

Talent on the move: creative human capital migration patterns in UK

Book or Report Section

Accepted Version

Comunian, R., Faggian, A. and Jewell, S. (2016) Talent on the move: creative human capital migration patterns in UK. In: Comunian, R. and Gilmore, A. (eds.) Higher Education and the Creative Economy: Beyond the Campus. Routledge, Abingdon, pp. 102-122. ISBN 9781138918733 Available at <http://centaur.reading.ac.uk/62112/>

It is advisable to refer to the publisher's version if you intend to cite from the work. See [Guidance on citing](#).

Publisher: Routledge

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

www.reading.ac.uk/centaur

CentAUR

Central Archive at the University of Reading

Reading's research outputs online

Talent on the Move: Creative Human Capital Migration Patterns in UK

This is a pre-print version of book chapter. It is advisable to refer to the publisher's version if you intend to cite this work

<https://www.routledge.com/products/9781138918733>

Correct Reference:

Comunian, R, Faggian A and S Jewell (2016) Talent on the Move: Creative Human Capital Migration Patterns in UK, in R Comunian and A Gilmore (eds) *Higher Education and the Creative Economy: Beyond the campus*, Routledge: Abingdon (UK) pp. 102-122

Roberta Comunian, Alessandra Faggian and Sarah Jewell

Introduction

The last decade has seen an increasing number of contributions, from both academics and policy makers, focusing on the role of higher education in developing human capital (Charles, 2003; Cramphorn & Woodlhouse, 1999; Preston & Hammond, 2006) and hence contributing to local and regional growth (Faggian & McCann, 2006; Mathur, 1999; Moretti, 2004). Within this broader literature, the role played by more ‘scientific’ types of human capital, such as STEM (science, technology, engineering, and mathematics) graduates and science parks (Bozeman, Dietz, & Gaughan, 2001; Linderlöf & Löfsten, 2004; Löfsten & Lindelöf, 2005), has also been explored. Little attention has been paid so far, to the role played by more ‘creative’ types¹ of human capital. This chapter aims at filling this gap, in light of the central role that the term ‘creative’ took in policy and academic discourses in the UK (Comunian & Faggian, 2011; Comunian & Gilmore, 2015; DCMS, 2006; Powell, 2007; Universities UK, 2010). From a policy perspective, the focus on creative human capital has been the result of the legacy of policy interventions and promotional discourses surrounding the creative industries (DCMS, 2001, 2006), and a general emphasis on creative careers as being a new area of growth in the post-industrial economy (DCMS & BERR, 2008). From an

academic perspective, research has highlighted the struggles and unstable career patterns of creative human capital (Blair, 2003; Comunian, Faggian, & Li, 2010b; Towse, 2006), but also their value within local systems of production and the creative city literature (Comunian & Faggian, 2011).

Nonetheless, every year higher education institutions (HEIs) in the UK train an increasing number of graduates across a range of creative disciplines. Data from the Higher Education Statistical Agency (HESA) show that after a slight decrease in enrolment in ‘Creative Arts & Design’ disciplines between 2012-2013 (probably related to the introduction of full-fees), enrolment is up again (with an overall growth of 5% in the last seven years)².

The literature on human capital and regional economic development has become increasingly interested in the role of the ‘creative occupations’ on economic growth (Comunian, Gilmore, & Jacobi, 2015; Lee & Drever, 2013). Attracting quality human capital and cultivating creative industries have been given an unprecedented level of significance in regional policies. As a result of this, understanding the factors determining the migration behaviour of graduates – and especially graduates in creative disciplines - has become more crucial for policy makers. In addressing these issues and advancing our understanding of the relationship between creativity and mobility of human capital, this study provides the first empirical analysis of the role played by creative graduates’ subject background in influencing their migration choices in the UK.

However, we know that the geography of where students train is very different from the geography of opportunities for creative work and a creative career (Comunian & Faggian, 2011; Faggian et al., 2012). The chapter takes a closer look at the migration patterns and movements of recent creative graduates in the UK, considering pattern of interregional migration and geographical strategies to either enter a creative career or seek support towards establishing one. Using micro-data from the Higher Education Statistical Agency (HESA), graduates are classified into five migration categories (going from the most migratory group, i.e. repeat migrants, to the least migratory, i.e. non migrants) based on their migration choices from domicile to university and then onto workplace. Using the data, we explore the distribution of graduate jobs, creative jobs, and salary levels in relation to the creative graduates’ migration. It is found that different sub-disciplines in the creative field have

different migration patterns and these also relate to their ability to obtain better-paid creative jobs.

The chapter is articulated in four parts. Firstly, we explore the existing literature on human capital and migration and the more focused research on creative work, talent, and mobility. We then explain the methodology and definitions adopted for the data analysis, followed by our results. Finally, conclusions are drawn about the impact of our results for higher education policy and local development.

Human capital, mobility and economic development

The role of human capital and mobility (Faggian & McCann, 2009) on the development of regions and knowledge economies has been the subject of increasing research. What the broader literature does not differentiate on is the ‘type’ of human capital required for local development. Graduates are considered equally important for economic development, irrespective of the subject they studied. More recently, some questions arose about this point. Does *creative human capital*, i.e. the human capital specifically developed via education and advanced training in creative and artistic subjects (Comunian & Faggian, 2014), play the same role as, say, more scientific-oriented human capital in fostering local development? The importance of human capital and specialised knowledge for local and regional economic growth has long been acknowledged in the literature. The link between human capital and growth was formalised by Lucas in 1988, but most theoretical models overlooked the role played by migration and mobility of highly skilled individuals. There is an increased recognition that international and internal migration impact regions in fundamental ways (Beine, Docquier, & Rapoport, 2008; DaVanzo, 1976; DaVanzo & Morrison, 1981; Sjaastad, 1962) because of the very nature of regions which are open systems that continuously exchange material goods, ideas, and individuals. The success of a region is highly dependent on the balance of the trade of these goods and individuals. Therefore, in this literature it is argued that a better understanding of the factors determining the migration behaviours of people, especially highly skilled or educated, is vital.

Studying the migration behaviour of highly skilled individuals is not an easy task. Until recently, sophisticated micro-data on highly skilled and educated individuals were not available. Nevertheless, thanks to the availability of detailed micro-individual data for certain

countries, recent works appeared on graduate mobility (Faggian & McCann, 2006 and 2009 for Great Britain; Venhorst et al., 2010 and 2011 for the Netherlands; Bjerke, 2012 for Sweden; and Corcoran et al., 2010 for Australia). Faggian (2005) shows that the most mobile group of graduates, i.e. repeat migrants, have an average salary advantage of about 4.5% when entering the labour market, but no university subject/major break-down is reported. She also shows that graduates from the Arts & Humanities faculty are more likely to migrate back home after graduation (i.e. being 'return migrants' à la DaVanzo, 1976), rather than move on towards a different job location (confirmed also by Faggian et al. 2014). It is unclear, though, whether return migration represents a 'corrective' movement or a rational behaviour, which allows these graduates to maximise their salaries and find a better job.

Jewell and Faggian (2014) also compared the migration behaviour of creative graduates to STEM graduates, and found that creative graduates were more likely to enter the labour market either in the location where they studied and graduated (i.e. being what we call 'university stayers') or back home (i.e. being 'return migrants') than STEM graduates. Creative graduates had, on average, a lower 'migration premium' than STEM graduates and were therefore less likely to engage in repeat migration.

The focus on mobility and attraction of human capital has received even more attention amongst academics and policy makers following the popularity of the 'creative class' concept (Florida, 2002). While Florida saw the 'creative class' as an alternative, and better, way of defining the skills and talent of workers than the out-dated 'human capital' measured by education, some researchers saw little or no value in this new concept. Economists such as Glaeser (2005) prefer the traditional 'human capital' concept over the new notion of the creative class and point out that regional growth is the outcome of a very highly educated workforce rather than a 'creative' one in the Floridian sense. Many others acknowledged that the term 'creative class' does not correspond to either cultural or creative workers (Markusen, 2006). However, the work of Comunian et al. (2010b), in trying to clarify the relationship between human capital and the creative class, helps us define a more coherent sub-group of the human capital, i.e. the 'creative human capital' which connects the human capital literature (because of the higher level of education) and the creative economy (UNESCO, 2013) and creative industries (DCMS, 2015) literature (because of the subject studied). Furthermore, the acknowledgement of policy and research that workers in the creative industries in the U.K. are a 'highly educated' sector (NESTA, 2003)³, proves the strong overlap between (high) human capital and creative occupations within the broader literature

on creative industries and creative work (Banks & Hesmondhalgh, 2009), which is the focus of our next section.

Creative talent, mobility and work

After discussing the general role played by human capital and mobility, we now focus on the (limited) literature available on the relationship between mobility and creative human capital. While the literature on the mobility of artists and creative workers is relatively developed, only a few contributions specifically focused on the mobility of core creative workers *à la* Florida.

Recent work on the nature and practice of artists and creative workers has often highlighted the instability and mobility of their careers. There is general recognition that ‘artists, musicians and writers have always been great travellers’ (Addison, 2008, p.1). Historical research shows the tendency of visual artists and composers to cluster (O’Hagan & Hellmanzik, 2008; O’Hagan & Borowiecki, 2010), so that migration patterns of creative workers are not only determined by amenities but also by certain locations (mainly cities) being known worldwide, as creative milieu (Hall, 1998). Acheson and Maule (1994), analysing the development of cultural industries, consider the important role played by international trade and investment, as well as the transfer of key workers and technical staff. Furthermore, with the development of the creative and cultural industries as a globally recognised economic sector (UNESCO, 2013), there has been increased emphasis on the international market for creative work and talent (Solimano, 2006). Following the uneven distribution of creative industries and their tendency to cluster (Comunian, Chapain & Clifton, 2010a), it is become clear that mobility within countries and across borders plays an important role interlinking new global hubs with disperse satellite sites (Vang & Chaminade, 2007). Addison (2008) highlights how this might have effects on the uneven distribution of talent to the disadvantage ‘of poorer countries, which can lose talent to the richer world.’

In relation to Florida’s work (2002) and its policy emphasis on retention and attraction of creative individuals (specifically artists, also referred to in his theory as ‘Bohemians’), there seems to be an assumption that creative people are highly mobile and that locations with certain characteristics can attract them. However, while most of the contributions focus on the debate of whether labour market characteristics or amenities are more important in

attracting them (e.g. Scott, 2010), only a handful of contributions question the fundamental assumption that creative people are in fact highly mobile. Hansen and Niedomysl (2009) studying the case of Sweden, find that highly educated people are as mobile as the rest of the population. Martin-Brelot et al. (2010) question the mobility of the 'creative class' in the European context as they argue that soft location factors, such as amenities, the open-minded and tolerant character of the city, and the diversity of its atmosphere, play only a marginal role in attracting the creative class to a city, although they are more important in retaining them after they settle there. Lawton, Murphy and Redmond (2013) highlight how too much emphasis has been placed on the importance of soft factors to attract the creative class to specific cities while often key classic location factors, such as housing cost and travel-time to place of employment, are underestimated.

Similarly, Borén and Young (2013, p. 207), studying specifically the case of artists in Sweden, question the assumption of the high mobility of creative workers. They point out that networks are vital for artists and that once artists are 'embedded in their networks...it (is) more difficult for them to migrate.' They also caution about reducing the migration histories of artists to a 'simplistic set of assumptions' (Ibid), as the migration dynamics of creative occupations are very heterogeneous. Bennett (2010), also studying the migration of artists – for the case of Western Australia, finds that employment opportunities do play a role in attracting them (in accordance with the findings of Hansen & Niedomysl, 2009 for Sweden). However, she also finds that the move is 'rarely the result of securing a position' (Ibid, p.125), making migration very risky financially. Comunian and Faggian (2011) show the importance of location for creative graduates and the importance that locating in a 'creative city' might have in providing opportunities to enter creative occupations. However, as with Borén and Young (2013), they caution against a one-size-fits-all approach when studying artists' migration, showing that in some cases artists can be attracted to more rural locations, such as her case study, Launceston in Tasmania, where the 'small scale is perceived as a safe haven to escape the rat race of the city' (Ibid, p.139).

Recent research (Comunian et al., 2010b; Markusen et al., 2008) has proved the need to consider that the subsectors of the 'creative class' - such as the 'Bohemian' subgroup - might have very different jobs, migration behaviour, and geographical patterns. Lawton et al. (2013) stress the importance of considering the evolving life-cycle of cultural workers. Although there is a tendency to identify creative workers with young and highly mobile individuals,

some of them are older and have family commitments whose influence might offset their professional reasons for moving. While there is a tendency for younger creative workers to prefer city centre locations, older ones prefer to live in suburban areas (Lawton et al., 2013). While most of the studies cited focus on creative workers, not enough attention has been given to the earlier stage of creative careers. As highlighted also by Frenette and Tepper's chapter in this book, we still have limited knowledge about the transition of arts graduates from academia into work. In this paper, we use the term 'creative human capital' to capture the development of research within this field. We specifically focus on 'creative graduates', a sub-group of the highly educated individual who are specialised in artistic, creative, and cultural disciplines, and who are most likely to enter creative occupations both within and beyond the creative industries (Comunian et al., 2010a; Comunian et al., 2011; Faggian et al., 2012).

Methodology and Data

The chapter builds on an extensive number of papers that have recently explored the career patterns of creative graduates in the UK (Comunian & Faggian, 2014; Comunian, Faggian & Jewell, 2011; Comunian, Faggian & Jewell, 2014a; Comunian, Faggian & Jewell, 2014b; Faggian et al., 2013; Faggian, Comunian & Li, 2014). It adopts a methodology and research framework consistent with previous contributions, but expands on them by looking more specifically at the migration behaviour of sub-groups of creative graduates never explored before.

Our main sources of data are the 'Students in Higher Education' and the 'Destinations of Leaves from Higher Education' (DLHE) surveys, both collected by the UK Higher Education Statistical Agency (HESA). The former contains data on all students enrolled in UK HEIs, while the latter, generally targeted at British domiciled students, is a survey undertaken every year, by each institution on behalf of HESA, to collect information about graduates' employment activities six months after graduation. Since we are interested in migration, we focus on British-domiciled students (both part-time and full-time) for which we have full location information (post code information for pre-university, university, and job location). In particular, we focus on the cohort of students who graduated in 2005 (with a DLHE return referring to their employment situation in January 2006). Second, in line with the literature on the topic (Abreu et al., 2012) and due to the lower response rate of postgraduates (whom we

also do not know if they migrated for their first degree) and other undergraduates (those below first degree level) to the DLHE survey, we focus on first degree undergraduates⁴, who represent 61% of the full ‘Students in Higher Education’ sample. As we are interested in employment patterns, these two years are particularly good as they refer to the pre-recession period. The recession which took place following the 2007 credit crunch in UK had a negative effect on graduates’ employment in general (Shattock, 2010), but it might have impacted graduates from different disciplines differently hence biasing our results.

The ‘Students in Higher Education’ data contain individual student record data with information on a series of variables including: personal characteristics (such as gender, age, and ethnicity), subject of study (at the 4 digit Joint Academic Coding System (JACS⁵) code), mode (full-time vs. part-time), degree results, and institution attended. The DLHE survey, which is matched to the student record data, includes information on the graduate’s employment, in particular: salary level, employer sector code (4-digit SIC code), job occupational code (4-digit SOC code), and location of employment (postcode). For the 2005 cohort of graduates, the student dataset includes 268,143 records of British domiciled finalists (who are all eligible for a DLHE return) from 164 HEIs. The DLHE data has information on 202,947 British domiciled graduates, which equates to an overall 75.7% response rate. Once restricted to those employed and with full location information (original domicile, institution, and job location), our sample reduces to 137,256 valid observations. 73% of the respondents to the DLHE survey were in employment at 6 months with 14% in further study only, 6% unemployed, and 6% doing something else. Of our employed valid cases, 81% are in full-time paid employment, 14% are part-time employed, 3 % are self-employed (or working freelance), and 1% are employed in voluntary work or other unpaid work.

Our definition of ‘creative human capital’ comes from Comunian et al. (2010). ‘Bohemian’ (or creative) graduates include students in creative arts and design subjects (all JACS codes starting with W), creative media graduates (all JACS codes starting with P), and other creative graduates: subjects mainly linked to technologies-based creative subjects and architecture (for the list of JACS codes used in the category of ‘Bohemian’ graduates, please refer to Comunian et al., 2011). This categorisation is helpful to first compare creative graduates in general to all the graduates in other disciplines (see also Comunian et al. 2010). However, as we already explained, it is also crucial to understand the different trends and patterns between the different sub-groups within the creative graduates group.

We are interested not only in comparing the general human capital (graduates from non-creative disciplines who make up 85% of our valid sample) with creative graduates (15% of our valid sample), but also different sub-groups of creative graduates. To that effect, we divide creative graduates into eight sub-groups in line with Comunian et al. (2011) (we combined crafts with design, due to a small cell size and advertising with writing and publishing) namely: Architecture, Design and Craft, Film and Television, Fine Art, Music, Performing Arts, Technology, and Advertising, Writing & Publishing. As Table 6.1 shows, 21,074 (15.35%) of our sample are graduates from creative disciplines. The larger sub-disciplinary groups are in the field of Design and Crafts (4.6% of our sample), Film and Television (2.9%), Performing Arts (1.84%), and Fine Art (1.62). Advertising, Writing & Publishing, Music, and Technology students represented each just over 1% of our sample, while students in Architecture represent just below 1% of our sample. This first glance at our sample highlights already the difficulties in defining ‘creative human capital,’ as it is a very heterogeneous group with some disciplines being more prominent and some representing just a smaller niche.

INSERT Table 6.1 HERE

Using a creative job definition *à la* Cunningham et al. (2004), we consider both creative careers within the creative industries but also creative occupations in other non-creative industries. Our definition of a creative job is based on the initial DCMS definition based on 4-digit SIC codes. However, we supplement this definition with the inclusion of other creative workers (based on occupations using 4-digit SOC codes that are defined as creative) based in industries outside the creative industries as identified by DCMS (2010b) (see also Comunian et al., 2010 for detailed SOC and SIC codes). This chapter also builds on the work of Faggian et al (2014), which highlights the different patterns of migration of ‘Bohemian’ graduates in the UK compared with non-‘Bohemian’ graduates. The findings from Faggian et al. (2014) show that graduates from disciplines such as business/management and more importantly engineering/technology are more migratory, more likely to be repeat migrants, and land higher paid jobs than graduates from creative arts, education, or law. This chapter expands on this last finding, looking at the sequential migration behaviour of graduates in creative sub-disciplines. In the three-year period from entering university to graduation (and subsequently entering the labour market), students are faced with two distinct migration decisions. The first is whether to study locally or migrate to study in a different area. The

second is whether to work locally (i.e. in the university's immediate region) or make another move to enter the labour market in a different location. By combining these two choices, it is possible to identify five different migration paths (Figure 6.1): repeat migrants, return migrants, university stayers, late migrants, and non-migrants. The first three migration categories include students who all migrated to study, but they differ in regards to the second migration (following graduation). Repeat migrants are those who move to work in an area different from both their original pre-university domicile and the university region. Return migrants also move out of their university region to work, but only to go back to their original domicile. When analysing migration to study and migration to work separately, these two categories are undistinguishable, as both repeat and return migrants are in fact migrating twice. Nevertheless, differentiating between repeat and return migrants is vital because the two groups have different characteristics (DaVanzo & Morrison, 1981; Newbold, 1997). Repeat migrants are generally individuals who, encouraged by a successful first migration, venture upon a new migration; while return migrants are likely to be people who found the first migration to be a failure (DaVanzo, 1976; Faggian, 2005) and return home to a familiar surrounding where the network of acquaintances can help them enter the labour market. The third category, university stayers, includes all students who migrate to study, but then find a job near their university. The last two categories, late migrants and non-migrants, include graduates with the lowest migration propensity. Late migrants study near home and only migrate once they graduate. Non-migrants, as the name suggests, are those who study and then work in the same area as their original domicile. Figure 6.1 illustrates the five categories.

INSERT Figure 6.1 HERE

Starting from this broad sample of creative graduates and their migration patterns, in this paper we explore three key aspects:

1. Creative graduates' location choices, both in reference to location to study and location where they find, or migrate to, for employment;
2. Creative graduates and the different migration behaviours they follow across the sub-disciplinary groups identified;
3. The relationship between the migration patterns and the impact on creative career outcomes, such as the ability to secure a graduate level job, a creative job, and a higher salary level. This question is particularly important in the light of what others (including

various contributions in this book) have found in terms of job insecurity of creative graduates.

Creative graduates' location: Study and employment

The initial descriptive statistics of study location by UK countries shows that 86.16% of the creative graduates in our sample have studied in England, which is more as a percentage than the overall graduates' population (Table 6.2). England has also the highest retention rate of creative graduates (97.86%), followed by Northern Ireland and Scotland, while Wales only retains 53.18% of creative graduates (and a slightly higher percentage of non-creative).

INSERT Table 6.2 HERE

Table 6.3 highlights the regional dimension of these migration patterns. The regions in England that are able to retain more students are London (74.01 %) and the North West (65.83%). The role of London as place to study and work is acknowledged in the literature (Lee & Drever, 2013). Similarly, we can see the strength of the North West, which, despite losing many creative graduates, is the second place for retention. This supports some of the concerns and dynamics explored via qualitative interviews with artists in Manchester in the Gilmore et al. chapter in this book. Although just after the graduation of our cohort of analysis, the North West has also benefitted from increased investment and attention towards the creative economy, with Liverpool winning the role of European Capital of Culture in 2008 but also with the move of the BBC move to Salford (near Manchester) in 2009-2010. The regions with the lowest retention rate of creative graduates are East Midlands, Yorkshire and the Humber, and the South East. Yorkshire and the Humber see 12.67% of graduates moving to the North West, a relative short-distant migration, and 12.29% moving to London. The 'London-effect' is also clear for East Midlands, East of England, and the South East with 15.6%, 30.75%, and 28.63% of their creative graduates migrating to London to work.

INSERT Table 6.3 HERE

Creative graduates and different migration behaviours across disciplines

Sequential migration patterns (as defined in Figure 6.1) differ quite substantially by creative sub-disciplines, as shown in Table 6.4. Architecture graduates are the most mobile, with 38.37% of them falling in the ‘repeat migrants’ category. ‘Design & Craft’ graduates are equally split into repeat and return migrants (30.63% and 30.78% respectively). If we think of return migration as a possible corrective move, this finding might highlight the difficulties encountered by some who decide to revert to their area of origin to build up a portfolio with the support of family and/or their original network. The percentage of ‘return migrants’ is even higher for Film & TV graduates, Performing Art graduates, Fine Art graduates, and Advertising, Writing & Publishing graduates (33.83%, 31.37%, 33.07%, and 33.11% respectively). Overall, this is consistent with Comunian et al. (2010b) highlighting the more difficult and undefined career patterns of creative disciplines where non-graduate, temporary, and multiple jobs are not uncommon, as well as the findings of Frenette and Tepper’s chapter in relation to arts graduates in the USA. Return migration is often associated with a higher reliance on family and friends, and it is therefore a coping mechanism to deal with job insecurity while building a portfolio and establishing a career.

Finally, it is worth noticing the large number of ‘university stayers’ amongst music graduates - possibly linked to the role of networks and local connections (to work and perform) established for music graduates in the place of study (see also Comunian et al., 2014b). This is also true – although less so – for Fine Art, Performing Arts, and Film & TV graduates. Technology graduates are an interesting case, as an almost equal percentage of them are return migrants (a prospect with potential low rewards) and repeat migrants (on the contrary, a pattern usually associated with high levels of economic rewards). This seems to support the findings of Comunian et al. (2015) that show some contradictions emerging in their job market, as digital technology graduates enjoy both higher economic rewards in the labour markets (compared to creative arts and design graduates) but also higher level of initial unemployment (9.26% versus 8.36% of creative arts and design graduates).

INSERT Table 6.4 HERE

‘Late migrants’ are also fewer in creative disciplines than ‘other subjects’ (with the exception of Technology graduates). This seems to confirm the attachment of creative workers to specific locations where they developed networks. It also confirms what Chapain and Comunian (2010) found interviewing creative workers in Birmingham and Newcastle-

Gateshead, i.e. that creative workers have a strong sense of pride and belonging stemming from being ‘born and bred’ in a specific context.

While it is interesting to look at migration patterns per se, the ultimate goal of migration for many of these creative graduates is to improve upon their future career. In this light, the next section explores more closely the impact of migration on future career opportunities.

Migration patterns and impact on career outcomes

Confirming the findings of Comunian et al. (2011), Table 6.5 shows creative graduates are more likely than non-creative graduates to find jobs that are classified as ‘non-graduate’ (in other words, for which a degree is not deemed necessary). Interestingly, return migration and non-migration are universally linked to higher level of non-graduate jobs (Faggian et al., 2014). However, the difference between creative and non-creative graduates is that the former also settle for non-graduate jobs if they stay in the university area after graduation (i.e. they are classified as ‘university stayer’). This could be a short-term effect, as creative graduates might not feel ready straight away to leave the ‘university life’ (including friends and established networks). What is fascinating is that, as Faggian et al. (2014) point out, migration after graduation (either in the form of late migration or repeat migration) plays a key role in securing a graduate level position, and this applies equally to both creative and non-creative graduates.

INSERT Table 6.5 HERE

Notwithstanding this general finding, some differences do emerge across sub-disciplines. For Design & Craft, Fine Art, Music, and Performing Arts graduates, staying in the area of study (university stayers) puts them in a worse position (high level of non-graduate jobs) than non-migration. Again, this seems to suggest that while universities might be a great place to build networks for further employment, this might not provide enough negotiation power or motivation to find permanent and high quality jobs after graduation. Some graduates might get ‘trapped’ in a non-graduate job found before graduation and prefer the security of a low salary while looking for new opportunities and building their portfolio, rather than tempting fate with a migration movement (speculative migration).

Aside from the ‘level’ of employment (graduate vs. non-graduate job), we are also interested in the chances of creative graduates to get into a creative occupation (i.e. ‘field’ matching). Table 6.6 shows the relationship between migration trajectory and the ability of graduates to secure a creative job.

INSERT Table 6.6 HERE

Overall, Table 6.6 confirms that migrating after graduation (late or repeat migration) facilitates the matching between creative skills and the job requirements (creative occupation). This holds for most of the sub-disciplines, but there are some exceptions worth noting. Architecture graduates have the highest chances of entering a creative job (89.21%), if they stay around the university area after graduation. Maybe surprisingly – as it contradicts the general trend - ‘non migration’ gives Fine Art graduates the best chances of entering the creative sector (34.28%). While networks are important for both groups, architects rely more on formal career pathways (such as internships) that might be provided by university connections, while Fine Arts graduates contend with less defined and institutionalized paths for which more informal networks (e.g. through family and friends) are more relevant. Lastly, we look at the role of migration on creative graduates’ salaries (Table 6.7).

INSERT Table 6.7 HERE

As for the chances of getting a graduate type job, the highest salaries are linked to late migration and repeat migration for both creative and non-creative graduates. Similar results have been found by Jewell and Faggian (2014).

As for graduate jobs, some differences exist in terms of salaries across the creative sub-disciplines. Surprisingly, non-migration is associated with the highest salaries for Architecture graduates and the second highest for Film & TV graduates. For these graduates, it seems that the ability to build stronger, long-term connections comes with a salary premium. However, it must be noted that Architecture and Film & TV graduates are also highly clustered in the London area, so this might explain part of their higher returns.

Conclusions, implications and future research

The chapter argued that, in order to understand the relation between creative human capital and geographical locations, it is important to have a better understanding of the factors determining the migration behaviours of people. In particular, as we explore the transition period from university education to employment of creative graduates, this helps understand how mobility (non-mobility) can be seen as an outcome (for example, the outcome of a job offer/opportunity), but also used a strategy to reinforce existing networks or explore specific potential opportunities in the short and long term. Some of our results confirm the trends already explored in the literature for creative graduates. Looking at the geographical distribution and migration dynamics of creative graduates in the UK, we can confirm further the role of London as a hub for talent (Knell & Oakley, 2007), but also as magnet (Comunian and Faggian, 2014) attracting creative students from all over the UK and retaining almost 75% of them.

As consistent with previous literature, creative graduates have lower salaries and a higher percentage of non-graduate jobs (Comunian et al., 2010; Abreu et al., 2012). However, the chapter has highlighted that migration could mitigate some of their difficulties allowing them to find a better occupation more fitted to their skills. The most common migration pattern of creative graduates, i.e. return migration, is the one associated with the lowest mean (and median) salary, which is just above £13,000. The fact that return migration is the most common choices of creative graduates suggest that networks and peer-to-peer support are crucial just after graduation (Comunian, 2012). Networks are helpful in developing trust to respond to the risky nature of the creative economy (Banks et al., 2000), but also the importance of family support is recognised in the literature on creative work/careers (Ball, Pollard & Stanley, 2010; NESTA, 2008) and is key for creative graduates (Faggian et al., 2014).

The second most common migration path, i.e. 'repeat migration' (28.80%), is associated with the highest salary (£15,000). Alongside these general trends, we identified some specific sub-group trends. In particular, music graduate show a stronger tendency towards being 'university stayers.' While this gives them lower salaries and higher probability to be in non-graduate job, it also coincides with a higher ability for this group to secure a creative job. Considering that creative jobs in music are associated with low salaries and a high level of instability (Comunian et al., 2014b), the fact that music graduates can at least enter a creative

career seems a positive outcome. It also confirms some early findings by Comunian et al. (2014b) that university networks play a crucial role in helping music graduates to eventually secure successful careers.

In general, aside from music graduates, ‘university stayers’ do not benefit from high rewards in choosing to stay in the area where they studied. While this strategy allows them to build on local knowledge and networks, it also means that graduates settle for non-graduate jobs (maybe the same ones they held while studying) to support themselves while they establish their career or portfolio, rather than moving on to graduate level jobs straightaway.

In summary, the findings from this chapter highlight that while the mobility of highly skilled labour is key to a better understanding of career patterns and opportunities, a more refined understanding of the different types and characteristics of creative graduates is needed.

However, the data also highlights some limitations common to this type of analysis in relation to the creative economy. If graduates are asked to only identify a main current occupation, this may underrepresent those who might not be in a creative occupation but might, nonetheless, undertake creative activities (Throsby & Zednik, 2011). Finally, alongside income measures, other measures of success and fulfilment – as highlighted also in Frenette and Tepper’s chapter – might be required as, for example, ‘university stayers’ might not achieve higher income but might benefit from the support and well-being (Bille et al., 2013) derived from stronger support and networks in a specific locality. Finally, the interconnection between the resilience of urban spaces and the career of creative graduates and practitioners need to receive further attention (Comunian & Jacobi, 2015), as migration patterns could also be results of the processes of gentrification or re-location determined by the context not only by the creative workers themselves. The data also are not able to account for the importance of networks and connected migration patterns, among the mobility dynamics, which could be researched with more qualitative frameworks (like the ones adopted by Jacobi and Gilmore et al. in their respective chapters in this book).

Building on the initial findings of this chapter, several avenues for further research can be identified. The new ‘Longitudinal Destinations of Leavers from Higher Education’ (LDLHE) survey, which captures graduates up to the three-and-a-half years after graduation, provides data to study the migration behaviour and employment circumstances of graduates over a longer time span. This is particularly important for creative graduates, whose careers often

take longer to take off. This would also allow for a better understanding of the role of the ‘return migration’ and the ‘university stayer’ strategies, e.g. whether they are temporary coping strategies rather than long-term trajectories. Longitudinal data might also help shed some light on how often creative graduates have to change jobs before settling into more permanent (and better-fitting) ones.

As mentioned in respect to the limitation of the data, the fundamental role of networks for creative careers has been widely acknowledged (Borén & Young, 2013) and a follow-up study of a more qualitative nature, focusing on how the networks developed in a specific locality are the main reason for staying rather than moving, would be really noteworthy. A more qualitative study would also help in understanding the phenomenon of multiple jobs held simultaneously, which is often lost in more quantitative, large datasets such as the one used in our study. Finally, one point worth mentioning is that our findings show that assuming high human capital individuals (i.e. graduates) are highly mobile is misleading. There are obvious differences based on the subject studied (and subsequent career), and our contribution only scratched the surface of what could be an interesting and prosperous line of research.

Bibliography

- Abreu, M., Faggian, A., Comunian, R., & McCann, P. (2012). “Life is short, art is long”: The persistent wage gap between bohemian and non-bohemian graduates. *The Annals of Regional Science*, 49(2), 305-321. doi: 10.1007/s00168-010-0422-4
- Acheson, K., & Maule, C. J. (1994). International regimes for trade, investment, and labour mobility in the cultural industries. *Canadian Journal of Communication*, 19(3).
- Addison, T. (2008). The international mobility of cultural talent. *The International Mobility of Talent: Types, Causes, and Development Impact: Types, Causes, and Development Impact*, 236.
- Ball, L., Pollard, E., & Stanley, N. (2010). Creative graduates, creative futures (pp. Available at www.creativegraduates.com (last accessed May, 2010)). London: Creative Graduates Creative Futures Higher Education Partnership and the Institute for Employment Studies.
- Banks, M., & Hesmondhalgh, D. (2009). Looking for work in the creative industries policy. *International Journal of Cultural Policy*, 15(4), 415 - 430.
- Banks, M., Lovatt, A., O'Connor, J., & Raffo, C. (2000). Risk and trust in the cultural industries. *Geoforum*, 31, 453-464.
- Beine, M., Docquier, F., & Rapoport, H. (2008). Brain drain and human capital formation in developing countries: Winners and losers*. *The Economic Journal*, 118(528), 631-652.
- Bennett, D. (2010). Creative migration: A western australian case study of creative artists. *Australian Geographer*, 41(1), 117 - 128.

- Bille, T., Fjællegaard, C. B., Frey, B. S., & Steiner, L. (2013). Happiness in the arts—international evidence on artists' job satisfaction. *Economics Letters*, *121*(1), 15-18. doi: <http://dx.doi.org/10.1016/j.econlet.2013.06.016>
- Bjerke, L. (2012). *Knowledge flows across space and firms*. (Doctoral Thesis), Jönköping University, Jönköping (Sweden).
- Blair, H. (2003). Winning and losing in flexible labour markets: The formation and operation of networks of interdependence in the uk film industry. *Sociology*, *37*(4), 677-694. doi: 10.1177/00380385030374003
- Borén, T., & Young, C. (2013). The migration dynamics of the “creative class”: Evidence from a study of artists in stockholm, sweden. *Annals of the Association of American Geographers*, *103*(1), 195-210.
- Bozeman, B., Dietz, J. S., & Gaughan, M. (2001). Scientific and technical human capital: An alternative model for research evaluation. *International Journal of Technology Management*, *22*(7), 716-740.
- Chapain, C. A., & Comunian, R. (2010). Enabling and inhibiting the creative economy: The role of the local and regional dimensions in england. *Regional Studies*, *43*(6), 717-734.
- Charles, D. (2003). Universities and territorial development: Reshaping the regional role of english universities. *Local Economy*, *18*(1), 7-20.
- Comunian, R. (2012). Exploring the role of networks in the creative economy of north east england: Economic and cultural dynamics. In B. Warf (Ed.), *Encounters and engagement between economic cultural geography* (pp. 143-157): Springer.
- Comunian, R., Chapain, C., & Clifton, N. (2010a). Location, location, location: Exploring the complex relationship between creative industries and place. *Creative Industries Journal*, *3*(1), 5-10.
- Comunian, R., & Faggian, A. (2011). Higher education and the creative city. In C. Mellander, A. Andersson & D. Andersson (Eds.), *Handbook on cities and creativity* (pp. 187-207). London/ New York: Edward Elgar.
- Comunian, R., & Faggian, A. (2014). Creative graduates and creative cities: Exploring the geography of creative education in the uk. *International Journal of Cultural and Creative Industries*, *1*(2), 19-34.
- Comunian, R., Faggian, A., & Jewell, S. (2011). Winning and losing in the creative industries: An analysis of creative graduates' career opportunities across creative disciplines. *Cultural Trends*, *20*(3/4), 291-308.
- Comunian, R., Faggian, A., & Jewell, S. (2014a). Embedding arts and humanities in the creative economy: The role of graduates in the uk. *Environment and Planning C: Government and Policy*, *32*(3), 426-450.
- Comunian, R., Faggian, A., & Jewell, S. (2014b). Exploring music careers: Music graduates and early career trajectories in the uk. In N. Crossley, S. McAndrew & P. Widdop (Eds.), *Social networks and music worlds* (pp. 165-188): Routledge.
- Comunian, R., Faggian, A., & Jewell, S. (2015). Digital technology and creative arts career patterns in the uk creative economy. *Journal of Education and Work*, *28*(4), 346-368. doi: 10.1080/13639080.2014.997683
- Comunian, R., Faggian, A., & Li, Q. C. (2010b). Unrewarded careers in the creative class: The strange case of bohemian graduates. *Papers in Regional Science*, *89*(2), 389-410.
- Comunian, R., & Gilmore, A. (2015). Beyond the creative campus: Reflections on the evolving relationship between higher education and the creative economy: King's College London, London (UK) available at www.creative-campus.org.uk
- Comunian, R., Gilmore, A., & Jacobi, S. (2015). Higher education and the creative economy: Creative graduates, knowledge transfer and regional impact debates. *Geography Compass*, *9*(7), 371-383. doi: 10.1111/gec3.12220

- Comunian, R., & Jacobi, S. (2015). Chapter 8: Resilience, creative careers and creative spaces: Bridging vulnerable artist's livelihoods and adaptive urban change". In H. Pinto (Ed.), *Resilient territories: Innovation and creativity for new modes of regional development* (pp. 151-166). Cambridge: Cambridge Scholars.
- Corcoran J, Faggian A, & McCann P. (2010). Human capital in remote and rural australia: The role of graduate migration. *Growth and Change*, 41(2), 192-210.
- Cramphorn, J., & Woodhouse, J. (1999). The role of education in economic development. *Industry & Higher Education*, 13(3), 169-175.
- Cunningham, S., Cutler, T., Hearn, G., Ryan, M., & Keane, M. (2004). An innovation agenda for the creative industries: Where is the r&d? *Media International Australia: incorporating Culture & Policy*, 112, 174-185.
- DaVanzo, J. (1976). Differences between return and non-return migration: An econometric analysis. *International Migration Review*, 10(1), 13-27.
- DaVanzo, J., & Morrison, P. (1981). Return and other sequences of migration in the united states. *Demography*, 18(1), 85-101. doi: 10.2307/2061051
- DCMS. (2001). *Creative industries mapping document* London: Department for Culture, Media and Sport.
- DCMS. (2006). *Making the case for public investment: Developing entrepreneurship for the creative industries - the role of higher education*. London: DCMS.
- DCMS. (2015). *Creative industries economic estimates*. London: DCMS.
- DCMS, & BERR. (2008). *Creative britain - new talents for the economy*. London: DCMS.
- Faggian, A. (2005). *Human capital, migration and local labour markets: The role of the higher education system in great britain*. University of Reading, Reading.
- Faggian, A., Comunian, R., Jewell, S., & Kelly, U. (2012). Bohemian graduates in the uk: Disciplines and location determinants of creative careers. *Regional Studies*, 1-18. doi: 10.1080/00343404.2012.665990
- Faggian, A., Comunian, R., Jewell, S., & Kelly, U. (2013). Bohemian graduates in the uk: Disciplines and location determinants of creative careers. *Regional Studies*, 47(2), 183-200.
- Faggian, A., Comunian, R., & Li, Q. C. (2014). Interregional migration of human creative capital: The case of "bohemian graduates". *Geoforum*, 55(0), 33-42. doi: <http://dx.doi.org/10.1016/j.geoforum.2014.05.003>
- Faggian, A., & McCann, P. (2006). Human capital flows and regional knowledge assets: A simultaneous equation approach. *Oxford Economic Papers*, 58(3), 475-500. doi: 10.1093/oep/gpl010
- Faggian, A., & McCann, P. (2009). Universities, agglomerations and graduate human capital mobility. *Journal of Economic and Social Geography (TESG)*, 100(2), 210-223.
- Florida, R. (2002). *The rise of the creative class*. New York: Basic Books.
- Glaeser, E. L. (2005). Review of richard florida's "the rise of the creative class". *Regional Science and Urban Economics*, 35, 593-596.
- Hall, P. (1998). *Cities in civilization: Culture, innovation and urban order*, . London: Weidenfeld & Wishart.
- Hansen, H. K., & Niedomysl, T. (2009). Migration of the creative class: Evidence from sweden. *Journal of economic geography*, 9, 191-206.
- Jewell, S., & Faggian, A. (2014). Interregional migration wage premia: The case of creative and stem graduates in the uk. In K. Kourtit, P. Nijkamp & R. Stimson (Eds.), *Applied modeling of regional growth and innovation systems* (pp. 197-216): Springer.
- Knell, J., & Oakley, K. (2007). *London's creative economy: An accidental success?* London: The Work Foundation.

- Lawton, P., Murphy, E., & Redmond, D. (2013). Residential preferences of the 'creative class'? *Cities*, 31, 47-56.
- Lee, N., & Drever, E. (2013). The creative industries, creative occupations and innovation in London. *European Planning Studies*, 21(12), 1977-1997.
- Linderlöf, P., & Löfsten, H. (2004). Proximity as a resource base for competitive advantage: University -industry links for technology transfer. *Journal of Technology Transfer*, 29, 311-326.
- Löfsten, H., & Lindelöf, P. (2005). R&d networks and product innovation patterns—academic and non-academic new technology-based firms on science parks. *Technovation*, 25(9), 1025-1037.
- Markusen, A. (2006). Urban development and the politics of a creative class: Evidence from the case study of artists. *Environment and Planning A*, 38(10), 1921 - 1940
- Markusen, A., Wassall, G. H., DeNatale, D., & Cohen, R. (2008). Defining the creative economy: Industry and occupational approaches. *Economic Development Quarterly*, 22(1), 24-45. doi: 10.1177/0891242407311862
- Martin - Brelot, H., Grossetti, M., Eckert, D., Gritsai, O., & Kovacs, Z. (2010). The spatial mobility of the 'creative class' : A European perspective. *International Journal of Urban and Regional Research*, 34(4), 854-870.
- Mathur, V. K. (1999). Human capital-based strategy for regional economic development. *Economic Development Quarterly*, 13(3), 203-216. doi: 10.1177/089124249901300301
- Moretti, E. (2004). Human capital externalities in cities. *Handbook of regional and urban economics*, 4, 2243-2291.
- NESTA. (2003). *Forward thinking - new solutions to old problems: Investing in the creative industries*. London: NESTA.
- NESTA. (2008). *The art of innovation: How fine arts graduates contribute to innovation*. London: NESTA.
- Newbold, K. B. (1997). Primary, return and onward migration in the U.S. And Canada: Is there a difference? *Papers in Regional Science*, 76(2), 175-198. doi: 10.1111/j.1435-5597.1997.tb00688.x
- O'Hagan, J., & Hellmanzik, C. (2008). Clustering and migration of important visual artists: Broad historical evidence. *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 41(3), 121-136.
- O'Hagan, J., & Borowiecki, K. J. (2010). Birth location, migration, and clustering of important composers: Historical patterns. *Historical Methods*, 43(2), 81-90.
- Powell, J. (2007). Creative universities and their creative city-regions. *Industry and Higher Education*, 21(6), 323-335.
- Preston, J., & Hammond, C. (2006). *The economic impact of UK higher education institutions*. London: Universities UK.
- Scott, A. J. (2010). Jobs or amenities? Destination choices of migrant engineers in the USA. *Papers in Regional Science*, 89(1), 43-63.
- Shattock, M. (2010). Managing mass higher education in a period of austerity. *Arts and Humanities in Higher Education*, 9(1), 22-30.
- Sjaastad, L. A. (1962). The costs and returns of human migration. *The Journal of Political Economy*, 70(5), 80-93.
- Solimano, A. (2006). *The international mobility of talent and its impact on global development: An overview* (Vol. 52): United Nations Publications.
- Throsby, D., & Zednik, A. (2011). Multiple job-holding and artistic careers: Some empirical evidence. *Cultural Trends*, 20(1), 9-24. doi: 10.1080/09548963.2011.540809

- Towse, R. (2006). Human capital and artists' labour markets. *Handbook of the economics of art and culture*, 1, 865-894.
- UNESCO, U. (2013). Creative economy report: Widening local development pathways. New York & Paris: United Nations Development Programme (UNDP) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Universities UK. (2010). Creating prosperity: The role of higher education in driving the uk's creative economy. London Universities UK.
- Vang, J., & Chaminade, C. (2007). Cultural clusters, global–local linkages and spillovers: Theoretical and empirical insights from an exploratory study of toronto's film cluster. *Industry and Innovation*, 14(4), 401-420.
- Venhorst, V., Van Dijk, J., & Van Wissen, L. (2010). Do the best graduates leave the peripheral areas of the netherlands? *Tijdschrift voor Economische en Sociale Geografie*, 101(5), 521-537.
- Venhorst, V., Van Dijk, J., & Van Wissen, L. (2011). An analysis of trends in spatial mobility of dutch graduates. *Spatial Economic Analysis*, 6(1), 57-82.

¹ We use the word 'creative' in the chapter not to generically qualify students or courses (we would happily argue that all students and academic disciplines have a creative component), but to refer to students and courses that align with the definition of the creative industries in UK (for the latest definition see DCMS, 2015). So it is possible to argue that all 'human capital' is creative, but in this paper we use the term 'creative human capital' to specifically define individual with high level of knowledge and specialisation (a degree) in creative industries related disciplines.

² See HESA press release 221 (12th February 2015) available at: <https://www.hesa.ac.uk/pr211>

³ With 43% of the employees having a tertiary degree qualification or higher - compared to an average of 16% for the workforce as a whole (NESTA, 2003)

⁴ The response rate to the DLHE survey for the 2005 cohort was 77% for undergraduates, 62% for postgraduates and 58% for undergraduates below first degree level.

⁵ For more information on the Joint Academic Coding System (JACS) see http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=158&Itemid=233