90% satisfaction) than suburban dwellers¹. Although social relations and interest in neighbours is often assigned to suburban areas, this is not the case for Amsterdam’s hinterland. The influence of the **length of residence** is also investigated. Clear results, however, are seldom found. The level of satisfaction is not interrelated to the duration of residence. This is true for the perceived quality of public places², art galleries and pubs. The importance of these issues decreased with the length of stay. This is true for the judgment of pubs and the quality of architecture. In few cases, the expected positive relationship between length of stay and a

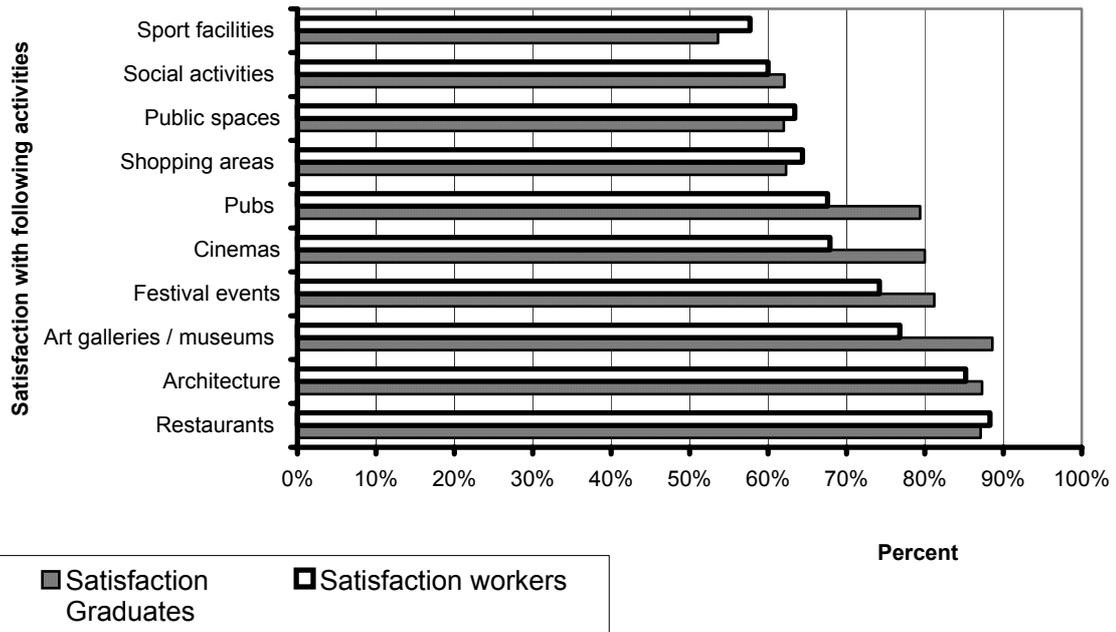
¹ 60% satisfied with the number of social organisations versus 50% in the suburban areas.

² Persons who have lived in the AMA for less than 5 years were satisfied by 69%, whereas persons who have been citizens of the region for longer than 10 conceived the quality of parks only to 60% as satisfactory.

positive judgment appears. The quality and range of festivals are better evaluated the longer persons lived in the Amsterdam region. Overall, however, these positive or negative assessments have hardly any influence on the general assessment of the region.

To **sum it up**, demographic variables show hardly any effects, differences between individual parts of the region are merely found. Satisfaction does often not increase with length of stay, but it does appear less important for the persons.

Figure 4.7 – Satisfaction with amenities



Source: Own survey

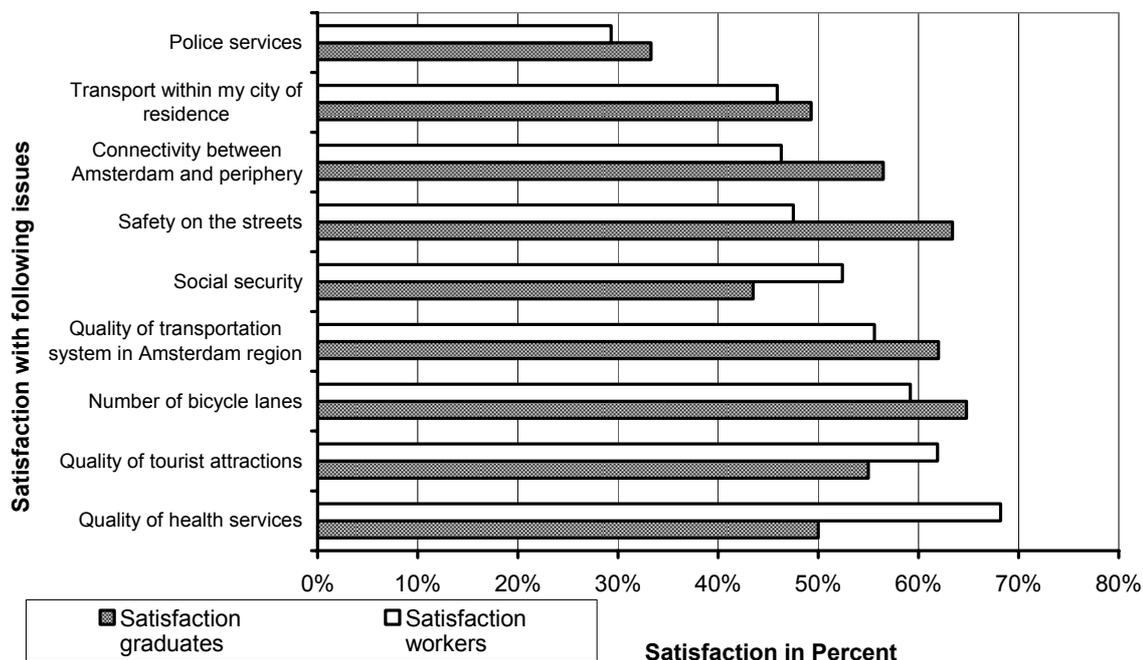
Satisfaction hard factors

The judgment on the **technical and social infrastructure** is positive (around 50%), but on a lower level of satisfaction. The quality of health services and the tourist attractions receive the highest scores by creative knowledge workers. Figure 4.8 indicates that the assessment is in few cases influenced by the surveyed sample group. Demographic and social differences are mirrored through the quality of the health service. It is significantly worse judged by the graduate respondents than by the creative knowledge workers (sign. level 0.4%).

Although the general assessment is positive, single issues around the transport system and provided public services are seen less positive. One out of four creative knowledge workers criticises the public transport system. This includes the quality and the connectivity of the public transport system. Secondly, the police service (21%) and safety on the streets (17%) is mentioned. Thirdly, the number of the bicycle lanes does not meet the expectations of 15% of the respondents. This criticism is not only mentioned by cyclists (54%), but also by car and train users (37%). The commuting distance has no influence on these judgments. This is a

surprising outcome considering the extensive bicycle infrastructure in Amsterdam, probably not topped by any city worldwide.

Figure 4.8 – Satisfaction with infrastructure and services



Source: Own survey

In addition to that, one fifth of the graduates is concerned about the quality of the health service. A negative evaluation of the health system appears significantly more often from non-Dutch citizens than from persons with Dutch nationality.

Overall hard factors are less positively judged than soft factors, although the general level of satisfaction is still high in the Amsterdam region.

The test with **demographic variables** revealed that the quality and range of different public services is evaluated differently by persons with different gender, age and income. The results are often unexpected. Personal safety in the street is seen more critical by male and younger respondents than by women and elder participants of which such statements would have been expected (Onderzoek en Statistiek 2007, 91f). Since young persons use public space more often and during all times of the day, and male persons traditionally use public space more regularly and more natural than females, those results are striking. Safe access of streets is one precondition for the development of creative knowledge cities, since public places are elementary meeting places for personal encounter. The evaluation of the health services brings another unexpected result to the fore. Younger respondents and creative knowledge workers express less satisfaction with the health system. The causes behind this judgment are not clear. At the same time, higher income groups (above 3000 € monthly household income) are significantly more satisfied with the health system available in the AMA which is an understandable result. Higher income earners also state significantly more often that they are

significantly more satisfied with the quality of the transport system, whereas female respondents expressed the opposite. As described on page 63, significant income differences exist between gender and residential location, too. It can be concluded that both variables are interrelated.

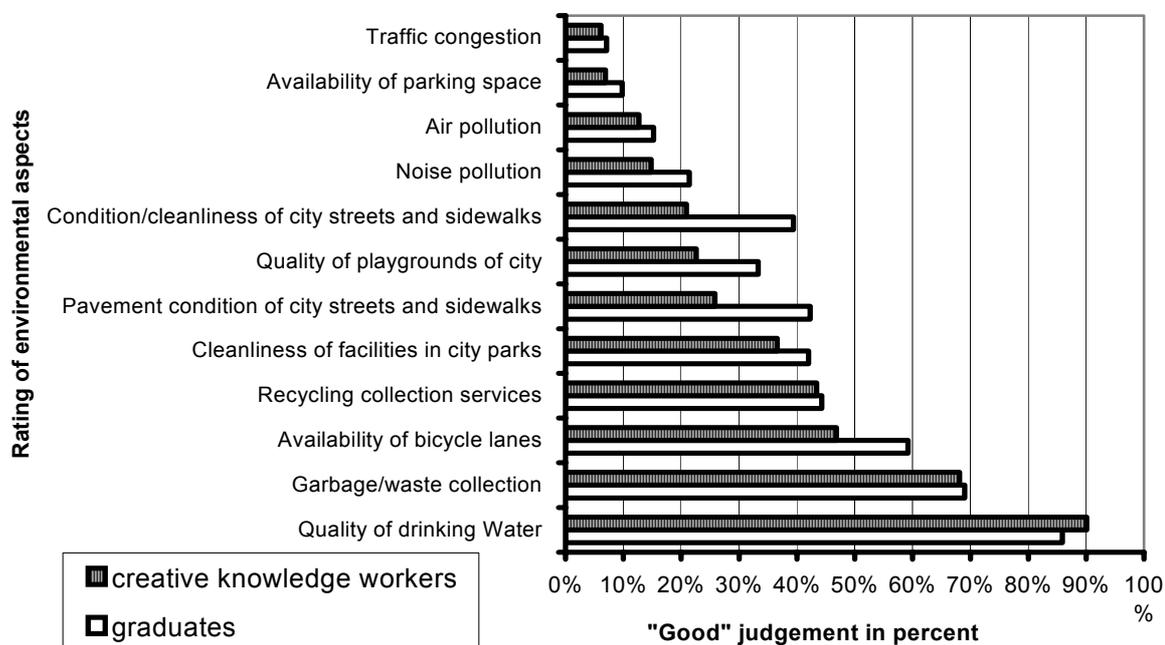
The **residential location** has little effect on the assessment of hard factors. Of course, national institutions like the health service and social security system are not differently judged in different parts of the region. One might expect a different view on the transport system, since connectivity and service might differ between suburban and urban areas. Creative knowledge workers have hardly any criticism in this respect. Only respondents who live in suburban centres feel that the connection between Amsterdam and the periphery can be improved. Different levels of satisfaction are articulated in relation to safety on the streets, the quality of tourist attractions and the availability of bicycle lanes. For the first two, suburban centres are less positively judged. Whereas virtually all Amsterdamers are content with the tourist attractions, 13% of creative knowledge workers in sub-centres are unsatisfied. The judgment on safety is more problematic, since 25% of the respondents in sub-centres and 15% of the respondents in Amsterdam are discontent. An higher crime rate in the inner city of Amsterdam might explain the attitude of inner city dwellers (cf. *Onderzoek en Statistiek 2007*, 91), but the causes for the higher feeling of insecurity in suburban towns are subjective. It is also surprising that a lower share of inner city Amsterdamers is content with the availability of bicycle lanes, since this part of the region has the best infrastructure and other surveys reported a good level of satisfaction (7.0). The higher traffic density might explain the lower level of satisfaction here. Interestingly, nearly 50% of the suburban dwellers switch to a neutral category. I. e. this question is of lower interest for them. If the length of the stay in the Amsterdam region and in the current neighbourhood is taken into account, creative knowledge workers who live less than 5 years in the region appear to be often more dissatisfied. This is true for the social security system, health system, street safety and the quality of the transport system. Whereas a normal increase of the level of satisfaction by the **length of the stay** is rarely observed for the soft factors in this survey, it is a common development for the hard factors. An exception is the quality of the connection between Amsterdam and the periphery. Here the discontent increases, the longer persons live in the region. It is possible that persons who started their housing career in Amsterdam and moved to the suburban spaces later, are regretting the less dense traffic network in the periphery, then. The length of residence in a certain neighbourhood has hardly any effect on the judgment of those factors.

The length of stay has usually a positive influence on the level of satisfaction. This observation, however, does not hold for soft and hard factors. Whereas it is true for hard factors, the desire for adequate urban amenities increases by length of stay. A large impact on the general level of satisfaction is not visible, however.

A second set of hard factors are investigated which focus on **traffic infrastructure and environmental conditions**. The range of satisfaction varies more than for the other questions. Only two aspects are judged positively: quality of drinking water and garbage/waste collection. Traffic and environmental problems receive an alarming position which seems to

be related to agglomeration disadvantages of the inner city. Environmental services like waste collection or recycling and conditions of public space receive mediocre ratings.

Figure 4.9 – Judgment of the condition of selected hard factors



Source: Own survey

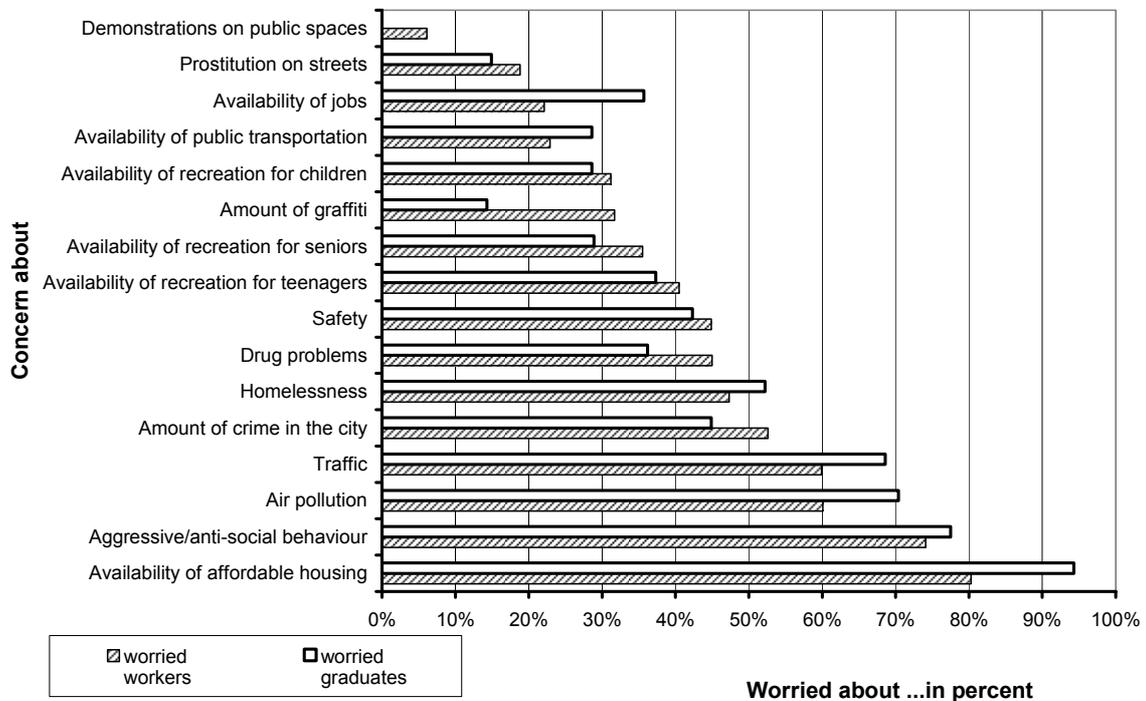
In the following, the influence of demographic factors, location and length of stay are investigated. Again, **demography** has hardly any impact on the judgment of the factors. The distribution of items by age categories is often so uneven that no results are available. The **residential location** of creative knowledge workers influenced their judgment, although often in unexpected directions. The problematic judgment of environmental conditions is not stated by inner city dwellers as expected, but noise pollution is even more criticised by suburban dwellers. Various aspects which are usually associated with inner city areas are not related to a specific area in the AMA. This is true for traffic congestion and air pollution. Amsterdamers more often lament about the missing parking space, but inner city dwellers are not amongst those who complain the most. Inner city dwellers only consider the supply of playgrounds more often as poor.

Suburban dwellers, however, are more often discontent with environmental services such as waste collection and the condition of the pavement. The latest is also more often object of criticism by older age cohorts. Since they tend to live more often in the suburban areas, this pattern is hardly surprising. Suburban dwellers are less concerned with parking facilities, cleanness of park facilities and the availability of bicycles lanes. As described above, the conditions and availability of bicycle lanes is important for inner city dwellers who also use them the most. The **length of stay** has a positive influence on the judgment of the recycling service, availability of parking space, bicycle lanes and access to playgrounds, whereas for the traffic congestion, parking facilities, air pollution and conditions of the pavement the level of satisfaction decreases by the length.

Concerns

Several worries are expressed by creative knowledge workers. Surprisingly, the level of dissatisfaction is higher and their complaints are much stronger than stated in other questions before.

Figure 4.10 – Concerns of creative knowledge workers



Source: Own survey

Clearly the largest problem is seen in the **housing market**. 80% of the creative knowledge workers and 94% of the graduates are worried about the housing situation. Although the level of concern is very high of all respondents, significant demographic differences appear. Not surprisingly, more financially challenged persons are more concerned about their housing career. This applies to women, lower income households, younger persons, creative workers and Amsterdammers in particular. Persons who recently moved to AMA and who live in social housing more often state a higher vulnerability of their housing situation. A rough positive conception of creative knowledge workers as an independent, powerful and well earning class as it often found in Florida’s texts runs into danger to level out differences between the sub-groups. But creative knowledge workers are in this respect not different than other parts of the urban population. They are sensitive to financial burdens, and significant income differences exist between them. Although these large differences exist in the judgment of housing, the judgment of housing supply does not have a significant impact on the overall satisfaction of the AMA. Other aspects have already been mentioned before: traffic and related issues such as air pollution. Traffic is once more mentioned by more than 60% of the creative knowledge workers and even a larger share of graduates. Traffic problems are more often reported by inner city dwellers, but air pollution seems to be a concern which is not related to a particular place of residence in the AMA. Whereas the younger are significantly more concerned about

the traffic, older creative knowledge workers in the AMA are more worried about the air pollution.

A second concern, however, is a social factor. **Aggressive and anti social behaviour** is seen as problematic (graduates 78% and creative knowledge workers 74%). The demographic status of creative knowledge workers does not have any impact on the strength of this statement, but the place of residence does. 90% of creative knowledge workers in the inner city borough 'centrum' make this statement. Some judgments of the graduates exceeded those of the creative knowledge workers. This is particularly true for work related issues and job availability and availability of affordable housing. In both cases, graduates are starters. It is also true for environmental problems and social problems such as homelessness and aggressive behaviour. Crime related issues, however, worry graduates less than creative knowledge workers.

Given the age difference between graduates and creative knowledge workers, one might assume that those differences can be explained by the more challenging situation of young professionals. An analysis of the demographic factors brings other results to the fore. Low income earners (less than 3000 € household income) as well as creative workers are more concerned about job availability. The longer persons live in AMA and the older they are, the more often they make this statement. Denser social networks of older persons are not able to compensate for this fear of age discrimination. Worries about homelessness are significantly more often expressed by female, lower income and inner city dwellers than by other groups. Although male respondents state a higher degree of dissatisfaction with street safety, no gender differences as well as other demographic differences appear when safety in general or the amount of crime is judged. Interestingly, visual sign of delinquency are considered as problematic by specific sub-groups. E.g. the presence of graffiti reveals large differences between the attitude of creative knowledge workers of different gender, income and age. Male, higher income and older respondents are significantly more worried about this public expression of youth culture. Drugs cause also a higher concern for older age cohorts. Although police maps clearly show that the inner city of Amsterdam is more likely to be the stage of crime, safety threats, prostitution and drug abuse (cf. Dienst Onderzoek en Statistiek 2007, 99), creative knowledge workers express their fear independent of their place of residence. Inner city dwellers feel even less worried about their safety than other inhabitants of the AMA.

A sufficient offer of social services for teenagers and seniors is subject of concern for significantly older age groups than for younger persons. Given the fact that those age cohort are more likely to be faced with the need to find suitable social facilities for their parents and their children, this pattern is not surprising.

Given the fact that most of creative knowledge workers in the AMA moved to Amsterdam because of their job, our respondents think that the condition for this immigration of talent are excellent at the moment. Of all surveyed hard factors, especially job perspectives cause least concern. Soft factors such as the housing market, aggressive anti-social behaviour and environmental condition receive the highest negative scores. They are less often named as reasons to move to the AMA. Newcomers tend to be more worried about the presented factors, but for most factors the length of the stay has a positive impact on the articulation of

sorrows. Since the scores for the labour market are positive, in our respondent's experience the AMA has good conditions to attract talent sustainably.

The **level of satisfaction** with the AMA shows no significant relation to all surveyed **hard and soft factors and amenities**. In a second step demographic variables are investigated. Since it can be assumed that the negative level of satisfaction is related to a decision to leave the AMA, future migration plans are also integrated in this part of the analysis. Does this assumed positive relation between satisfaction with the AMA and the plans to continue the residence in the AMA exist?

Surprisingly, no significant relation can be confirmed (see page 23ff). The **level of satisfaction** with the living environment in the AMA and **future mobility** plans are independent. Migration from the AMA is not caused by an unsatisfactory living situation. Given this pattern, it is no surprise that no demographic factor such as gender, income, age, and household status influence the general satisfaction with the AMA. The time spend in the Amsterdam region has an impact on future mobility plans. The longer creative knowledge workers have been working for their employer and the longer they have lived in the AMA, the less likely is it that they plan to move outside the region. Significant positive relations also exist between income, nationality, household structure, length of stay and work duration with the variable 'future mobility'. It appears that at least two distinctive groups exist amongst the creative knowledge workers: a very small group with expat-characteristics and a larger group with strong regional attachment to the AMA. The first group has arrived recently with a trailing spouse (from abroad) and they are economically very successful. They plan to stay for a limited time in the region. They are also very satisfied with the living conditions in Amsterdam. A second group of Amsterdammers has lived and worked in the region for a very long time, but shows a mixed income pattern and consists more often of single households.

Conclusions

In the previous part a detailed account is given different soft and hard factors are judged. The results are diverse, sometimes even confusing. The importance of specific hard and soft factors for creative knowledge workers is strongly dependent on demographic variables, location and often the duration of residence in the AMA. Therefore, we want to proceed now with a final analysis about the importance of hard and soft factors in four steps. Thereby we draw together the previous result and try to judge on this basis which factors determine the attractiveness of the AMA. These qualitative results can be used for further quantitative analysis which is not possible here. Firstly, the impact of demographic variables, location and time of residence is discussed in Figure 4.11. How is the use of the amenities and the satisfaction with amenities, public services and the environment as well as the labour and housing market influenced by the demographic background of the persons. How does the residential location influence the described items and how do creative knowledge workers adjust over time to the absence or presence of those location factors? In a second step, the importance of the different items is in more detail investigated for the suburban and inner city locations. Which factors have an impact on those parts of the AMA? In a third step, the level of satisfaction is mapped out and the different items are compared. Which assets and deficits exist in the AMA? How satisfied are the creative knowledge workers with the different hard

and soft factors in the region? In a final, fourth step, the previous result are compared and the reasons for living in Amsterdam are included in the analysis, too. Then, the meaning of the results is discussed for the attractiveness of the Amsterdam region for creative knowledge workers from outside and inside the AMA? How attractive is the AMA for creative knowledge workers and how attractive are the different parts of the AMA for creative knowledge workers? Can the shortage of suitable dwellings in the inner city be solved by creating more new residential opportunities in the outer urban fringes?

Influence of demography, location and length of residence

In the previous parts, the influence of **demographic factors** such as gender, age, family status, nationality and income was described in detail. Interestingly, the hard and soft factors are affected less often by demographic differences amongst the creative knowledge workers. The **location of residence and the use of amenities**, however, are strongly related to different levels of income, age and gender (cf. Chapter 3 and use of amenities). The same is true for the assessment of the housing market, the subjective judgement of personal security and labour market opportunities. The assessment of the level of satisfaction is less sensitive towards demographic differences between creative knowledge workers. Important differences are found in the use of amenities which is strongly influenced by age and by residential location. Residential location of creative knowledge workers, however, hardly influences their level of satisfaction with those urban amenities. It appears that creative knowledge workers have already chosen their residential location in order to use the offered urban amenities according to their needs. It also implies that creative knowledge workers who live, for instance, in the inner city, would be less content to live in the outer fringes of the AMA, because the offered amenities would not correlate to their activity pattern. This is especially true, because the level of satisfaction with amenities tends not to improve in time as the analysis of those factors indicates. The longer creative knowledge workers live at a place, the more their dissatisfaction with the offered urban amenities increases (see also Figure 4.11). In other words, the housing market in the inner city cannot be improved by finding suburban locations for inner city dwellers.

Figure 4.11 – Influence of demography, residential location and length of stay on use and satisfaction with hard and soft factors

	Demographic structure	Location	Length of stay
No influence	- satisfaction with amenities - service infrastructure - environmental services	- satisfaction with amenities - social services such as health services or facilities for elderly or teenagers - labour market - pollution	- amenities - environmental services - street maintenance - environmental conditions - labour market
Influence	- use of amenities - residential location - housing market - security - labour market	- satisfaction with infrastructure - use of infrastructure - conditions of environment - housing market - safety - traffic - social behaviour	- service infrastructure - condition environment - traffic facilities - social conditions - housing market - services - security

Source: Own design

Furthermore, creative knowledge workers must not be conceived as a social entity. Given the large impact of income on the residential locations and the declining labour market changes for elderly creative knowledge workers, it would be wrong to find a single policy for diverse social ‘class’.

Influence of residential location on the judgment of the attractiveness

The evaluation of **soft and hard factors** comprises also a large **spatial dimension**. Soft and hard factors have different effects in different parts of the region and at different geographical scales. The labour market is one example for the regional scale. It was identified in Chapter 4.1.1 as the most important factor which generates the inflow of creative knowledge workers. The spatiality of most investigated other soft and hard factors is more complex. Many are only powerful at the micro-level, i.e. a particular part of the region. This is particularly true for the hard factors which were discussed in Figure 4.8 and Figure 4.9. The available parking space, the number of bicycle lanes and of playgrounds is seen as problematic for inner city areas, whereas traffic noise, the conditions of the pavement and the waste collection was seen more critical by suburban dwellers. Environmental services and street maintenance which are more use related were seen as problematic in one place, whereas environmental conditions such as noise or pavement maintenance are subject of concern in another part of the region. Similar micro-geographic effects are observed for the housing market, safety, traffic and social behaviour. In other words, certain factors such as the labour market are effective for the overall attractiveness of the region, whereas other factors such as safety are relevant, if the attractiveness of specific parts of the region is discussed (see Figure 4.12).

Figure 4.12 – Importance of locations for the judgment of amenities, hard and soft factors

	Inner City	Suburban fringe	Whole region
Important	<ul style="list-style-type: none"> - urban amenities - social behaviour - bicycle lanes - tourist attractions - safety - public space - parking space - playgrounds 	<ul style="list-style-type: none"> - natural areas - parks 	<ul style="list-style-type: none"> - use of amenities - demography - subjective judgment of the development of the region
Unimportant			<ul style="list-style-type: none"> - transport - pollution - health service - labour market - services for youth and seniors

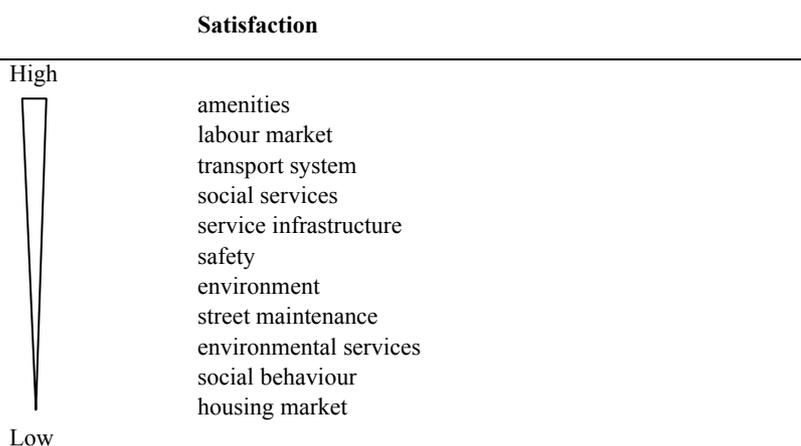
Source: Own design

A common observation is that the level of satisfaction with the living environment increases in process of time. If this is not the case, the place of residence is given up for a more convenient location. This process is effective for most of the investigated items such as the satisfaction with the housing market, subjective judgment of security, traffic system and environmental services. In few cases an inverse process is visible and the degree of

satisfaction declines by time: satisfaction with amenities (see above), labour market and various environmental aspects such as traffic, parking space, air pollution and conditions of the pavement.

What conclusion can now be drawn from this? Which amenities, soft and hard factors are judged as satisfactory? **Which factors are important** for the attractiveness of the AMA?

Figure 4.13 – Level of satisfaction of discussed hard and soft factors



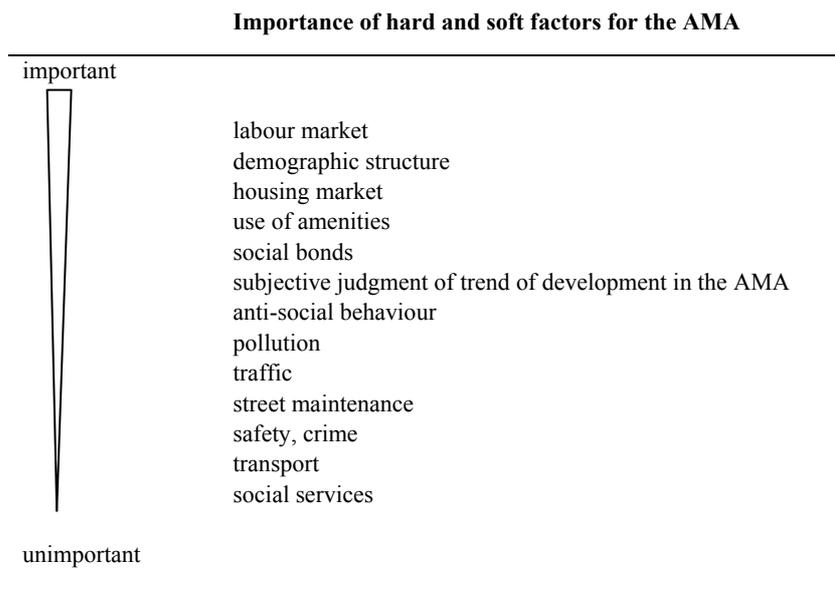
Source: Own survey

The range of satisfaction between the surveyed items varies enormously. It fluctuates between more than 90% to less than 10%. As result of the discussion above, Figure 4.13 is developed gives account of the most important factors. This figure is the outcome of two considerations. Firstly, since demographic variables and space are important influences on the assessment of the soft and hard factors, factors which are influenced by them are given more weight. Secondly, since the level of satisfaction does not gradually increase for all factors, those are given more weight which have a negative impact on the level of satisfaction. The outcome shows that there are no real differences between the influence of hard and soft factors visible, but it shows that both hard and soft factors can have an impact on the assessment of a certain region. Although Florida and others are right to address soft factors as an important influence on urban development, it seems that classic factors such as a functioning regional housing market have not lost importance.

The level of satisfaction is one important indicator for the importance of the discussed hard and soft factors, but the **impact** of the different factors must be taken into account, too. Demographic structure, the situation of the labour market, but also family bonds turned out to be important influences on the situation of creative knowledge workers in the AMA (see previous chapter). Comparing and weighting the results of the previous tables and figures, Figure 4.14 shows the most important factors for maintaining the attractiveness of the AMA. A sustainable urban policy should not focus on single specific soft and hard factors, but it should be also aware of the social geography of a region and the social conditions of its inhabitants and their activities. The attractiveness is not so much the result of the improvement of single soft or hard factors, but it also the result of understanding the social

texture. Income and gender differences have still a strong impact on them. Social ties are intensively developed within the region due to a large share of long term residents. Subjective judgements about the general development trend of the AMA effects mobility. In addition to those factors which have long been included in textbooks (labour market, gender, duration of residence), soft factors are important too. Social behaviour, the intensity of traffic and pollution appear to be important in the AMA in this respect.

Figure 4.14 – Importance of factors for the AMA



Source: Own survey

4.1.4 Tolerance

Tolerance is seen as a key factor by Richard Florida (Florida 2002). Often he is criticised for his insensitivity towards different forms of social acceptance and that he only takes gay liberation to the fore. Tensions between different ethnic groups and social inequality matter too, as he admitted in his later books. Then, it is also revealed that cities which are economically successful in his view are also the most unequal cities in the US.

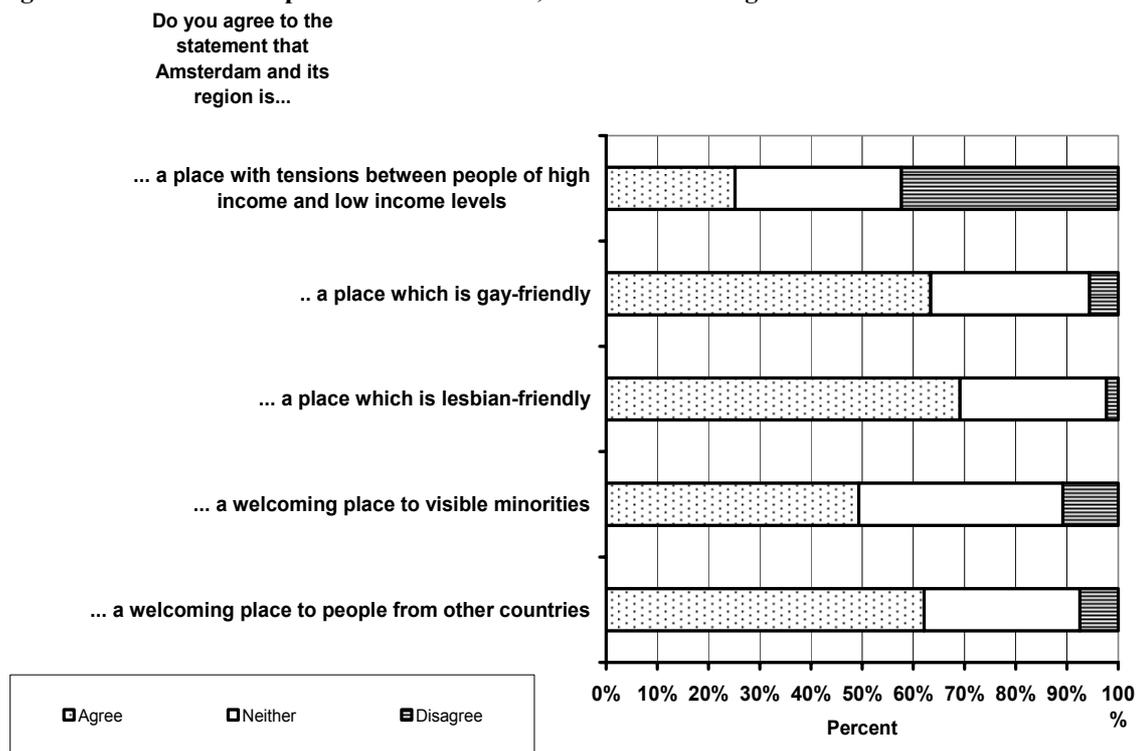
The questionnaire addresses the issue tolerance in three ways:

- tolerance towards homosexuals (gay and lesbian)
- tolerance towards visible minorities and a welcoming attitude towards foreign persons
- presence of tensions between high and low income groups.

The answers of the creative knowledge workers and graduates differed strongly between the various form of discriminations which are addressed in the survey.

“The Netherlands is the world leader when it comes to giving equal rights to heterosexuals and homosexuals.”, concluded a recent Dutch study on equal right and acceptance of **gay and lesbians** (Keuzenkamp and Bos 2007, 13). Banning restrictive laws on sexual intercourse between same sex consenting partners as early as 1810, the Netherlands can look back on a long history of decriminalisation of homosexuality. Turning from one of the most conservative countries in terms of sexual mores before the Second World War into the most progressive country after world war II, gay and lesbian life became one constitutive part of everyday life of Dutch society. Recent European and world-wide opinion monitors³ confirm the accepting attitude, since the Dutch population shows the highest acceptance of all surveyed countries in relation to homosexuality, gay marriage and adoption of children by gay parents (ibid.). Given this background, it is no surprise that the Amsterdam region is very positively judged in terms of acceptance of homosexuals. Nearly 70% of the interviewed persons concluded that Amsterdam is a tolerant place for sexual minorities. The remaining 30 percent expressed their view by using the neutral category. Since it can be assumed that the majority of respondents is heterosexual, this decision is not surprising. The graduates expressed a similar view, although the positive and negative judgments are slightly higher.

Figure 4.15 – Perceived openness and tolerance, creative knowledge workers



Source: Own survey

³ European Social Survey, Eurobarometer no. 66 and the World Values Survey.

The interviewed distinguished between the **acceptance of foreigners** in general and visible minorities. Generally, the Amsterdam region is seen as a welcoming place by 62% of the respondents, but their attitude towards visible minorities is seen more sceptically. Less than 50% agreed to the statement that Amsterdamers are tolerant towards visible minorities. Although creative knowledge workers did not reject the statement (only 11%), they preferred to give a neutral opinion. Creative workers are significantly more sceptical about the statement than knowledge workers (sign. level 5.1%). The graduates are more critical in this respect. 27% rejected the positive statement.

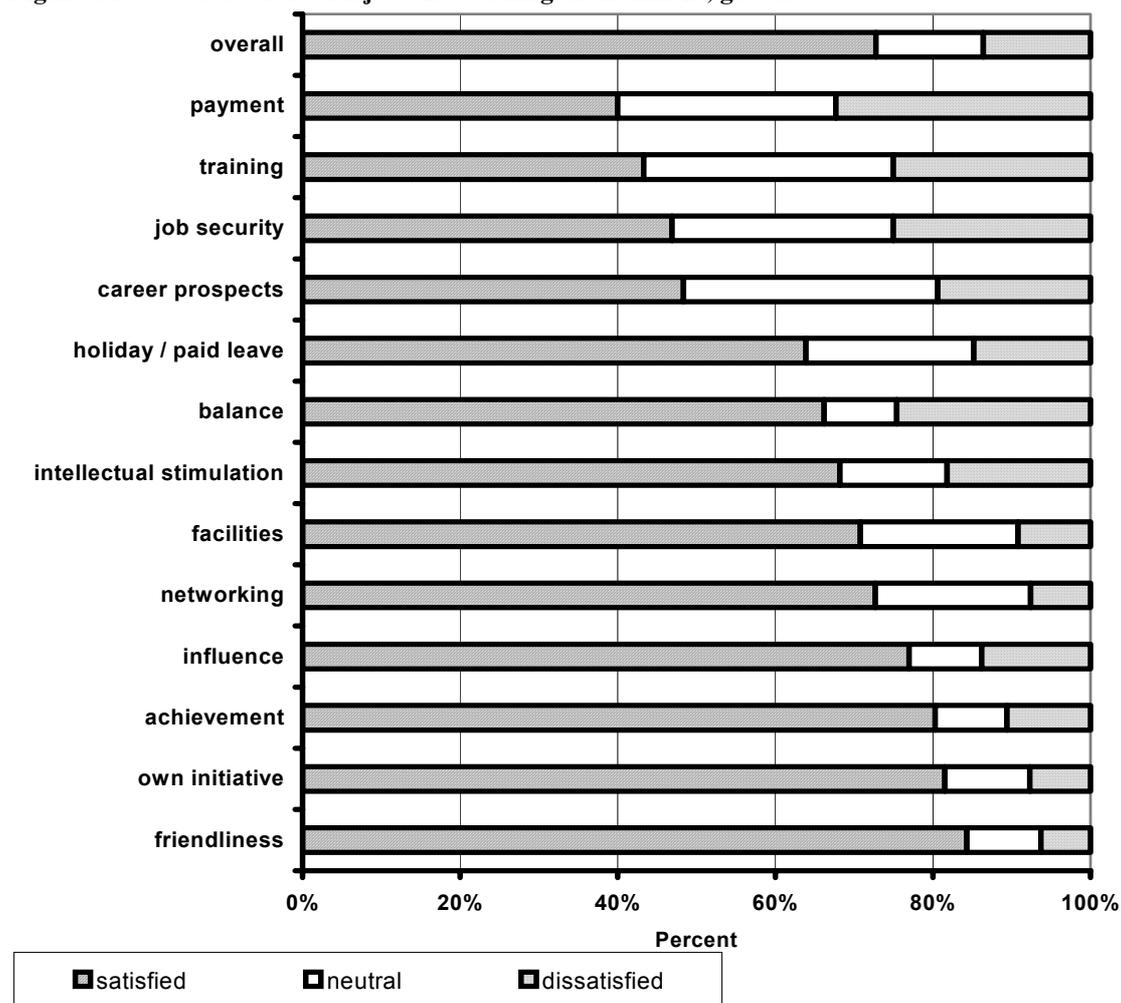
Interestingly, foreign respondents judged the situation much more positive. 82% considered Amsterdam as welcoming. The self evaluation of Dutch persons is more negative than that of the foreign population. A similar pattern was found in a recent survey by Hodes et al (2006). Bontje and Sleutjes interpret it: "This could be related to the positive image of Amsterdam as a gay city: tourists will likely base their opinion on this international image, whereas residents are more sensitive toward local developments that they encounter in their daily life." (2007, 76).

A strong concern, however, is expressed in relation to **inequality**. More than 40% disagreed with the statement that the Amsterdam region is a place without tension between the income groups. The graduates are slightly more moderate, but their opinion reached in the same direction. Creative workers reject this statement more strongly (50%) than knowledge workers (35%). This conclusion, however, is not explained by income of the respondents. Although women and creative workers earn significantly less than men (see page 23ff), gender and occupation do also not have an effect on this judgment. On the contrary, higher income groups chose a negative statement more often. An explanation for this relation is difficult to find. The often used claim that creative knowledge workers are indifferent towards inequality does not prove for persons in the Amsterdam region.

4.2 Satisfaction with job and work environment

So far we have focused the discussion on the extent to which our respondents are satisfied with the Amsterdam Metropolitan Area as a living environment. We addressed questions about the region's residential qualities, the level of service provision, satisfaction with various types of amenities, environmental issues, and the region's social characteristics, more in particular tolerance. The second part of the questionnaire we will turn to now contains questions about the extent to which our respondents are satisfied with their job and their work environment. We will first look at these topics separately and then discuss the extent to which job satisfaction and residential satisfaction are interrelated.

Figure 4.16 – Satisfaction with job and working environment, graduates



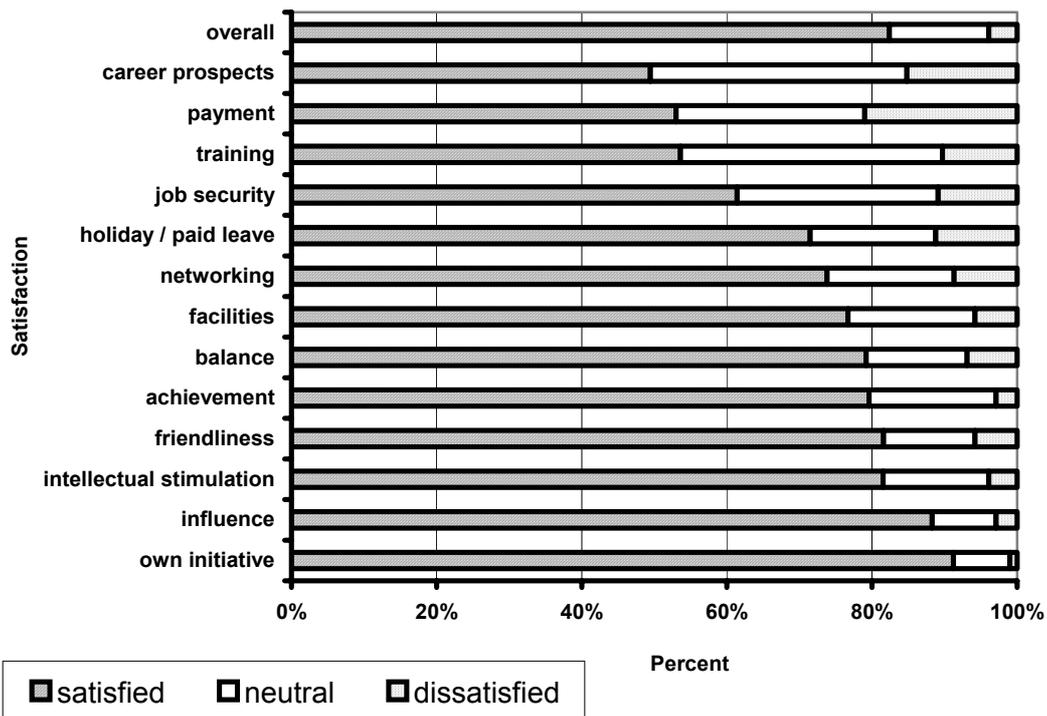
Source: Own survey

In general, the **recently graduated respondents** appear to be very satisfied with their current working situation (Figure 4.16). The overall satisfaction score is 73 percent, while only 14 percent are dissatisfied. Most aspects of job and working environment are judged just as positive and in some cases even much more positive. The graduates are most satisfied about the friendliness of their working environment (84 percent). The few exceptions to this general picture are payment, training received, job security and career prospects. Payment typically is a variable that always scores low in satisfaction studies, and probably even more among those that just started their working career. The low scores on job security and career prospects show that many of our respondents are in relatively insecure positions, again related to the recent start of their working career. The low satisfaction about training received at the workplace gives food for thought: in a knowledge-intensive working environment, one would expect that sufficient job-specific training is provided.

The **creative knowledge workers** in our survey are even more satisfied about their job and their working environment (Figure 4.17). The overall job satisfaction is an impressive 84%. The lowest satisfaction scores are related to payment, job security, the amount of training received, and career prospects. But even in the least positive category, career prospects, only

20% indicate that they are dissatisfied. It is remarkable that the workers and the graduates show almost similar scores on job security, payment and career prospects. The scores of the creative knowledge workers are slightly higher, but one would expect larger differences with the graduates, since this group includes people with longer working careers and generally higher positions than the recently graduated. This might point at insecure and flexible contract situations as a general feature of the creative knowledge sectors, even for those with longer work experience.

Figure 4.17 – Satisfaction with job and working environment, creative knowledge workers



Source: Own survey

Comparing creative workers to knowledge workers mainly results in similarities, but also some differences. Generally speaking, creative workers are less satisfied about job and working environment than knowledge workers, but the differences are small on most dimensions. Creative workers are clearly less satisfied about the on the job training they received (45% satisfied creatives, 60% satisfied knowledge workers); the amount of holiday time (56% satisfied creatives, 77% satisfied knowledge workers); and their job security (47% satisfied creatives, 66% satisfied knowledge workers).

4.2.1 The influence of job characteristics on job satisfaction

We explored to what extent job and work environment characteristics influence the job satisfaction of creative knowledge workers, and also that what extent creative workers differ from knowledge workers looking at those variables. For the creative knowledge workers as a whole, the **income category** made a difference for some of the dimensions of job satisfaction.

The lowest income groups are less satisfied about the facilities in their workplace, (naturally) their payment, and the ability to meet and network with professionals from their own field. On some other dimensions of job satisfaction, the curious phenomenon appeared that both the lowest and the highest income groups are clearly less satisfied than the middle income groups. This holds true for the training received and job security. The other dimensions of job satisfaction had roughly the same scores for all income groups. Taking the creative workers apart, the differences between income groups slightly increase. Creative workers in the lowest income groups are less satisfied on almost all dimensions of job satisfaction. The only exceptions are the curious ‘double peak’ of dissatisfaction for low and high income groups on the dimensions training received and job security.

The variable with the strongest influence on job satisfaction seems to be the **perceived future in the company**. Both for creative and for knowledge workers, those that expect to stay with the company less than 3 years are less satisfied about their job than those expecting to stay longer. The largest differences appear on the dimensions sense of achievement, workplace facilities, job security, and ability to meet and network. However, even though those with the shortest in-company career expectation are less satisfied about most individual dimensions, the vast majority of them are still quite satisfied with their job overall. Another reason not too draw too firm conclusions is that there are many missing cases (70 out of 164) with the question on expected time in the company.

The **length of the workweek** seems to make some difference in job satisfaction as well. Generally speaking our respondents seem to have long working weeks compared to the average Dutch work week, which is most often around 40 hours for full-time workers. In our sample, 70 respondents (one-third) indicate they usually work 43 hours or more per week, of which 19 respondents even work more than 55 hours. Those working less than 43 hours a week are less satisfied about sense of achievement, intellectual stimulation, and job security, and have lower scores on overall job satisfaction as well. Those working more than 43 hours, on the other hand, are less satisfied about the ability to balance professional and personal life and their holiday time. The other dimensions do not result in meaningful differences. Moreover, we have to keep in mind that despite the differences on the dimensions mentioned before, no category scores below 79% in the two most satisfied categories. Several problems appear in interpreting the possible relation between workweek length and job satisfaction; the most extreme categories (less than 20 and more than 55 hours) have too little cases, and the category division does not seem to fit Dutch working culture very well. The category 31-42 hours probably contains many part-time workers, since a 4-day working week (usually 32 hours) is a common Dutch phenomenon, but also many full-time workers (usually around 40 hours).

Finally, we looked at the possible effect of **travel time and travel distance** on job satisfaction. Both did not make any difference. We would have expected, for example, that those travelling longer in terms of time and distance would be less satisfied about the ability to balance work and personal life. Apparently most of our respondents have managed to find this balance irrespective of how far they live from their workplace.

4.2.2 The influence of job characteristics on regional satisfaction and plans to move

To what extent are the regional satisfaction and the likelihood to move related to aspects of the job and working environment? Some job characteristics seem to influence the extent to which our respondents are satisfied with the Amsterdam region and/or their likelihood to leave the region within the next few years. **Work duration** is one of those characteristics. Respondents that have worked 1-4 years for their current company are much more likely to leave the Amsterdam region soon (45% state that this is very likely or somewhat likely) than those that already worked for their company 10 or more years (only 18% very or somewhat likely). More in general, the effect seems to be that the longer someone has worked for a company, the less likely it is that he or she will leave the Amsterdam region. The only exception to that are the respondents that have joined their current company less than a year ago. The value of Chi^2 , however, is too high to confirm this possible relationship.

Table 4.1 – Regional satisfaction and likelihood to move per branch group

	software	advertising	film, video, broadcasting	law, accountancy	banking	higher education	art	other
satisfied	19 54.3%	22 61.1%	18 81.2%	29 59.2%	8 66.7%	16 59.3%	15 57.7%	11 52.3%
unsatisfied	16 45.3%	14 38.9%	4 18.8%	20 40.8%	4 33.3%	11 40.7%	11 42.3%	10 47.7%
likely to move	13 37.1%	12 33.3%	5 22.7%	11 22.0%	6 50.0%	9 33.3%	12 46.2%	9 42.9%
unlikely to move	22 62.9%	24 66.7%	17 77.3%	39 78.0%	6 50.0%	18 66.7%	14 53.8%	12 57.1%

Source: Own survey

If we split up all our respondents (graduates and creative knowledge workers) in two broad branch groups, the **creative workers** and the **knowledge workers**, there is hardly any difference in regional satisfaction and the likelihood to move out of the Amsterdam region. If we split up our sample in smaller **branch groups**, however, quite striking differences appear (Table 4.1.). Those working in film, video and broadcasting are very satisfied with the Amsterdam region and highly unlikely to move. Respondents in the software sector, law and accountancy, higher education and art, on the other hand, seem much less satisfied, while people working in banking and art seem much more likely to move. The extreme scores on regional satisfaction and likelihood to move in the film, video and broadcasting sector might well be related to the dominance of the Amsterdam region in this sector in the Netherlands; that is, there is hardly an alternative region to move to for people working in this branch group (unless if they move abroad). However, the low number of cases in some of the other branch groups (especially banking) does not allow for too firm conclusions on the differences we found between the branch groups in our sample.

A third job-related variable with some possible influence on regional satisfaction and likelihood to move is the **future perspective in the current company**. Respondents that are

expecting to work for their company more than 10 years are more satisfied with the Amsterdam region (64%) than those who expect to stay with their company less than 1 year (53%) and between 1 and 3 years (56%). Unfortunately, the categories in-between have too few cases to check if we are actually dealing with a relationship between these two variables. In the same vein, those expecting to stay with the company less than 3 years are more likely to move than those expecting to stay with their company at least 10 more years.

The other variables we tested did not show a meaningful relationship with regional satisfaction and/or likelihood to move out of the Amsterdam region. These variables are contract status, company size, executive position, and overall job satisfaction. The latter could be expected to show little or no influence, considering the extremely high share of respondents being satisfied with their job.

4.2.3 Connecting migration reasons, regional satisfaction and job satisfaction

We have already indicated earlier that a large share of our respondents either moved to or stayed in the Amsterdam region because of job-related reasons. It would be interesting to explore to what extent these job-related reasons are interrelated with the satisfaction with the region as a place to live and work and the satisfaction with the job. The relatively small size of our sample unfortunately does not allow for analysing correlations between each of the mentioned reasons to live in the Amsterdam region. Instead, we have aggregated for this purpose all work-related reasons on the one hand, and all reasons related to city and regional attractiveness on the other. Again it appears that **graduates and creative knowledge workers** are quite different groups. Those graduates that live in the Amsterdam region because they consider it as an attractive place to live, are more satisfied with the region than those that live there mainly for work-related reasons. For the creative knowledge workers, it is exactly the opposite. One could interpret this as an indication that graduates attach more value to city-regional residential attractiveness than creative knowledge workers. Due to a high share of missing values in both groups (half of the graduates and 30% of the workers), however, this assumption cannot be supported convincingly.

For the same reason, caution is necessary when looking at possible connections between plans to leave the Amsterdam region, the perceived future in the current working environment, and the reasons why respondents are currently living in the Amsterdam region. Firstly, an array of respondents did not answer all questions, so that the interpretation of the results is limited. For those who answered, all questions are needed to explore these relationships. We can state that the reasons for living in the Amsterdam region hardly lead to differences in the likelihood to move away from the Amsterdam region in the next 3 years. The perceived future in the current company or organisation seems to have more influence on migration plans. Not surprisingly, those creative knowledge workers expecting to remain in the same company or organisation longer are less likely to move away from the region. The graduates do not show this pattern; they seem less likely to leave the region irrespective of their perceived future in their current working environment. Maybe this is related to their shorter working career: many graduates probably have not made a decision on their longer-term working future yet and might therefore not have thought of other places to work than the Amsterdam region yet.

Creative and knowledge workers that lived longer in the Amsterdam region also expect to stay with their company or organisation longer. This is especially true for those that have already lived in the region for more than 10 years. The likely explanation is that this group has probably reached a rather stable situation in their working and housing career: they found a residence and a working environment that largely meet their demands. However, from our data it is impossible to find out if these two variables are truly interrelated, or if we are dealing with a 'spurious' correlation. For the graduates, we do not see a clear relationship between these variables.

4.2.4 Conclusions on job satisfaction

The vast majority of respondents are very satisfied with their current job and working environment. With generally high scores on almost all dimensions of satisfaction with job and work environment, it is hard to find differentiation within sub-groups of our respondents. Some differences could be found between the knowledge workers and the creative workers. Knowledge workers tend to be more satisfied about their work situation. Moreover, our sample of graduates tends to be less satisfied than our sample of creative knowledge workers. Both creative workers and graduates are less satisfied about job security, payment and working conditions like holidays and on-the-job training. For graduates this seems logical since we selected respondents that graduated less than 5 years ago, which usually means they have just started their labour market career. The creative knowledge workers sample is older, more experienced and usually better off in terms of working conditions. The differences between knowledge workers and creative workers might point at more precarious working conditions in the creative sectors we analysed. However, the differences with the knowledge-intensive sectors we analysed are only small, and also many respondents from the knowledge-intensive sectors were less satisfied about job security, career perspectives and some of their working conditions.

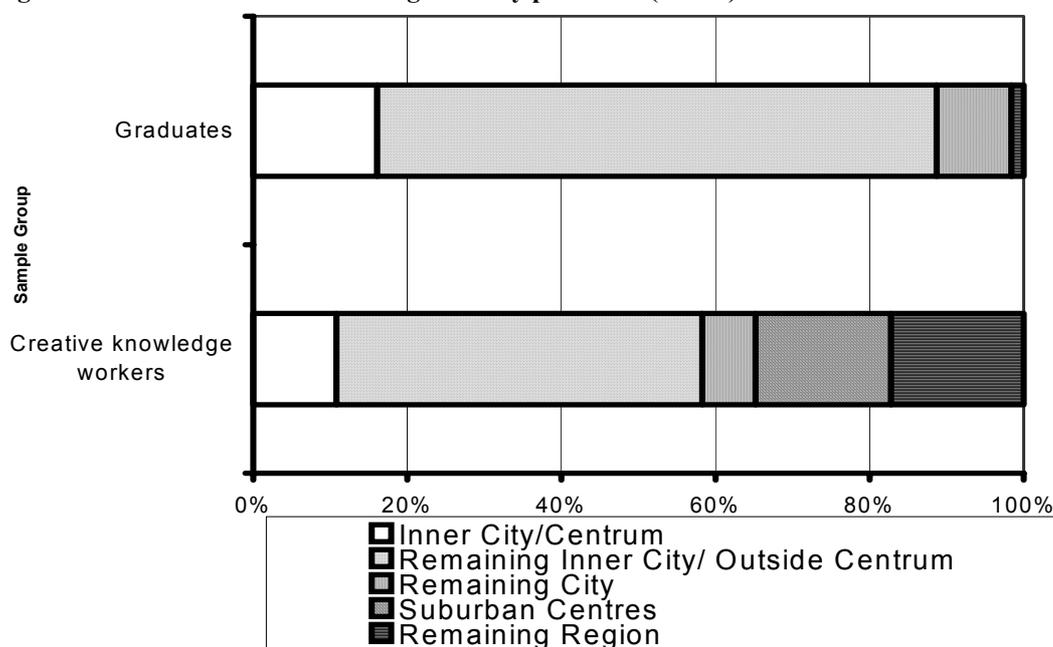
Relating the job satisfaction scores to other, possibly explanatory variables often resulted in too small sub-groups to draw meaningful and reliable conclusions. Three variables seemed to influence the job satisfaction scores: perceived future in the company, income category, and hours worked. The most convincing relationship of those three was found between perceived future in the company and job satisfaction. As could be expected, those who expected to stay longer with their company were also more satisfied with their job and working conditions. However, even this possible relationship cannot be confirmed reliably due to many missing cases. Similar caution is needed when trying to relate job characteristics to regional satisfaction and plans to leave the region. The few job characteristics that seemed to have impact on regional satisfaction – branch group, work duration, and perceived future in the company – suffered from too low cell frequencies or problematic scores of significance statistics. When looking at the possible links between job satisfaction, regional satisfaction and plans to move, we again faced troubles with either many missing cases or too low cell frequencies to confirm or reject hypotheses. In the end, our conclusions on satisfaction with job and working environment can only be limited and tentative. It is clear that most respondents are very happy with their job and working conditions, but to what extent this

influences their satisfaction with the Amsterdam Metropolitan Area as a living environment remains unclear.

4.3 Satisfaction with neighbourhood and living environment

The **place of residence** varies between the recently graduated participants and the creative knowledge workers. The graduates are geared towards the inner city of Amsterdam. More than 80% live within the A10-ringroad. Nearly one fifth lives in the very centre of the town, the historical city centre. The largest group of creative knowledge workers live in the inner city outside of the historical core (48%). A second group selected their place of residence outside of the inner city, either in one of sub-centres or in other villages and small towns of the suburban part of the region (17%).

Figure 4.18 – Place of residence categorised by postcodes (n=204)



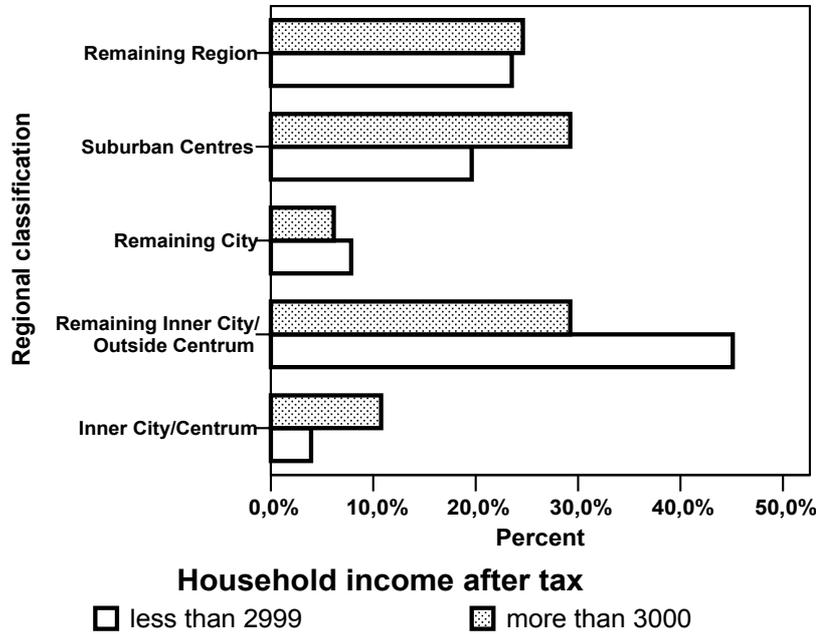
Source: Own survey

The **demographic structure** in the various parts of the AMA shows different patterns (see Chapter 3). The inner city of Amsterdam is significantly more often inhabited by female⁴, single and younger creative knowledge workers (see figures next page and appendix). In the outer fringes persons, especially families with a higher household income, higher age and of Dutch descent are situated. Creative knowledge workers with a lower monthly household income with less than 2999 € live also more often in Amsterdam. Although some re-urbanisation tendencies of higher income households in the very centre of Amsterdam

⁴ Significance level gender: 0.037, age: 0.020.

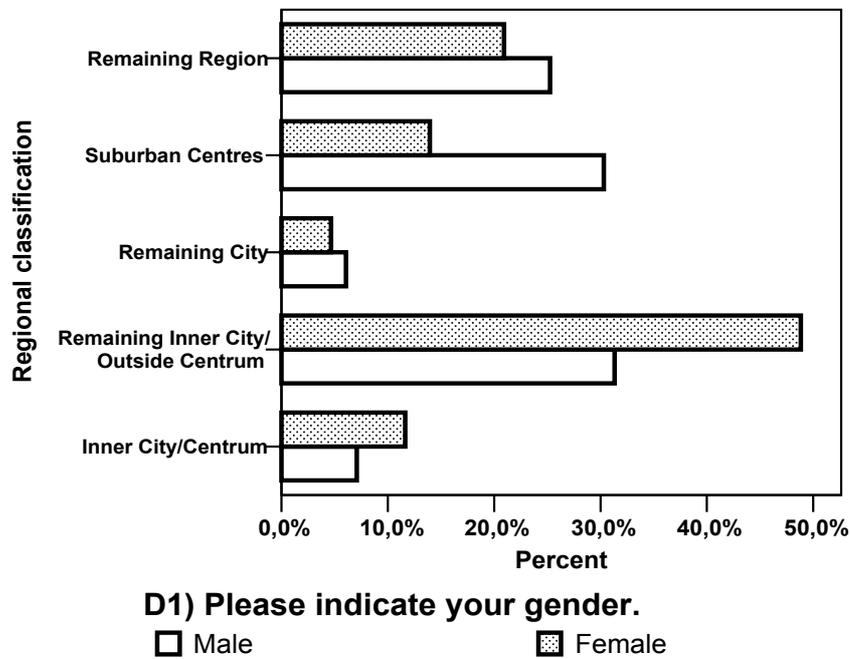
(stadsdeel Centrum) are visible, higher income households are found less often within the A10 ring-road than expected.

Figure 4.19 – Regional distribution of income (N=116)



Source: Own survey

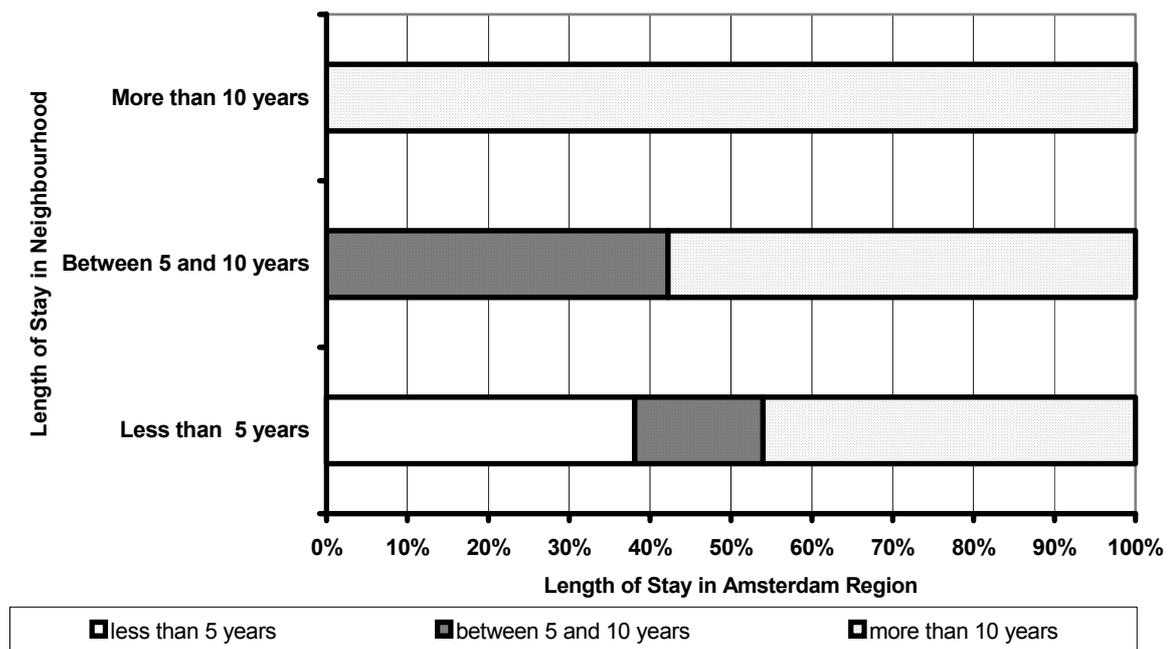
Figure 4.20 – Regional distribution by gender (n=142)



Source: Own survey

Although the residential patterns of creative knowledge workers are often seen as an indicator that the conventional demographic structure within urban agglomeration changes due to re-urbanisation processes, results of the survey rather document that the conventional urban models of the Chicago school are also applicable for creative knowledge workers. As described in those models, low income, female, foreign and younger inhabitants and single households tend to be located in inner city areas, whereas the more well-off families moved to the outer fringes of urban agglomerations. Obviously, the differences amongst the so called ‘creative class’ are underestimated. Given those results, it seem to be misleading – at least for the case of the Amsterdam region – to talk about a new urban geography or a new urban class with new residential preferences compared to the remaining population. The sociologist Beck described the post war social strata of post capitalist societies with the so called “Fahrstuhleffekt” (Beck 1992). The income of all classes increased, but differences amongst the classes maintained. It might be possible that the same is true for creative knowledge workers. Although they earn significantly more than the average population in the AMA, social differences still generate the same uneven residential pattern as in the industrial age. Their residential pattern seems to still very similar to the social structure of industrial cities. Apart from re-urbanisation tendencies in the very inner city to which high income groups move, other parts of the agglomeration still follow conventional settlement patterns. Beck relates to his concept of the “elevator effect” two antagonistic effects. Increasing income does allow the articulation of individual tastes. Individual lifestyles can be expressed. In this sense, he is very similar to Florida’s description of the creative class. On the other hand, this is a notion that is also expressed by Bourdieu. Additionally, Beck warns that old forms of solidarity based on class experiences start to fade. Those strong differences between the city of Amsterdam and suburban part of the region lead to the expectation that differences in the judgment of residential neighbourhoods also appear. Before they will be discussed in the following part, the residential attachment to the AMA will be explored.

Figure 4.21 – Attachment to the region of creative knowledge workers (n=163)



Source: Own survey

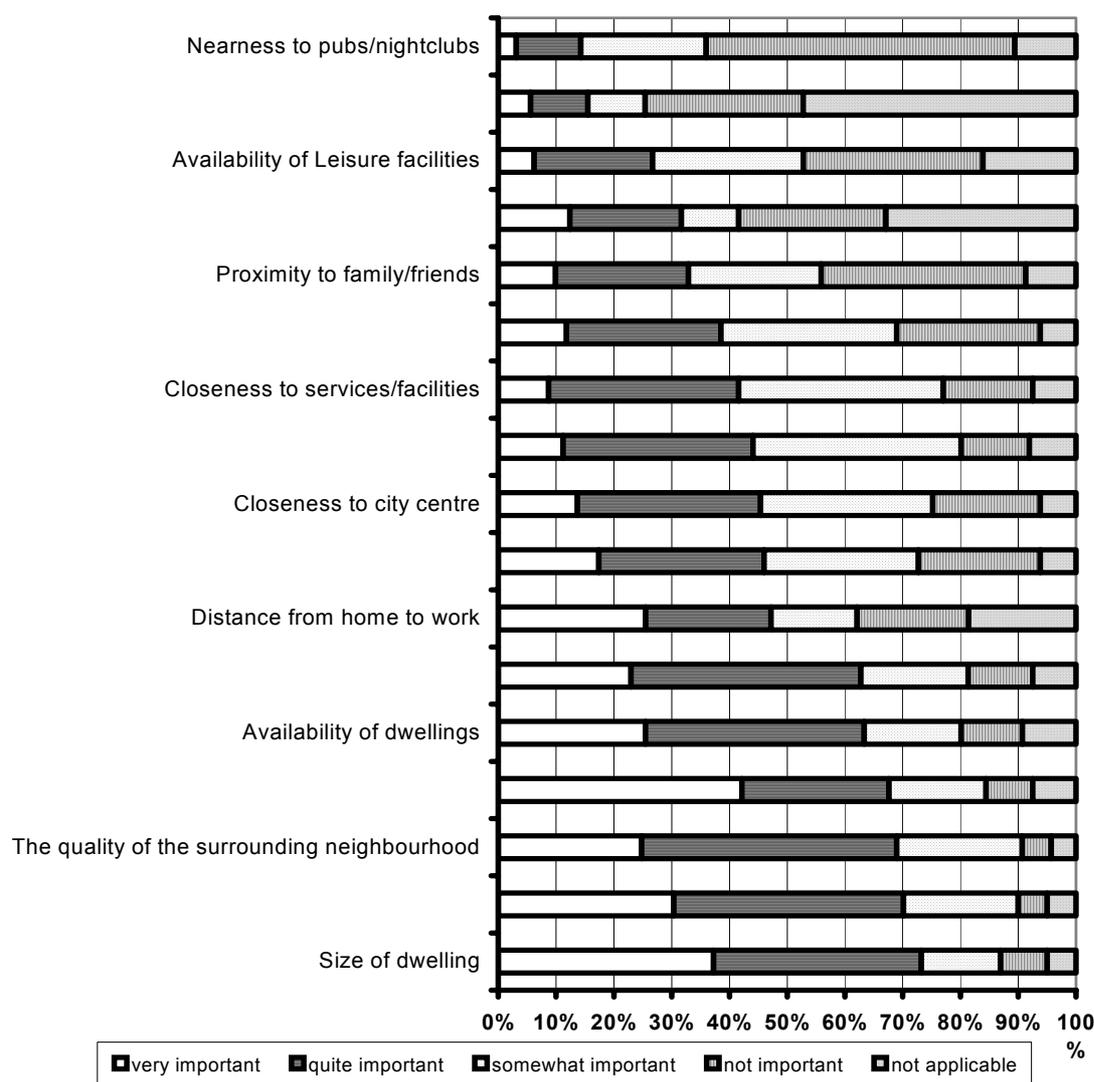
As stated earlier, the majority of the interviewed persons have lived longer than 5 years in the Amsterdam region (see Chapter 3). The **level of intraregional mobility** is much higher. One out of ten creative knowledge workers moved during the last 12 months into the current neighbourhood. Almost every second person moved from outside of Amsterdam to their new place of residence. The graduates are more mobile. Two thirds moved at least once within the last 5 years. Only one third has kept their address for longer than five years. Probably due to the age difference and the later phase in their housing career, the creative knowledge workers are less mobile. 59% live in the same neighbourhood as 5 years ago.

The judgment about the neighbourhood is addressed in three questions in the survey: the importance of several qualities of the neighbourhood and the dwelling, a judgment about the level of satisfaction with various aspects of the neighbourhood, and the satisfaction about the dwelling itself.

In general, the place of residence has no effect on the general level of satisfaction with the region, but three factors are significantly linked to the overall satisfaction with the AMA. Two of them address safety (personal safety and security of dwelling) and another the physical quality of the dwelling. Dissatisfaction with subjective security and housing quality influences the general level of satisfaction. How is the **residential environment** assessed in detail?

Six items are seen as important for creative knowledge workers (see Figure 4.22). They describe the size and the feature of the dwelling, the quality of the surrounding neighbourhood and availability and price. Whereas no demographic differences are found between the creative knowledge workers in relation to the importance of certain neighbourhood feature, an array of differences appear when the quality, features and cost of dwellings are surveyed. Not surprisingly, income, gender, age and to a lesser extent household size influence the assessment of housing features. Creative knowledge workers who are Dutch or live outside of the city of Amsterdam claim significantly more that the size of the dwelling is an important feature.

Figure 4.22 – Importance of factors for creative knowledge workers – satisfaction with the neighbourhood (n=161)



Source: Own survey

The level of satisfaction, however, is strongly influenced by **social and spatial characteristics** of the creative knowledge workers. Creative knowledge workers and Amsterdamers are less content with the given size of their dwelling. In a similar fashion, Dutch creative knowledge workers with higher income and a long presence in the AMA (> 10 years) underline the importance of available open private space such as a balcony or garden as a feature of their residence. Creative knowledge workers who are either young, or originate from outside of the country or who live in the inner city of Amsterdam are dissatisfied due to the lack of private open space in their dwelling. Another similar example is the assessment of housing cost which is significantly more often mentioned by creative knowledge workers with lower income than by the rest. The availability of dwellings is less seen as a pivotal point by low income earners, but families with children are significantly less satisfied with the offers made by the housing market. Compared to the items which address the quality of the neighbourhood and the dwelling, service facilities or distance relation to work or to friends is given less attention. Although the social ties of the surveyed creative knowledge workers are

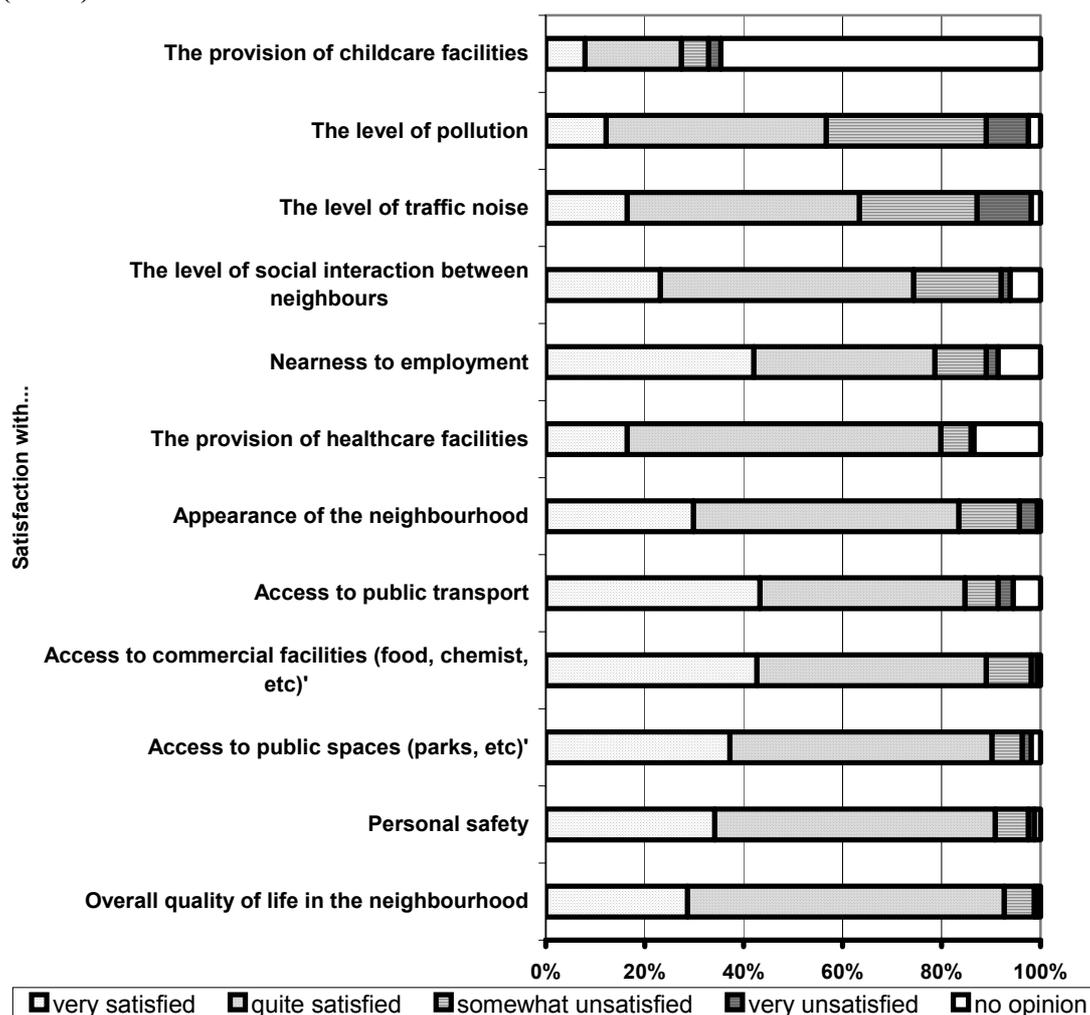
strong, and they claim that visits to friends are one of the important leisure activities, they more often state that proximity to work is more important than proximity of friends. In this respect, creative knowledge workers in the AMA are more influenced by their working environment than by their social bonds. Although nearness to nightclubs received almost no attention, this item is a good example to show the impact of age on the judgment of neighbourhoods. Creative knowledge workers who are either young, single, or originate from outside of the Amsterdam region or have recently arrived in the AMA significantly more often state that those amenities are highly influential on their choice of residence.

Of course, **creative knowledge workers and graduates** also disclosed differences. Whereas the distance of the dwelling from the city centre is one of the important aspects for the graduates, the creative knowledge workers referred more often to layout of the dwelling, especially the private open space (balcony, terrace, garden), and the availability of the dwelling. Whereas the nearness of pubs and nightclubs gains less attention from the creative knowledge workers, the graduates are not particularly interested in locations close to major roads or highways.

In a second step, the **level of satisfaction about the neighbourhood** is surveyed (Figure 4.23). It is very high. 93% of the creative knowledge workers and 86% of the graduates indicate that they are satisfied with the overall quality of their neighbourhood. Apparently, residential location does not account for negative judgments about the region in general, because the closest living environment is judged so positively. Safety, access to parks and access to commercial facilities achieved the highest level of satisfaction. Interestingly, the assessment of personal safety is significantly influenced by income, household composition and location. Creative knowledge workers who earn less than 2999 € are more often dissatisfied with the situation. Negative assessments are also more often articulated by creative knowledge workers who live in the inner city or have children. Although graduates evaluated the situation in their neighbourhood slightly more critical, they gave the accessibility to public transport a higher score than the creative knowledge workers. Given the fact that they are situated within the inner city, it is not so surprising that they mention good access to public transport. If income differences or location is also taken into account, it becomes clear that creative knowledge workers who have a higher income, live in suburban areas of the AMA and who have children find it more difficult to access public transport.

Nearly all other presented issues received a positive evaluation, but some are judged more sceptical. The level of pollution is seen as a problem by a larger group of respondents (creative knowledge workers 41% and 48% of graduate respondents). This is significantly more articulated by Dutch Amsterdamers who live outside the stadsdeel Centrum. The level of traffic noise is seen as problematic too (44% of graduates and 35% of creative knowledge workers). In addition to that, the graduates are not satisfied with the level of interaction between various social groups (42%). Creative knowledge workers who are single or of non-Dutch nationality criticised this aspect significantly more often, too. Health facilities are seen more sceptical by singles. The appearance of the neighbourhood received the most critical remarks by families with children and persons who live less than 5 years in the AMA and are located in the inner city of Amsterdam.

Figure 4.23 – Satisfaction with the neighbourhood of selected items by creative knowledge workers (n=164)



Source: Own survey

The difference between graduates and creative knowledge workers can be well illustrated by the assessment of the importance of nightclubs. Persons who are either young, single, originate from outside the Amsterdam region or who live in Amsterdam for less than 5 years think this amenity is significantly more important. In other words, of all presented issues related to public infrastructure and social services, environmental aspects are seen as the most critical points. For the graduates the missing social interaction in the neighbourhood is another factor of concern.

In a third step, the satisfaction with the **dwelling** itself and its amenities are surveyed (Figure 4.24). The level of satisfaction is even higher. Physical feature of the dwelling received the best scores, but a more detailed analysis clearly shows that this judgment is strongly based on social attributes of the surveyed creative knowledge workers. Creative knowledge workers who earn a monthly household income less than 2999 € are significantly less satisfied with the outlook, size of the dwelling, size of the kitchen and the management of building. The items which are generally seen more critically – still on a very positive level – bring spatial

differences to the fore. Creative knowledge workers who live in the inner city of Amsterdam are significantly more discontent with the available storage space, parking space and private open space in the dwelling. Persons who moved from outside the Netherlands to the AMA are more dissatisfied with the available parking space and open space within the dwelling. The level of satisfaction with the dwelling itself also varies considerably between the creative knowledge workers and graduates. The level of satisfaction is again far above 80% for the latter, but two out of five graduates state some form of discontent with their dwelling. They are negatively concerned about the unsatisfactory management (60%), the missing storage space (59%) and the size of the kitchen (43%). In addition some environmental factors are mentioned such as missing parking space (52%) and noise from neighbours (47%) as well as missing open garden space (45%). The architecture of the dwelling, the size of the bedrooms and attached green space are seldom elements of criticism.

Figure 4.24 – Satisfaction with the dwelling



Source: Own survey

4.4 Mobility

Florida (2002, 2005) emphasises that the mobility of people is the most significant fact of modern society – more important than the rise of new technology or the mobility of capital. He regards flexibility, mobility and the ability to change location as fundamental assets in the postfordist society, especially for creative knowledge workers. They often work on the basis of flexible contracts, for example, as free agents. Due to the fact that this group has a lot of occupational opportunities, they would give up the prospective of having secure jobs for greater mobility and autonomy (Florida 2002, p. xix). Their social life would be morre

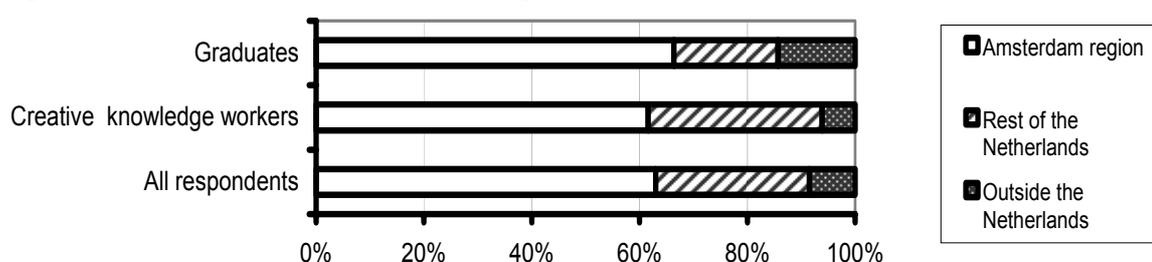
flexible, too: ‘strong ties’ to family members as well as close friends are supposed to lose importance, while ‘weak ties’ would gain importance (Florida 2002, p. 7).

This section of the report will focus on the mobility of the creative knowledge workers in the Amsterdam region. We will address the question whether these people are actually as mobile as they are expected to be. Furthermore, factors that influence the mobility of creative knowledge workers and graduates in the Amsterdam region will be analysed.

First, a brief review of the general mobility of the respondents will be provided. The focus will lie on past and future mobility. The future mobility will be characterised by the likelihood of a respondent moving away from the Amsterdam region in the next three years, and the past mobility by the place where a respondent has lived before moving to Amsterdam and its adjacent region. Second, the past and future mobility will be related to the demographic characteristics of the respondents. The main objective is to find out whether there is any relation between demographic characteristics and past and future mobility. Moreover, the analyses will be focused on the relation between the reasons for living in the Amsterdam region and the past and future mobility. The results may suggest some key factors that might influence creative workers’ and recently graduated students’ decision to live in Amsterdam.

Florida describes high occupational and residential mobility as a main characteristic of the ‘creative class’. Our mobility analysis, however, points out that the respondents are not as mobile as they are expected to be. They are predominately moving across short distances. Most of the respondents (over 63%) have already lived in the Amsterdam region before they moved to their current address, whereas a relatively small amount has come from either other parts of the Netherlands or abroad (Figure 4.25).

Figure 4.25 – Place of residence before moving to current residence

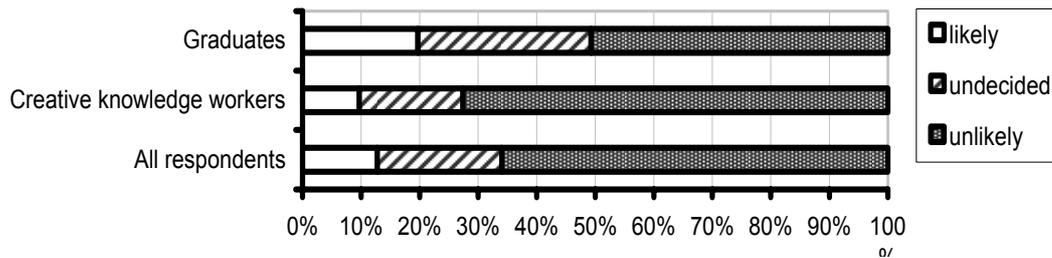


Source: Own survey

The majority of the respondents are not planning to leave the Amsterdam region in the next three years: Around 66% said it is unlikely and only around 13% assume it is likely. There are, however, differences between creative knowledge workers and the former students in respect to this issue: only 10% of creative knowledge workers think it is likely that they are going to leave the region, in contrast with 20% of students (Figure 4.26). This result refers to the assumption that the younger recently graduated student are not so definitely ‘settled’ in the region and more flexible concerning their future decision of choosing their place of residence. However, we should also keep in mind that the graduate sample may be slightly biased. Many educational institutions provide English programmes attracting many foreign students, who are more likely to return to their home country (or move on to other countries)

after graduation. In our sample this is especially true for the art students of the Rietveld Academy. Moreover, the age structure of the graduates is not balanced: the majority of them belong to the younger age group of those under 35. This results in distortions, e.g. regarding the mobility of this group, because young people can be expected to be more mobile. We also asked which location those planning to leave had in mind. However, since only few respondents considered it likely they would move soon and since many did not answer the question, it is not possible to draw meaningful conclusions from this question.

Figure 4.26 – Likelihood moving away from Amsterdam and its region in the next three years



Source: Own survey

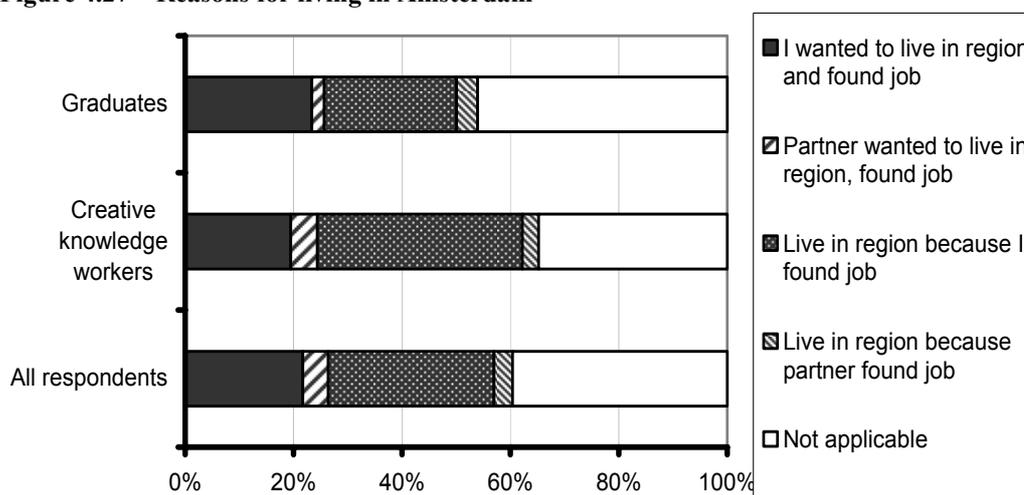
4.4.1 Job mobility

Florida argues: “[The creative class] progress from job to job with amazingly little concerns and effort” (Florida 2002, p.6). However, Amsterdam’s creative knowledge workers do not seem to be as mobile regarding job change as they are expected to be. 40% of the respondents are thinking about leaving their company in less than 3 years. There are significant differences between creative knowledge workers and graduates in this respect; only 27% of graduates expect to remain in same job for at least the next three years. Florida does not mention that migration to another place is connected with high costs like loss of social ties, getting used to a new working and living environment, and most often also financial costs. Our analysis suggests, as could be expected, that the creative knowledge workers charge these costs higher than the graduates. This is most likely connected with differences in age and stage in de life course between these two groups.

Most of the respondents live in the Amsterdam region because of their jobs. Fewer answered that they live in Amsterdam, because they really wanted to live in this region (and thereafter found a job). This raises serious doubts about Florida’s hypothesis that ‘talent is a flow’ and that the ‘creative class’ is more likely to move from place to place to meet life-style requirements. It also suggests that, in the case of Amsterdam, the hypothesis that ‘labour follows company’ is more applicable than ‘company follows talent’. There are also major differences between creative knowledge workers and graduates in this respect. In the case of graduates, 27% of respondents live in the Amsterdam region because of the city itself and only 14% are living in the Amsterdam region because of their job (Figure 4.27). This also indicates that graduates attach more value to city-regional attractiveness than creative knowledge workers. Analogously, the creative knowledge workers attach more value to the job-related issues than the graduates. A reason for this could be the different lifestyle and preference of the two groups. The graduates favour the ‘big-city feeling’ in Amsterdam with

its cultural diversity and its diversity in leisure and entertainment more than the occupational opportunities here. This might be related to the age difference between these two sub-groups in our sample, or to differences in the main reasons to move to the Amsterdam region. Graduates have often moved to the Amsterdam region for study-related reasons, not always having a labour market career in mind, while creative knowledge workers often mention job- and career-related reasons (see section 4.1.1 and 4.1.2).

Figure 4.27 – Reasons for living in Amsterdam



Source: Own survey

4.4.2 Future and past mobility in relation with demographic characteristics

Several studies show that age, level of education, gender and household size have an influence on mobility behaviour (e.g. Mulder 1994). Do these issues also relate to the mobility of creative knowledge workers in the Amsterdam region?

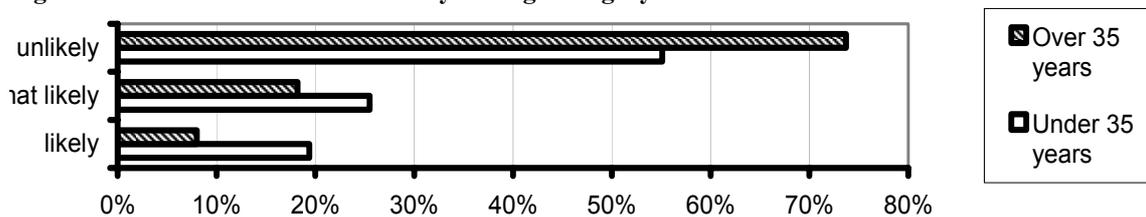
First of all, the **gender** of creative knowledge workers could have an influence on mobility. Women are said to move across shorter distances than men (e.g. Baehr 1983). These relationships are only partly true for Amsterdam. If one looks at past mobility according to gender in the case of Amsterdam, 68% of the women and only 59% of the men have already lived in the Amsterdam region. Hence, women move at a higher proportion inside the Amsterdam region. Men move at a higher percentage than women from the rest of the Netherlands and outside of the Netherlands. In contrast to this, our male respondents have already lived longer in the Amsterdam region than our female respondents. This outcome might well be interrelated with age differences between our male and female sub-samples, though. If one looks at the future mobility, in general this factor has no influence: there is hardly a difference in future mobility between women and men.

Furthermore, the **age** of the creative knowledge workers influences their mobility: looking at future mobility it is clearly shown that mobility drops with age. These results agree with those of other studies, in which people aged between 20 and 30 are said to be most mobile (e.g.

Mulder 1993). In this life phase, job- and residential-related mobility reaches its highest level, and thereafter declines.

This relationship also fits to the case of the creative knowledge workers in the Amsterdam region. Thus there is a clear relation between the age of the creative knowledge workers and their future mobility. The older the creative knowledge workers are, the more likely they are to stay in Amsterdam region: Respondents over 35 years think it is *unlikely* that they will leave the Amsterdam region in the next three years. This result refers to the assumption, that in general, young people are more mobile than older.⁵ In addition, the fact that the younger creative knowledge workers are more mobile than the older ones is also shown by the fact that those aged over 35 have moved to a higher percentage inside the city or region of Amsterdam.

Figure 4.28 – Likelihood to move away and age category



Source: Own survey

Looking at the monthly **household income** and the past and future mobility, respondents from the lowest income category (under 2000 Euros) assume to a higher proportion (16%) that it is likely that they will leave the Amsterdam region, compared to only 13% of the households with an income over 4000 Euros and 11% of the households with an income of 2000-4000 Euros. The households in the middle income range (2000-4000 Euros) state most frequently (77%) that they are not going to move out of Amsterdam, in contrast to only 51% of the households with an income under 2000 Euros (Table 4.2). Surprisingly, there is a kind of analogy in the future mobility of the lowest and highest income category. For the past mobility, there is no significant difference between the different income groups.

Table 4.2 – Likelihood to move away in the next 3 years and household income (Euro)

	Under 2000	2000-4000	Over 4000
Likely	12	8	7
	16.0%	10.7%	13.2%
Somewhat likely	25	9	13
	33.3%	12.0%	24.5%
Unlikely	38	58	33
	50.7%	77.3%	62.3%
Total	75	75	53
	100.0%	100.0%	100.0%

Source: Own survey

⁵ The differences between the groups recently graduated students and creative knowledge workers are not representative, because the number of cases for the category over 35 years for the graduates is too small to make any significant conclusion.

The **type of household** in which the creative knowledge workers live could also influence their mobility. The results of several surveys suggest that households with children are less mobile than singles or childless couples (e.g. Mulder 1993). However, this relation is not true for our sample in the Amsterdam region. The proportion of respondents that moved inside the Amsterdam region does not vary significantly between household categories. One person households moved slightly more from outside the Netherlands to the Amsterdam region than the other household categories. If one looks at the future mobility, the likelihood to move away in the next three years, it is noticeable that 68% of the families with children regarded as unlikely that they will move away, in comparison with 53% of the one person households. Surprisingly, couples without children think to a same proportion than the couples *with* children, that it is unlikely to move away from the Amsterdam region.

Table 4.3 – Likelihood to move away and residential location

	Inner city	Outside the City
Likely	22	7
	16.5%	6.9%
Somewhat likely	32	18
	24.1%	17.8%
Unlikely	79	76
	59.4%	75.2%
TOTAL	133	101
	100%	100%

Source: Own survey

When we relate past mobility to the **residential location in the Amsterdam region**, we do not find a significant difference between the past mobility and current place of residence. However, regarding future mobility, some differentiation could be made: the respondents that live in the inner-city (within the ring road) assume it more likely to leave the Amsterdam region in the next three years than those beyond the A10 ring road (Table 4.3). This result suggest differing lifestyles between respondents living inside and outside the city: the respondents living inside the city seem to be more mobile than respondents living outside the city. The specific inner-city-household structure could potentially have an influence here: in the inner city predominately single households can be found (Mulder 1993; Musterd et al. 2006).

Respondents born outside the Netherlands more often think that it is likely that they will move out of Amsterdam than the two other groups of respondents (born in Amsterdam and elsewhere in the Netherlands). Especially respondents born in the Amsterdam region assume it very unlikely that they will leave the city. This result is no surprise due to the fact that a person is generally attached to their place of birth through ‘strong ties’. It is likely that the relation between the place of birth and future mobility is significant. In addition to that, the share for the future and past mobility and the place of birth do not differ significantly between the groups creative knowledge workers and graduates.

In summary, there are hardly any significant relations between past mobility and demographic characteristics. Regarding future mobility, relevant differentiation could be evidenced for income,⁶ area of residence and especially for place of birth and age.

4.4.3 *Relation between mobility and other factors*

Are the individual reasons for moving away from the Amsterdam region rather related to ‘hard location’ factors, such as employment, or to ‘soft factors’, such as leisure facilities or openness to social and cultural minorities? And what role do ‘strong ties’ such as family background play? Are there differences in the evaluation of these ‘location factors’ among the employees in the creative sector depending on the place where they lived before moving to the Amsterdam region?

As already indicated earlier (in section 4.2.2) a large share of the respondents moved to the Amsterdam region because of job-related reasons. The focus of the analysis will now move to job satisfaction in general and future career perspectives in particular. We expect these issues are related to the past and future mobility of a respondent. By analysing the two variables **previous residential place and the overall satisfaction with the job**, it becomes apparent that the respondents previously living outside the Netherlands are more satisfied with their jobs than respondents previously living in the Amsterdam region. One possible explanation for these differences could be that most respondents from outside the Netherlands have consciously chosen the Amsterdam region to start or continue their career and do not regret their decision. Graduates that moved inside the Amsterdam region tend to be less satisfied with their job: 23% of graduates and only 16% of the creative knowledge workers are dissatisfied with their job.

Looking at the **relation between job satisfaction and the likelihood of moving away from the Amsterdam region in the next three years**, respondents that are satisfied with their job are less likely to think that they might leave the Amsterdam region. However, looking just at the graduates, there is no relation between the likelihood of moving and the overall satisfaction with the job. This reconfirms that the job was a less important issue for the graduates than for the creative knowledge workers in their decision to move to the Amsterdam region.

Our analysis of the relationship between the **place of residence before moving to the Amsterdam region and the perceived career advancement** shows, that the respondents moving from outside the Netherlands are more satisfied with their prospects for career advancement than those who lived in the Amsterdam region before. This again implies that the majority of the foreigners have decided consciously to start their career in the Amsterdam region and they are still optimistic about their career perspectives. There are no major differences in this respect between respondents previously living in the Amsterdam region and those who moved from the rest of the country. This could be expected since the

⁶ The income has no statistical significant influence on the future mobility (0.014 Chi2)

Netherlands is a small country with only little differentiation in career advancement opportunities between regions.

All in all, the respondents are in general satisfied with their job and their career advancement. Furthermore, graduates are less satisfied with their job condition and their career advancement, especially if they lived also before in the region. However, the analysis shows so far that this is not a crucial reason for leaving the Amsterdam region.

One of the dominant themes of Florida's analyses is importance of openness and diversity concerning to different ethnics and (sub-) cultures and the opportunity for social and cultural interaction for attracting the 'creative class'. He suggests that heterogeneity and openness creates a vivid atmosphere that allows for individuality and self-expression, which are essential for the creative knowledge worker. Our analysis shows, however, that the **perception of regional tolerance** is not a crucial factor for entering or leaving the Amsterdam region. When considering the past mobility, there are relatively few differences between the groups of respondents who moved from inside the Amsterdam region, who moved from the rest of the Netherlands and who moved from outside the Netherlands. A slightly higher percentage of respondents who moved from outside the Netherlands think that the Amsterdam region is a welcoming place for foreigners, than those who lived in the Amsterdam region before.⁷

Regarding the possible relation between satisfaction with certain issues and the likelihood of moving away, our hypothesis is that the likelihood of moving away from the Amsterdam region is related to the **satisfaction with leisure activities, public services and environmental aspects**. This hypothesis is derived from the idea that the physical infrastructure and 'soft location factors' of a city are, besides the tolerance and open-mindedness of a place, crucial factors for choosing the residential location, especially for employees in the creative sector (Florida 2002). According to Florida, the crucial factor that is related to the mobility of the 'creative class' is the 'quality of place', which attracts the 'creative class'. The 'creative class' moves to places, that meet their needs. Accordingly, it becomes of greater importance for cities to attract such a 'flow of talent' and creative workers by creating infrastructure and favourable conditions for this group.

As mentioned before (section 4.1.3), the majority of our sample is satisfied with the leisure activities, public services and environmental aspects. For all amenity variables around 60% of the respondents are satisfied and think it is unlikely to move out of the Amsterdam region. There are only small differences observable between the evaluation of the respondents from the creative knowledge workers and the graduates: the graduates are overall more dissatisfied with the leisure activities, public services and environmental aspects. But this does not consequently mean that those who are dissatisfied are more likely to move. The share of respondents that are *dissatisfied* and think it is *likely* they will move out of the Amsterdam region is relatively small, around 20%, for almost every analysed factor.

Almost the same results occur when analysing the **concerns** about certain issues in the Amsterdam region and the likelihood to move away. In this case, it is also not possible to

⁷ The Chi significance test point out, however, that the differences between these groups are not significant.

relate these two factors conclusively. Although the majority of the respondents are worried about the availability of housing, this issue is not significantly related to the likelihood of a person to move away. In the same way, there is also no meaningful relation between the evaluation of the housing costs and the likelihood of moving away.

Analogously, it would also be interesting to know if the reasons for living in the Amsterdam region could be the main motives to stay. In this sense, the likelihood to move away in the next three years could be indicated by the weak or no reasons.

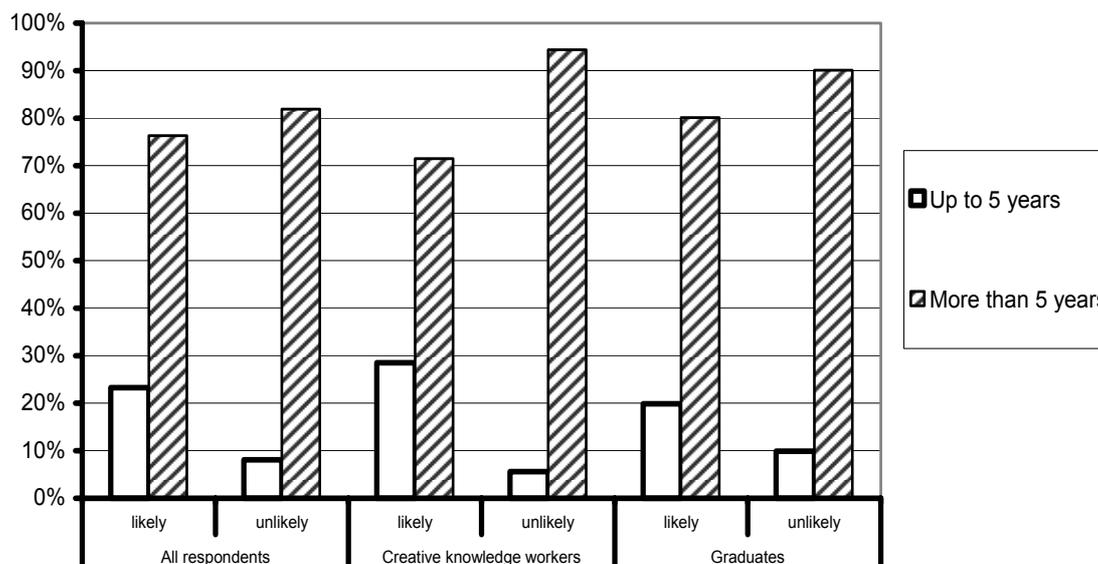
After having analysed the cross tables between the different reasons for living in the Amsterdam region and the individual likelihood to move away, the categories 'born here', 'studied here' and 'family lives here' seem to have a strong relation with future mobility. This would imply that 'strong ties' are related to the residential decision of the employees in the creative sector. Moreover, neither the job and other 'hard location' factors, nor the 'soft location factor' seem to be significantly related to the likelihood to move away. However, the low number of cases, especially in the category 'likely to move' does not allow for a reliable conclusion.

Furthermore, there is no clear relationship between the place of living before moving to the Amsterdam region and the reason for living here. Nevertheless, there are some surprising tendencies: for the respondents who moved from outside the Netherlands, the reasons for living in Amsterdam are highly related to the following characteristics: 'family lives here', 'language' and 'studied here'. The openness to different types of people and open mindedness/tolerance seems to be unimportant for this group. Moreover, jobs are the main reason for those coming from other parts of the Netherlands to move to Amsterdam.

4.4.4 Residential history, city-regional satisfaction and plans to move

Generally, our respondents seem reluctant to leave the Amsterdam region. There are only few respondents that indicate they would definitely move out of the Amsterdam region in the next three years. However, as could be expected, this is related to the duration of stay in the region (Figure 4.29). The longer respondents have already lived in the region, the less likely are they to move out of the region. There is a significant difference between knowledge workers and recent graduates, though. Much more graduates than creative knowledge workers indicate that it is likely they will move out of the region in the next three years. The difference between graduates and creative knowledge workers is particularly striking among those that have lived up to 5 years in the region. Apparently a large share of creative knowledge workers moves to Amsterdam with the intention to stay there for a long time, while the majority of the graduates have not decided on their longer-term labour and residential future yet. Again, this is very likely to be related to personal and household characteristics like age, life course and household type, as well as socio-economic status. The limited size of our sample does not allow us to analyse these relationships in more detail.

Figure 4.29 – Likelihood of move out of the Amsterdam region in relation to duration of stay in the region (%)



Source: Own survey

4.4.5 Creative workers and knowledge workers: A comparison

Finally, a comparison is made between the mobility of the creative and the knowledge workers. When considering the future mobility a significant difference between the two groups could not be found. But if one looks at where creative knowledge workers have lived before moving to their current place of residence, knowledge workers appear to be slightly more mobile than the creative workers: 12% of the knowledge workers have moved from outside of the Netherlands, while only 6% of the creative workers has done so. In the same way, if one examines the length of current residence in Amsterdam region, one can conclude that the creative worker lives in the Amsterdam region for a longer time than the knowledge-intensive worker. 67% of the creative workers obtained their highest educational qualification in the Amsterdam region; this is the case for 55% of the knowledge workers. Even though knowledge-intensive workers seem to be a bit more internationally oriented than the creative worker, there is no significant sign that the knowledge workers are in general much more mobile than their creative counterparts.

Another difference between creative and knowledge workers in our sample is more striking. The most mentioned reason for living in the Amsterdam region for knowledge workers is their job, while for creative workers it is the proximity to their friends. The creative workers seem to attach more importance to ‘soft factors’, like diversity of leisure and entertainment, and ‘weak ties’ than knowledge-intensive workers. Knowledge-intensive workers seem more attached to the job and ‘hard location factors’. These results give another indication that the ‘creative class’ is more heterogeneous than Florida suggests.

4.4.6 *Conclusions on mobility*

The ‘creative class’ is seen as hyper mobile by changing jobs and residence (see introduction to “mobility”). The empirical analysis for the Amsterdam region shows some findings which challenge Florida’s hypothesis to a certain extent: The analysis gives evidence that Florida’s ‘creative class’ is not as mobile as it is expected to be. Florida’s assumption that workers in the creative knowledge intensive sector are very mobile cannot be confirmed. The majority of the creative knowledge workers seem to be ‘linked’ to Amsterdam. More than half of the creative knowledge workers surveyed can be described as very connected to Amsterdam as a location: nearly 60 percent of them have lived in Amsterdam for more than 10 years. For the majority of the respondents, a move away from Amsterdam is not up for consideration.⁸ Furthermore, evaluation showed that age groups, place of birth and the area of living have an influence on future mobility behaviour. However, these differences turned out to be not statistically significant.

From our Amsterdam sample, the ‘creative class’ does not appear as one homogeneous category in terms of lifestyle and urban residential preference. At least two groups with different interests and lifestyles can be distinguished. On the one hand, there are the younger and more mobile respondents which live in Amsterdam less than five years. For them, leaving Amsterdam is a realistic option. They have chosen Amsterdam as their residence mainly because of its urban environment and soft-location factors, like the diverse leisure and culture faculties. On the other hand, there is the group of the less mobile, older respondents, which live in the Amsterdam for more than ten years - mainly due to job related reasons. They are to a high extent satisfied with Amsterdam as a location of residents and they are generally not ready to leave the Amsterdam region. Consequently, policy makers should be aware that these groups have diverse need and requirements and that each group would need a particular policy to attract them and to keep them in the city.

⁸ However, the relatively low number of cases for the group from outside the Netherlands makes it difficult for us to draw some conclusions.

5.1 General conclusions and policy implications

The ACRE survey investigated the attractiveness of the Amsterdam region for 164 creative knowledge workers and 71 graduates. The analysis distinguished between creative knowledge workers - who work in software development, advertising, film, video, broadcasting and TV production as well as in law, accountancy, opinion research, banking and higher education - and graduates. The latter finished their studies at the University of Amsterdam and the Rietveld Academy between 2001 and 2006. The graduate sample shows several differences in terms of age, gender, income and household size compared to the sample of the creative knowledge workers. The area we have considered as 'the Amsterdam region' is the Amsterdam Metropolitan Area' (AMA), a group of 38 municipalities that co-operate intensively on a voluntary basis. The AMA also more or less coincides with the regional housing and labour market of Amsterdam and the largest part of its commuting area.

The analysis of the demographic structure of the sample brings some social and spatial differences amongst the creative knowledge workers to the fore. Creative knowledge workers receive an income which is above the average of the rest of the population in the AMA. They are a more affluent group, but significant differences exist amongst them. The majority of the creative knowledge workers work in knowledge-intensive occupations. Compared to creative workers, knowledge workers earn significantly more. They are less concerned about their labour market perspective and they describe themselves as less vulnerable to tensions in the housing market than creative workers do. In spite of their importance for the region, knowledge workers are less often subject of pronounced policies than creative workers.

A label like 'the creative class' conceals the differences amongst the creative knowledge workers, and it might obscure needed and effective policy initiatives. Apart from the differences between creative and knowledge workers, other social and spatial differences become visible in our analysis. Income gaps do not only exist between different sub-fields, they also exist between female and male workers as well as between inner city dwellers and suburban inhabitants. The importance of the contribution of foreign creative knowledge workers is already addressed in a recent study by Kibbelaar (2007). Given the existing gender differences, it seems reasonable that gender differences should form an additional focus. Addressing female creative knowledge workers might not only lead to a positive impact on AMA's economic performance, it could also secure the innovation chances. At the moment, women earn less than men. They work less often in the creative knowledge economy, and they run significantly less often their own business. Studies in the UK show that self-employment of women raises the regional income disproportionately, because women start more often from unemployment. Women owned businesses tend to use recent innovations more often and they are more often run by highly qualified personnel (Prowess 2005; Harding 2006; Kehrer 2007, 9ff). In addition, self-employment can also provide a strategy to gain

autonomy and control over their working lives. Women owned business often adopt better work practices (Hanson and Blake 2004, 189). Currently, women often avoid risk taking and lack self-confidence, because they cannot access role models, they are less likely to be included in professional networks, and they often need to balance childcare and family commitments (Carey 2006, Carey 2007, 7f). Business development projects that address gender can be a suitable measure to reduce income differences. In the UK, several local policy initiatives used European funding resources such as EQUAL or the European Social Fund (ESF) support female self-employment in creative industries¹.

The situation of creative knowledge workers is determined by a specific spatiality. The residential location of creative knowledge workers has a strong influence on their activity patterns. Inner city dwellers use urban amenities significantly more often than persons who live in the suburban fringe of the AMA. In every case, however, creative knowledge workers state in our survey that they are satisfied with the offered amenities, services and infrastructure. In other words, creative knowledge workers chose a residential location which fits their activity patterns the most. I.e. easing the inner city housing market by developing peripheral locations for residential use in the AMA will only be attractive for those creative knowledge workers planning to leave the inner city, not for those that actually would prefer an inner city location. Even if urban amenities such as bars, cinemas, galleries or restaurants are relocated to those development areas at the same time, peripheral residential location do not fit the needs of inner city dwellers. One of the favourite leisure activities of our inner city respondents appeared to be ‘walking around the city’, an activity tightly connected to an authentic built environment and atmosphere which is hard to replicate elsewhere. This constraint does not indicate that the development of business locations such as creative centres in de-industrialised areas in the outer fringes of the AMA is not possible. However, it is likely that such locations would attract different types of creative knowledge workers than the inner city dwellers.

The interviewed persons have already lived a very long time in the Amsterdam region and most of them plan to continue so. This fact has several implications for the interpretation of the results. Firstly, it gives evidence that the Florida’s ‘creative class’ is not as mobile as it is portrayed. That does not automatically indicate that they are not embedded in international networks of communication and short term travelling. Secondly, the level of satisfaction with the living environment tends to grow the longer people stay at a certain place. This fact might also provide an explanation why the level of satisfaction is as high as it is in the Amsterdam region. Thirdly, this fact has, of course, policy implications, too. Policies for creative knowledge workers should address needs and concerns of a regional population. Although there are very good reasons to target international companies in a regional economic agenda and to be aware of the fact that 4% of the creative knowledge workers move from abroad to Netherlands, most of the creative knowledge workers have lived in the Amsterdam region for a long period of time.

¹ Birmingham: Institute for Small Business and Entrepreneurship - Birmingham City University; Aberdeen: Robert Gordon University

What attracts creative knowledge workers to the Amsterdam region? Previous research stressed that the judgment of creative knowledge workers is influenced rather by the overall attractiveness of the city than by work related motivations. Regarding this point, the analyses revealed interesting results. Recent graduates indeed base their decision more on the attractiveness of metropolitan regions and soft factors like openness and diversity, but their rationale differs from considerations of creative knowledge workers. For them work related reasons have clearly a higher impact on their location choice than regional attributes. A majority of creative knowledge workers stated that they came to Amsterdam due to their new jobs. Allen Scott (2006) criticised Richard Florida in this respect, when he emphasised that the economic networks and production system within a region have a larger impact on the attraction of talent than the atmosphere. This fact also underlines the importance of urban labour markets. Labour market regulation is organised at the national level in most countries, however. These results also give some evidence that a sectoral policy which addresses the needs of creative workers only in the shape of a cultural policy will not lead to the best results. A policy for creative knowledge workers should be a cross-sectoral policy that encourages different departments of the municipalities to find a common language and work together.

The general level of satisfaction is high in the region of Amsterdam. Although a low response rate is a burden of most surveys recently held in this region, it also underlines a low motivation to contribute to public issues. Issues that receive immediate attention however are more often problematic. Given this, not only the contribution of the respondents, but also the general reaction on the survey confirms a high level of satisfaction in the Amsterdam region. The Amsterdam region seems to hold favourable conditions for creative knowledge workers, so that a change of the policy agenda is not urgently requested.

In the analysis, we wanted to identify which realm is the most important for the overall judgment of the living environment. Is it the overall region, satisfaction with the working environment or with the neighbourhood or dwelling? Are the soft or hard factors more important in this respect?

Nearly two thirds of the respondents were satisfied with the Amsterdam region in total. The degree of satisfaction is much higher at the neighbourhood level: 86% of the creative knowledge workers and even 93% of the graduates are satisfied with their immediate living environment. This might point at a deliberate choice of our respondents for a certain type of neighbourhood and/or a certain position within the region; apparently there are also parts of the region they are less satisfied with. Job satisfaction, too, achieved high results as more than 80% declared that they were happy with their work. There are some differences between graduates (less satisfied) on the one hand and creative knowledge workers (more satisfied) on the other; and also between creative workers (less satisfied) and knowledge workers (more satisfied). There is some variation in satisfaction on dimensions of job satisfaction, too. Nevertheless, the overall picture is that the vast majority of our respondents have apparently found a job and a working environment they feel comfortable in.

Since those ratings did not clarify what improves and what destroys the attractiveness of a region, we continued to control for other variables. All demographic factors showed little significant impact on the level of satisfaction with the region. An exception is the nationality

of the respondents. Foreign persons rated the Amsterdam region significantly more positive than Dutch citizens. Whether their lack of knowledge, a comparison with the situation in their home country, or their work ethic influenced their decision might be explained in the coming work package 7 when foreign creative workers are investigated in more detail. Furthermore, other hard factors such as the commuting time and distance, the share of monthly income spent on housing, the satisfaction with public services and infrastructure also hardly had any impact on the level of satisfaction.

Policy Recommendations

Finally, we will summarise what in our view are the most important implications for local and regional policy in the AMA. Based on our empirical results so far, and the results of our survey of creative knowledge workers and graduates in particular, we recommend the following points for consideration of local and regional policy-makers. In a later stage of the ACRE project, we will pay more extensive attention to the policy dimension of developing a successful creative knowledge economy, so the following should be seen as preliminary recommendations and not as the final result of the entire ACRE project:

1. Knowledge workers are important for the Amsterdam metropolitan region in terms of their number and their income. Especially those working in the financial and the legal sector do not get the policy attention they deserve. Their needs should be addressed by a policy as well, not only those of workers and companies in creative and innovative branches.
2. Policy makers and institutions have started to address the needs of single subgroups of creative knowledge workers such as ethnic minorities and immigrants. They should also address the situation of women in the creative knowledge economy.
3. Different parts of the Amsterdam region are attractive for different subgroups of the creative knowledge workers. The inner city and suburban part of the region attract a different milieu of persons. Planning and policy should continue to take this into account and support assets of both parts of the region.
4. Creative knowledge workers are not as mobile in reality as they are often portrayed in theory. Policies for the creative knowledge region should not only focus on attracting creative and highly skilled talent, but also at meeting the needs of the regional population.
5. The political support should not focus on either hard factors or soft factors. Both have an impact on the future attractiveness of the region. The attractiveness of the AMA is not only depending on the improvement of single soft or hard factors, but also on understanding the social texture of the region.

REFERENCES

- Arnoldus, M. and S. Musterd (2002) *Wonen in de ambitieuze stad. Stedelijke leefstijlen en woonmilieus in internationaal perspectief*. Amsterdam: AME.
- Baehr, J. (1983) *Bevölkerungsgeographie. Verteilung und Dynamik der Bevölkerung in globaler, nationaler und regionaler Sicht*. Stuttgart: UTB.
- Beck, Ulrich (1992) *Risk society: Towards a new modernity*. New Delhi: Sage.
- Bol, R. (2007) *Eindrapportage Provincie Flevoland en de creatieve industrie. Analyse & oplossingsrichtingen*. Sandfire.
- Bontje, M. and B. Sleutjes (2007) *Amsterdam: history meets modernity. Pathways to creative and knowledge-based regions*. ACRE Report 2.1. Amsterdam: AMIDSt, University of Amsterdam.
- Bontje, M. and M. Pareja (2007) *Attracting creative knowledge: Strategies towards competitiveness in Amsterdam and Barcelona*. Paper presented at the ENHR Conference, Rotterdam, 25-28 June 2007.
- Bontje, M. and S. Crok (2006) Amsterdam, creative knowledge city? The debate on the economic future of Amsterdam and its region. In: M. Bontje and L. Deben (eds), *Creativity and diversity: key challenges to the 21st century city*, pp. 144-161. Amsterdam: Het Spinhuis.
- Bontje, M. and S. Musterd (2005) Hoe woont de creatieve kenniswerker? In: S. Franke and E. Verhagen (red.), *Creativiteit en de stad. Hoe de creatieve economie de stad verandert*, pp. 170-179. Rotterdam: NAI Uitgevers.
- Carey, C. (2006) *Characteristics of creative industries entrepreneurs: A gender perspective*. Birmingham: UCE.
- Carey, C. (2007) *Gender and entrepreneurship in the creative industries. What does the literature tell us?* Birmingham: UCE.
- CBS (2006) *De Nederlandse economie 2005*. Voorburg: Centraal Bureau voor de Statistiek (CBS).
- CBS (ed) (2007a) *Most women earn less than their partners*. Web magazine. 20 November 2007. <http://www.cbs.nl/en-GB/menu/themas/inkomen-bestedingen/publicaties/artikelen/archief/2007/2007-2328-wm.htm>
- CBS (ed) (2007b) *Majority of Dutch population would like to see income gaps narrowed*. Web magazine. 11 October 2007. <http://www.cbs.nl/en-GB/menu/themas/overheid-politiek/publicaties/artikelen/archief/2007/2007-2292-wm.htm>
- Crok, S. (2004) Creatieve kennisstad leeft onder inwoners en bedrijven. In: P. Reudink, J. Slot and J. van Antwerpen (red), *Amsterdam creatieve kennisstad: een passende ambitie?* Amsterdam: Gemeente Amsterdam, Dienst Onderzoek en Statistiek.
- Dienst Ruimtelijke Ordening (DRO) (2004) Special issue of Plan Amsterdam about the creative knowledge region.
- Dienst Ruimtelijke Ordening (DRO) (2006a) ...Amsterdam, the place to be! Amsterdam: Gemeente Amsterdam, Dienst Ruimtelijke Ordening.
- Dienst Ruimtelijke Ordening (DRO) (2006b) Succesvolle vestigingsplekken. Plan Amsterdam (3). Amsterdam: Gemeente Amsterdam, Dienst Ruimtelijke Ordening.
- Florida, R. (2002) *The rise of the creative class. And how it's transforming work, leisure, community and everyday life*. New York: Basic Books.
- Florida, R. (2005) *The flight of the creative class: The new global competition for talent*. New York: HarperCollins Publishers Inc.

- Gemeente Amsterdam (2006) *Amsterdam Topstad: Metropool*. Amsterdam: Gemeente Amsterdam.
- Gemeente Amsterdam (2007) *Hoofdlijnen programma creatieve industrie 2007-2010*. Amsterdam: Gemeente Amsterdam.
- Groenemeijer, L. (2002) *Woonpatronen van Amsterdamse kenniswerkers*. Delft: ABF Strategie
- Hanson, S and M.K. Blake (2004) Changing the gender of entrepreneurship. In: L. Nelson and J. Seager (eds), *The companion to feminist geography*, pp. 179-193. Oxford: Blackwell.
- Harding, R. (2006) *Stairways to growth: Supporting the ascent of women's enterprise in the UK*. Norwich: Prowess Ltd.
- Hodes, S. et al. (2006) *Onderzoek naar Amsterdam als gaytoeristische bestemming in de 21^e eeuw*. Amsterdam/ Diemen: Hogeschool INHOLLAND; Kenniskring Leisure management.
- Hoving, R. (2007) *Creative Amsterdam: What's going on?* Behorende bij Plan van Aanpak Creatieve Industrie. Amsterdam. Kamer van Koophandel Amsterdam.
- Innovatieplatform (2006) *Kennisinvesteringsagenda 2006-2016. Nederland, hét land van talenten!* Den Haag: Innovatieplatform.
- Jaumotte, F. (2003) *Labour force participation of women: Empirical evidence on the role of policy and other determinants in OECD Countries*. OECD Economic Studies, No. 37, 2003/2.
- Kamer van Koophandel Amsterdam (2004) *Gaan voor goud. Aanvalsplan voor de Noordvleugel van de Randstad als krachtig internationaal economisch centrum*. Amsterdam: Kamer van Koophandel Amsterdam.
- Kamers van Koophandel Amsterdam, Flevoland & Gooi- en Eemland (2006) *Regionale Innovatiestrategie Noordvleugel conferentie* (version 2.3, 29 November 2006). Amsterdam: Kamer van Koophandel Amsterdam.
- Kehrer, B. (2007) *Risky business? The story of women into business*. Walsall: Breathing Space Ltd.
- Keuzenkamp, S. and D. Bos (2007) *Out in the Netherlands. Acceptance of homosexuality in the Netherlands*. The Hague: The Netherlands Institute for Social Research.
- Kovacs, Z., A. Murie, S. Musterd, O. Gritsai and H. Pethe (2007) *Comparing paths of creative knowledge regions*. ACRE Report 3. Amsterdam: AMIDSt, University of Amsterdam.
- LISA (2005) *Bedrijvenmonitor 2005*. Tilburg: LISA.
- Ministerie EZ (2004) *Pieken in de delta*. Den Haag: Ministerie van Economische Zaken.
- Ministeries EZ and OCW (2005) *Ons creatieve vermogen*. Den Haag: Ministeries van Economische Zaken en Onderwijs, Cultuur en Wetenschappen.
- Mulder, C.H. (1993) *Migration dynamics: A life course approach*. PhD thesis, Department of Regional Science, Utrecht University, Utrecht.
- Musterd, S. and R. Deurloo (2006) Amsterdam and the preconditions for a creative knowledge city. *Tijdschrift voor Economische en Sociale Geografie*, 97 (1): 80-94.
- Musterd, S. and W. Ostendorf (2003) Understanding segregation in the metropolitan area of Amsterdam. In: S. Musterd and W. Salet (eds) *Amsterdam Human Capital*, pp. 181-198. Amsterdam: Amsterdam University press.
- Musterd, S. and W. Bakker (forthcoming) *Soft and hard conditions for the urban economy. Amenities, agglomeration economies, and the role of size and scale*. Paper presented at the 10th EURA Conference 'The Vital City', Glasgow, 12-14 September 2007.
- Musterd, S. (2004) Amsterdam as a creative cultural knowledge city: some conditions. *Built Environment*, 30 (3): 225-234.
- Musterd, S. (2006) Segregation, urban space and the resurgent city. *Urban Studies*, 43 (8): 1325-1340.
- Musterd, S., M. Bontje and W. Ostendorf (2006) The changing role of old and new urban centers: the case of the Amsterdam region. *Urban Geography*, 27 (4): 360-387.
- Oosteren, C. van, and T. Fedorova (forthcoming) *Monitor creatieve industrie 2007*. Amsterdam: O+S / DRO.

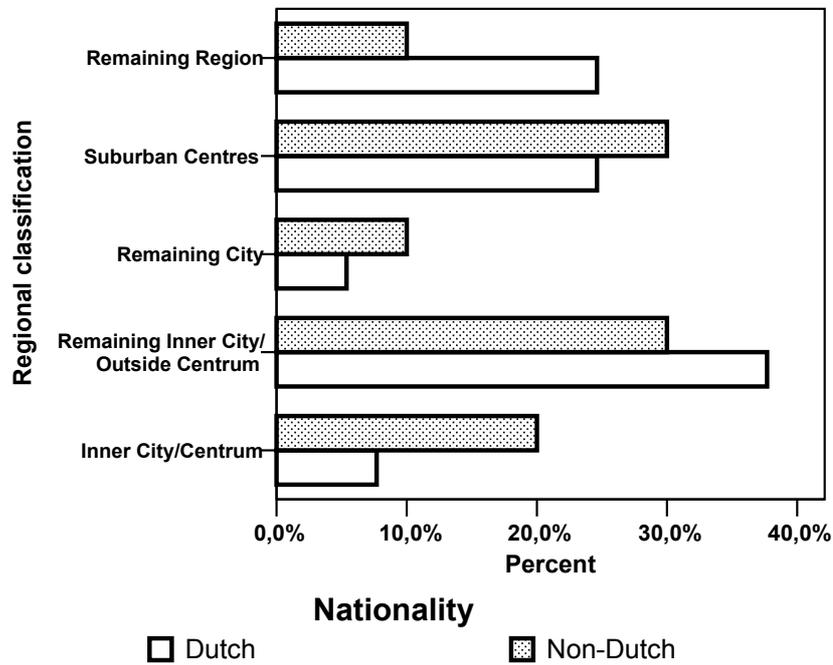
- Provincie Noord-Holland (2007) *Noordvleugel wordt Amsterdam Metropolitan Area / Metropoolregio Amsterdam*. Press release of Province Noord-Holland, 22 november 2007. <http://www.noord-holland.nl/thema/nieuws/persberichten/> (Accessed 26 November 2007).
- Prowess (eds) (2005) *The regional state of women's enterprise*. Norwich: Prowess Ltd.
- Regionaal Orgaan Amsterdam (ROA) (2004) *Ontwikkelings Plan Regio Amsterdam*. Amsterdam: ROA.
- Rooy, P. de, D. Bosscher and G. Meershoek (eds) (2007) *Geschiedenis van Amsterdam. Tweestrijd om de Hoofdstad 1900-2000*. Amsterdam: Sun.
- Rutten, P., J. Huismans and O. Koops (2006) *Cross Media Monitor 2006. ICT en creatieve industrie in de Noordvleugel. Bedrijvigheid, innovatiekansen en perspectieven*. Hilversum and Haarlem: Stichting iMMovator and Hogeschool INHOLLAND.
- Scott, A. (2006) Creative cities: Conceptual issues and policy questions. *Journal of Urban Affairs*, 28 (1): 1-17.

APPENDIX

Table 1 – Basic demographic features: Comparison between graduate and creative workers

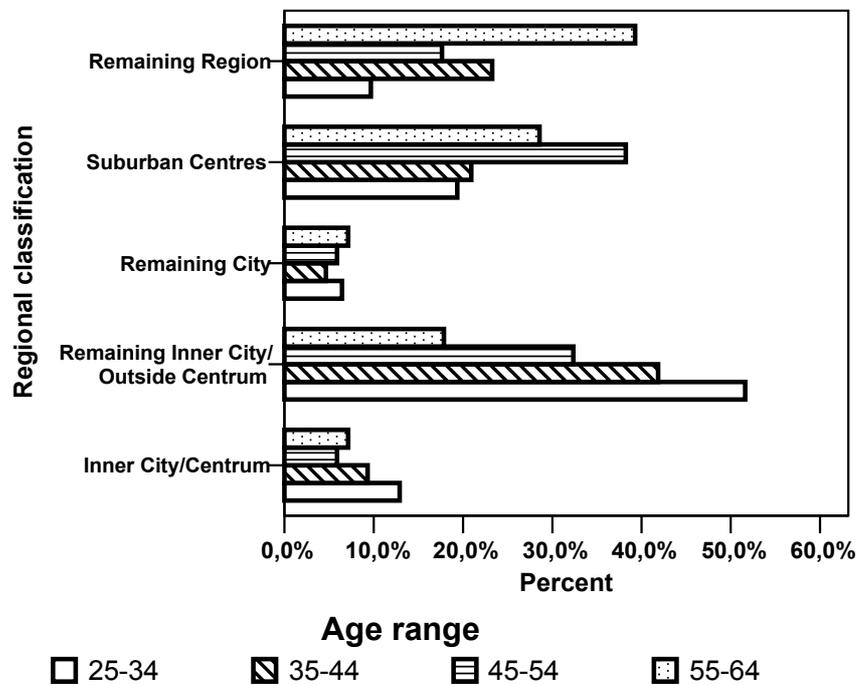
	Graduates	Creative knowledge workers
Gender	58% Female	66% Male
Household size	45% Single	17% Single
Income	52% 1000-1999€	15% 1000-1999€
Nationality	79% Dutch	93% Dutch
Place of residence	99% Amsterdam	51% Amsterdam
Dwelling	23% Home ownership	69% Home ownership
	39% Social housing	11% Social housing
	25% Tenants of private landlords	19% Tenants of Private landlords
Employment	38% Freelancer Self-employed	52% Freelancer Self-employed
	62% Non-executive position	21% Non-executive position
	34% Permanent contract	68% Permanent contract
	42% Work at companies under 10 employees	41% Work at companies under 10 employees
	23% Work duration longer than five years	47% Work duration longer than five years
Satisfaction with the region	59% Satisfied	60% Satisfied
Satisfaction with the neighbourhood	93% Satisfied	93% Satisfied

Figure 1 – Nationality



Source: Own survey

Figure 2 – Region by age



Source: Own survey