

Ambition, Human Capital Acquisition and the Metropolitan Escalator

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Abstract

This paper examines the relation between ambition, as a form of dynamic human capital, and the escalator role of high order metropolitan regions, as originally identified by Fielding (1989). It argues that occupational progression in such places particularly depends on concentrations both of people with more of this asset and of jobs offering preferential access to valued elements of tacit knowledge, interacting in thick, competitive labour markets. This is partially confirmed with analyses of BHPS data on long term progression showing that only the more ambitious gain from residence in the extended London region, and that they only progress faster there.

Keywords: Escalator region; migration; urban labour market; London; social mobility; human capital

JEL Classifications: J24; J61; J62; R23

1. Introduction: seeking ladders topped with gold

Famously, over the centuries, great cities have attracted young people with talent and ambition, set on making their careers in the metropolis, in the face of uncertain odds. The iconic example is that of the (English) Dick Whittington, reputedly a poor orphan from the countryside, attracted to London by tales of 'streets paved with gold', overcoming his initial disillusion (with the help of prophetic church bells urging him to 'turn again'), finding a rich master who encourages him to invest all his assets (his cat) in a trading venture, from which he gains a quite unexpected fortune, allowing him to progress to a social pinnacle as three times Lord Mayor. The story of the real Sir Richard's ascent to the Mayoralty in the 15th century is rather more prosaic, starting from roots in the landed (if indebted) gentry, and progressing via apprenticeship to the 'honourable trade' of mercery, to become a royal financier (Fischer, 2005). In either version, however, the City is seen to present opportunities for kinds of success not available elsewhere, though ultimately attainable only by a few, through an (obscure) combination of personal character, social connections and pure chance. Away from the context of folk tales, Harris and Todaro's (1970) formal representation of city labour markets in LDCs accounts for their high unemployment levels as the equilibrium outcome of a gamble which rural migrants make on the chances of gaining access to a set of formal sector jobs with high wages, sustained (in practice) by forms of social closure mechanism not transparent to them.

The continuing power of legends such as the Whittington story to encourage young people wishing 'to seek their fortune' to head for the metropolis, is not independent of their exposure to other real success stories coming from closer to home. Since there is less news from those who fail to 'make it', it must be very hard for anyone to realistically appraise the likely return on this gamble. But, recent statistical appraisals of socio-economic outcomes from those who have made such a move to some of the leading cities in the global north do suggest that they progress further and faster than their peers (Glaeser and Mare, 2001; de la Roca and Puga, 2011). City streets may not be 'paved with gold' just for the taking, but they do seem to provide access to a set of ladders potentially topped with gold - for those with the will and strength to climb them. In rather more dynamic terms, Fielding (1993, 1995) formulated the idea of an 'escalator region' to represent the enhanced chances of social mobility – across class boundaries – that he observed among residents in London's extended metro region (the South East) between 1971 and 1991. In particular, he found that in-

migrants to the region gained strongly - though it should be noted that the evidence for their greater success (based on inter-Censal mobility between places and classes) would have included any one-off 'elevator' effects resulting from entry to a region with many high status jobs, as well as any continuing 'escalator' effects arising from their presence in a set of more dynamic labour marketsⁱ.

This paper focuses more specifically on what evidence there is for pure escalator effects on occupational progression, and on who actually benefits from these. In the terms used by Glaeser and Mare (2001), analysing effects of relocation on earnings, it focuses on (continuous) 'learning' effects, rather than (one-off) 'productivity' boosts. The assumption is that - when people with similar characteristics are compared - any (pure) escalator effects *ought* to be just as relevant to long-term residents as to migrants. If, after controlling for initial 'elevator' effects, in-migrants *are* still found to gain proportionately more from their residence in an escalator region, this should be traceable to some catalytic attribute distinguishing those who choose to move to 'escalator regions' from those who were born and stayed there. Youth and talent are the obvious candidates for this role, but less readily observable factors might also be crucial, including the ambition and energy in pursuing career advancement to which Fielding (1993, 147) refers. .

All these 'bright lights' stories clearly beg fundamental questions (for the prospective migrant) about how many places are actually available on a city's escalator, and what it takes to get access to these - whether *great talent, great ambition, great connections, or great luck*. For the more detached observer (whether researcher or policy-maker) there are a related set of questions as to whether faster progress up career ladders in such cities reflects:

- simply their concentrations of:
 - progressive economic activities and educational institutions and/or concentrations of powerful patrons; and hence of
 - talented and ambitious young people attracted from the countryside and provinces; and/or
- specifically urban externalities, in the form of:
 - informally diffused tacit knowledge - the trade 'mysteries' in 'the air' of Marshall's (1890) specialised industrial districts, or the creative 'urban buzz' of Storper and Venables' (2004) more diverse agglomerations; and/or

- thick, flexible and dynamic labour markets, offering workers a personal financial incentive to pursue such knowledge (Glaeser and Mare, 2001).

These issues have wider significance in two respects. The first is in terms of how far the existence of economically dominant cities actually contributes to the human assets of a society and/or to inequality in the social distribution of these (and thus of real incomes too). The second concerns the familiar puzzle (for neo-classical economists at least) as to what could motivate strong migrational flows toward particular regions, if their effect is to eliminate disparities in the real incomes received by people with comparable attributes in different locations (Evans, 1990). Three elements in a (strong) urban escalator theory which might resolve this are: *the specificity of opportunities* attracting migrants; the impacts of spatial location on the *development of relevant attributes*; and the dependence of positive impacts on acceptance by (some) workers in these places of *costly efforts with uncertain rewards*.

Within the context of a wider study, attempting to address all of these issues in relation to potential escalator regions within the UK, the prime focus of this paper is on evidence relevant to the second and third of these elements – seeking answers to questions about whether jobs in some places contribute more to the development of human capital, and how selective these effects are, as between people with different backgrounds and attitudes.

In order to pursue these goals, the remainder of the paper is organised in three main sections. The *first* presents a theoretical framework, linking progression up an occupational ladder to dynamic forms of human capital, uneven spatial opportunities for exploiting this, and their relation to signalling behaviour in labour markets with high degrees of uncertainty. The *second* outlines an operationalisation of this, including measures of advancement in job status, and levels of career ambition, for application to analysis of mobility and status change over the 1991-2008 period, using micro-data from the British Household Panel Study. The *third* reports on results from this analysis (and of shorter-term change data from the Labour Force Survey). A short conclusion summarises the findings, together with outstanding questions, and links these to on-going work (with colleagues) using complementary data sources, including the Census Longitudinal Study and ASHE.

2. A theoretical framework: dynamic human capital, opportunities and space

The theoretical framework motivating this paper involves a strong version of the urban escalator thesis, focused on the potential role of urban externalities in creating real assets in the form of additions to human (and social) capital, with the active participation of workers who invest their energies acquiring and developing these capacities while 'on the job'.

2.1 Human Capital, Occupational Status and Ambition

Though often approximated by time spent in formal education (or qualifications achieved), in training, and in work 'experience', at a conceptual level human capital involves the full range of an individual's embodied assets, in the sense of those personal characteristicsⁱⁱ that contribute to the value derived from (any of) their activities. These are clearly diverse, and the labour market is accordingly structured around many different occupational positions, each associated with distinctive combinations of human capital, and connected by multiple ladders (along with some 'snakes'). In this context there is a two-way link between occupations and human capital: on the one hand, access to specific jobs requires credible evidence of a particular range of competences; on the other, performance of these roles is the main route to accumulating the relevant capabilities, and getting these recognised.

For *both* reasons, progress up occupational ladders (toward jobs with higher rewards) is indicative of success in developing types of human capital to which the productive economy currently assigns higher values. While at the micro-level progress can reflect a near zero-sum competitive game (with patronage/connections playing important roles), at more aggregative levels, advancement both represents and reflects the accumulation of *real economic assets*. In relation to metropolitan escalators, this may be evidenced by the capacity of their beneficiaries to transfer acquired occupational advantage to other spatial locations (as Fielding, 1993 implies for London and de la Roca and Puga, 2011 show for leading Spanish cities). ?????

In relation to individuals' progression, there is an important distinction to be made between the capabilities contributing directly to current performance (*static human capital*) and those which contribute indirectly through the accumulation of further capabilities for future use - or maintenance and replenishment of depreciating ones (*dynamic human capital*). .

Beyond the contributions made by luck and prior social connections, occupational advancement may then be seen to depend on a combination of:

- exposure to the superior learning opportunities (i.e. experience), which some places and institutions offer; and
- the desire / capacity to make the most of these (i.e. dynamic human capital).

Important aspects of human capital always involve not just matters of knowledge (of what, how or who) but of attitude and character too, including: fitness of all kinds (physical, mental and emotionalⁱⁱⁱ), energy, patience, loyalty, attention span, capacity to concentrate and/or to endure tedium etc.. This applies especially to the dynamic component, for which an *ability* to 'learn' (whether innate or acquired through 'learning to learn' in academic settings) is necessary but not sufficient. What is also required is a positive *desire* to learn (in relevant contexts), whether because the process is felt to be stimulating /satisfying, or because it is recognised as functional for pursuit of some personal aspirations. Job-related *ambition* is thus potentially key to the capacity to convert superior learning opportunities into success in terms of occupational advancement.

This notion of ambition is close to McLelland's (1961) concept of the Achievement Motive, identified as one of the key drivers of human behaviour, alongside the needs for Power, and Affiliation – over and above mere subsistence. Those with strong drives to achieve were seen as motivated to choose and respond positively to realistic challenges, whereas (at the other extreme) those with a stronger drive to avoid failure would tend to go for either impossible targets, or ones involving no real challenge. Such drives *are* quite likely to be conditioned both by social background and formal education. But, together with a psychological capacity to take a long term view, they have important implications for the acquisition of more advanced capabilities and effective exploitation of rich urban knowledge seams^{iv}. For these drives to be directed specifically to acquiring capacities of recognised use in remunerative work – in competition with the claims of other domains of personal life - seems also to require perception of a job as of intrinsic importance/interest, and as offering potential for esteem and self-actualisation (in Maslow's 1943 terms).

2.2 Opportunities for acquiring tacit knowledge

The other key requirement for substantial occupational progression – beyond that offered after years of blame-free service – is access to suitable learning opportunities for acquiring

relevant kinds of tacit knowledge. Tacitness is key because it goes beyond what is generally accessible (and hence of limited worth), because of its close relation to the practical mastery of a craft, and because of the need to share understandings with a group of others (Polanyi, 1958; Sennett, 2008).

Access to (potentially profitable kinds of) tacit knowledge is limited for several reasons. It may be too new or specialised for codification to be economic yet. Or, it may be available only interactively, because it involves the ground of shared understandings required to make codified knowledge intelligible and practically applicable. And, in either case, the 'guilds' in possession of it may serve as gatekeepers to protect the rents derived from its use. Since not all such knowledge is equally valuable, moving on up the escalator would involve 'entrepreneurial' activity, to find means of accessing, filtering and applying what the current state of technology and tastes identify as better versions of a still uncertain knowledge.

Generally, employers are not expected to allow their resources to be used to equip workers with transferable skills, except in circumstances such as formal training periods or internships where they can be compensated by paying lower/minimal wages. Becker (1962) developed this argument in relation to formal training, but the same principle should apply to less structured opportunities for learning with a transferable value to the worker. In practice, however, much human capital seems to be *task-specific*, acquired on the job but with transferable value to the worker^v, because broader human capital enhances the returns to specific skills (Oi, 1983). In fact, given a capacity and motive to learn, much task-specific capital will come from generalising and re-contextualising the combined lessons of firm-specific training and non-routine work situations.

How far employers effectively facilitate acquisition of such a potentially marketable asset will then depend on the nature of the activities in which a work unit is involved - being most likely: close to the cutting edge of market or technology change; where there is substantial customisation of the product/service for quality-sensitive clients; with sophisticated forms of collaboration in providing a complex product; and/or the provision of strategic advice and support to highly placed decision-makers. Places with concentrations of such jobs ought then to provide the greatest opportunities for those with ambition and capacity to learn.

2.3 Escalator Regions, Migration and Signalling

The nature of these activities means that many of them are likely to be concentrated in a limited set of high-order centres/city-regions offering superior face-to-face access to sophisticated external information sources, clients, suppliers and collaborators. For this reason alone, leading cities may exhibit stronger rates of occupational progression, at least for those groups with qualifications to access jobs of these kinds. If other work units required similar kinds of labour, but lacked the incentive to offer developmental opportunities they might simply have to pay more in compensation, or else accept less qualified /ambitious recruits.

That might turn out to be virtually the whole story, with no other significant spillovers. Additionally, however, some such places may also generate substantial externalities through their labour markets. In particular, as Glaeser and Mare (2001) suggested, places possessing *both* a concentration of escalator portals of this kind, including a range of independent employers with overlapping demands in terms of skill sets, *and* a flexible, competitive labour market, may more strongly incentivise workers to pursue the available opportunities for on-the-job acquisition of human (and social) capital. In turn, such places are even more likely to attract labour migrants with high levels of dynamic human capital, and consequentially also to reinforce the concentration of work units dependent on a dynamic labour pool of this kind.

The standard neo-classical model of migration (from Sjaastad, 1962), represents it as an act of personal investment, with once-for-all relocation costs being incurred in the expectation of a flow of returns, in terms of higher (real) income over the years. Where the attractor is better employment prospects, the return on this investment should clearly be greatest in the young working ages, with lower flows among the middle aged, and a likelihood of reversal as retirement approaches if the most successful areas have highest living costs. If place-specific elevator processes primarily affect (ambitious) young people, the selectiveness of migration to such places would be intensified, and an earlier reversal of flows may be expected, at the point when progression slows down - 'stepping off the escalator' (Fielding, 1993). In any case, migration may be motivated by the prospect of a once-for all occupational uplift (in the elevator), either where lack of local opportunities holds people back in jobs below their actual capabilities (perhaps having down-shifted after

a job-break), or because an individual's promotion is contingent upon taking up a specific vacancy elsewhere.

In its strong versions (going beyond the simple availability of jobs offering a portal to learning) the notion of an urban / metropolitan 'escalator' is not really one of an effortless ride up the occupational scale. Rather it is one of intense competition and effortful learning on the part of ambitious, achievement-oriented workers seeking recognition from knowledgeable, sophisticated and selective employers, patrons or audiences. Some of the flavour of this was captured in the New York (NY) context, by the lyric asserting (in relation to one of that city's occupational specialities) that: *'If you can make it here, you can make it anywhere it's up to you'* ^{vi} – with the double implication that it presents the most demanding challenge, but that success in meeting this yields capabilities of value anywhere .

There is also a symbolic aspect, both for prospective workers and employers, to thronging around such escalators, particularly in the recognised centres. This stems from the special uncertainties involved in identifying those who possess dynamic human capital that they will deploy on the employer's behalf, those jobs which will provide the best favourable opportunities for human/social capital development. Recognition of a particular (geographic and trade) sub-labour market as fulfilling an escalator role can be expected to attract to it a share of 'no-hopers' (as achievement motivation theory suggests) for whom failure there would involve very little shame, but also a core of those more invested in becoming: *'king of the hill, head of the list, cream of the crop, at the top of the heap'* ^{vii}. The first group, should be simply weeded out in a competitive environment. For the rest, however, , presentation as a job applicant in these sub-markets ^{viii}, particularly perhaps as an incomer, *signals* a degree of self-belief, seriousness of purpose, and professional ambition which address key questions about the possession of dynamic human capital. Similarly, on the employer's side: to locate your business unit in a part of the city where the price of access to high calibre workers is both higher property costs, and active local competition for the pool of talent that it attracts may be seen as a *signal* of intent to provide experiences that enable workers to pro-actively develop capacities with a marketable value. An intent to signal in this way would add force *both* to the self-selection of ambitious workers and progressive job opportunities, that together represent a weak (purely compositional) version of the escalator, *and* to the dynamic arising from their interaction within a thick, competitive labour market, representing the strong version of the escalator hypothesis.

2.4 Implications for the geography of occupational progression (and regression)

This sketched theoretical framework suggests a combination of mutually reinforcing processes which could lead a *few* places (maybe just one) within any economy with strong escalator roles that increasingly differentiate them from *all others*. The question is, how much of this idealised model is to be observed in practice (rather than simply as updated version of the Whittington myth) – or how far impressions of this kind, simply reflect the spatial concentration of relevant opportunities, inducing a highly selective pattern of migration into and out of the favoured areas.

There are, however, snakes as well as ladders within the labour market, some of which may also be concentrated in particular cities or regions. Accidents (both favourable and unfavourable) quite commonly place people in job niches imperfectly matched to their capabilities, with some chance of an early correction of the discrepancy, but failing that a gradual adaptation of capabilities (whether up, down or sideways) toward expectations. In the case of forced job losses, as one key type of accident, the likelihood of recovery will depend on the current tightness or slackness of the local labour market, with slack labour markets inducing a more extensive 'bumping down' process (à la Reder, 1955) as the downwardly mobile displace others. Some who mitigate their position through migration to a stronger labour market may nevertheless appear among those - recognised by Fielding, (1993, 156) as moving from positions of weakness rather than strength - who do not visibly gain from moving to the escalator region. More generally, we would expect that, even over the long run, all those with spells of interruption of employment were liable to show inferior occupational trajectories. A consequence would be a geography of generally weaker status progression and human capital development in regions exposed to substantial job losses – which is not simply the obverse of the expected upward movement in escalator regions, but needs to be controlled for in evaluating hypotheses about processes operating there.

Following sections of this paper partially address these hypotheses, with a focus on two empirical issues: about the evidence for any for the existence of place-specific pure 'escalator' effects in one or more metropolitan centres, and for concentration of such effects on particular sub-groups within the population, including those with stronger job-related ambition. Other issues are being addressed separately in papers with collaborators using complementary data sources – including fuller treatment of the question whether any

effects identified here as specific to places may just reflect more favourable opportunity structures.

3. Methods / Operationalising

In empirical terms, the analytic approach of this paper involves: firstly, charting the progress of people up (or down) an employment ladder linked to the achieved/recognised levels of human capital; and then examining how variations in such progress are associated with personal attributes, areas of residence (and/ or migration) *and* interactions between these. The questions to be addressed follow on from those of Fielding (1993), though being framed in more general labour market terms rather than as issues of class transition. Correspondingly, the basic methodology pursued here is one of conventional regression modelling with a continuous measure of progression, rather than tabular or statistical analyses of cross-classified categorical variables.

There are a number of important issues to be considered in applying this simple approach to analyses of the escalator processes discussed in the last section. In particular, these involve: data sources (and their limitations); variable definition (in relation both to the dependent variable and to the concept of ambition); and model specification (particularly the treatment of dynamics and disequilibrium positions).

3.1 Data Sources

Several micro-data sources – including the (Census-based) Longitudinal Survey (LS), , the Annual Survey of Hours and Earnings (ASHE), the Labour Force Survey (LFS) and the British Household Panel Study (BHPS) – offer relevant data on the occupational progression of individuals in the UK. Each has distinctive strengths (and limitations) for some of the key questions about functioning of the escalator process, and both the LS and ASHE are being employed in forthcoming papers from this project^{ix}. This paper, however- with its focus on hypotheses about the role of ambition as a form of dynamic human capital - concentrates on evidence from the BHPS. Uniquely (among UK data sources) this combines qualitative personal/family data, including the basis for a measure of work-related ambition, together with long term work histories, from which we can assess shifts up and down the occupational ladder, and link these to areas of work/residence. The core analyses using this

source are complemented by more descriptive analyses of occupational position and short term change, using the very much larger sample provided by the LFS.

The BHPS micro-data files used here^x cover the years 1991-2008, with successive annual waves of this survey collecting data from a panel of respondents incorporating all base year members of an original sample of households. In each wave there are a repeated series of questions, including ones on employment status and experience over the year and on qualifications as well as on area of residence etc. – supplemented by others in specific topics which are one-off or repeated irregularly. Among these is a pair of questions on attitudes to jobs/work which we use to construct a measure of individuals' job-related ambition^{xi}.

In order to make use of this (one-off) variable our focus is on change in job status over the whole period (for respondents in employment at both ends), rather than year-to-year dynamics^{xii}. The full annual panel is used only in a supplementary role, to generate measures of accumulated time spent in/out of employment, and in specific regions. Requirement of a full set of responses across 18 waves in order to generate these measures, in a survey with some discontinuities as well as attrition in responses, together with the age and employment restrictions which we imposed, inevitably reduced the available set of observations rather substantially, leaving just 868 cases for the final analyses presented below.

3.2 Operationalising Key Variables

Job Status: In contrast to previous 'escalator' studies which have taken either transitions between discrete social classes (Fielding, 1989, 1995) or increments to actual earnings (Glaeser and Mare, 2001; De la Roca/Puga, 2011) as their outcome indicator, the dependent variable in our analyses is designed to provide a continuous measure of occupational position, in terms of the value of human capital associated with the job type.

Since human capital encompasses many different types of attribute, with relative values that can shift in response to changing sectoral mixes, technologies and educational trends^{xiii} - any composite measure of needs to be substantially grounded on evidence of (market-determined) pay differentials. The concern of this paper is not with tracking which skill types are becoming more or less valuable, but rather to assess movement up and down a

pre-defined occupational scale, using *average* market valuations for a period to place different 'job niches' (defined in terms of occupation *and* managerial/supervisory status) on that scale.

In practical terms, occupation is defined in terms of the 371 units of the SOC90 occupational classification, while 4 levels of managerial/supervisory responsibility were also recognised (managers in establishments with 25+employees, managers in smaller establishments, supervisors and other workers^{xiv}). Out of the 1484 logically possible combinations, 1197 such niches were actually represented (with earnings data) in the pooled 1993-2000 rounds of the UK Labour Force Survey used to generate the JS scale values^{xv}. These scale values were derived from logged hourly earnings^{xvi} – available for employees only but applied also to the self-employed. After (regression-based) adjustment of individual earnings data for three contextual factors (year, workplace region^{xvii} and establishment size^{xviii}), values for each niche were computed on two bases: as simple averages, and as predicted values from regressions of adjusted log earnings on occupation and status dummies. In order to mitigate problems of sampling error in the less common niches, these two estimates were combined, with weights reflecting the computed standard errors of each^{xix}.

JS scale values were then applied to BHPS cases, using its records of occupation and managerial/supervisory responsibilities. Survey design, data collection and coding procedures should make these measures comparable between the two surveys (LFS and BHPS) and across waves of each^{xx}.

Ambition: For an indicator of individuals' potential motivation to seek and acquire on the job human capital, we make use of a couple of questions (each appearing in both the 1991 and 1999 waves of the BHPS) about the two most important aspects of, firstly, work in general, and secondly of particular jobs. For a composite measure of 'ambition', we combine responses highlighting promotion, career, initiative, job content (scored positively) as against those citing people's company or money for essentials (scored negatively y)^{xxi}.

In its raw form this measure showed a clear, but U-shaped, relation with age, which partially explained a relatively weak correlation in raw scores between the two years. This age factor was controlled for and the scoring converted to a 0-1 scale. In order to derive a measure

applicable to the 1991-2008 period, the the age-standardised measures from the 1991 and 1999 surveys were then simply averaged^{xxii}.

3.3 Model specification and Estimation

In principle, our analyses of individual progression relate JS *change* measures to a series of independent variables, involving location, prior education etc. However, a consistent feature of all our analyses with different sources and time intervals varying between 1 year and 17 years, is that change seems to be substantially affected by start of period JS level. When this variable is included in the analysis it consistently attracts (negative) coefficients, significantly below zero and above -1.

Similar findings are familiar in wage equations (e.g. Blanchflower and Oswald, 2005), but in the context of JS changes there appear to be two different kinds of explanation, implying different kinds of response. On the one hand, there is the distinct possibility of measurement error (in both JS levels and change), in which case *inclusion* of the lagged dependent variable could be a source of bias in the analyses. This might arise either because of the open-ended way in which occupations are initially reported (however systematic the coding of these) nor because of insufficient recognition of occupational heterogeneity in one or both tails of the distribution, causing an artificial truncation of the scale. On the other hand, it could be well be that some real processes are in play involving ‘reversion’ in JS scores. This might be either toward a ‘mean’ consistent with an individual’s real capabilities from an initial niche out of line with these; or, toward zero, reflecting a natural tendency for stocks of human capital to depreciate, in the absence of positive inputs from learning experiences that renew or upgrade these. In this case it is *omission* of lagged values from the RHS which would be liable to bias other estimates.

A series of experiments were undertaken to assess the potential influence of these different explanations. JS scores were averaged over several waves of the BHPS to see how far this weakened the relationship between change and lagged JS values, as would be expected with random measurement errors (or an atypical short term job). The length of the observation period was also reduced, to see whether this also served to attenuate the relationship, as would be expected from a systematic tendency to reversion. And the lagged JS score was replaced with a set of quantiles, to see how truncation effects might be responsible.

In fact, though analyses with larger data sets (over shorter intervals) did suggest that truncation played a role, there was no real evidence of this with the BHPS. Support was, however found for both of the other hypotheses, with their contradictory implications as to what should be done. The compromise solution eventually adopted involved averaging the first 5 waves of the survey to define the baseline JS level, down-weighting this by 20% in calculating JS change, and omitting JS levels from the RHS of the regressions.

4 Analysis and Results

4.1 Short Term Occupational Progression

Preliminary regression analyses were undertaken with the LFS, which has a very much larger sample of workers, enabling finer geographic distinctions to be made, though it only has short-term (1 year) information on changes in position, and lacks attitudinal data. These served to confirm that, as Fielding had indicated if there was an escalator city/region in the UK it was within the Greater South East (the GSE, i.e. London and its two adjacent regions). But they suggested that the relevant job opportunities were heavily concentrated in its core. Simple analyses of JS *levels*^{xxiii} for respondents to the 2004-8 rounds of the LFS showed that, for given demographic and educational characteristics, JS *levels* among Central London (i.e. CBD) workers were some 13% above the national average, as compared with 3-4% in the rest of London, 2% in outer parts of the GSE, and 1% above in the Birmingham and Manchester conurbations - though below average in the other 5 conurbations.

A more restricted analysis of JS *changes* between 2nd quarters of 2008 and 2009 (with results presented in Table 1) identified a similarly large differential in progress (of 18%) for Central London workers, though in this case specifically associated with *moving residence into the GSE during the year*. The basic results here are presented in column 1, with the other columns confirming the robustness of results to omission of the lagged dependent variable (which dominates the basic regression) and exclusion of the majority whose job did not change^{xxiv}. Overall it seems that young people and those with higher education were more likely to progress. In relation to geographies, there is evidence of a broad north-south contrast, with a modest but significant difference of 0.7% in occupational advancement between residents of southern England and those from the north and west. This is evidence

of an *escalator* effect - involving continuing learning and progression - since it essentially relates to people who stayed within one of these two super-regions. It might possibly be stronger among Central London workers, though the evidence on that is not clear here. As a continuing advantage to the average resident it is by no means trivial – but not of anything like the scale of gains made by inter-regional migrants with Central London jobs. These have then to be interpreted as predominantly reflecting a large one-off *elevator* effect, from moving to a place with superior opportunities to deploy already existing capacities. Other inter-regional migrants may make some gains of this kind, but they would be of a very much more modest scale.

This preliminary evidence on short-term changes echoes Fielding's earlier findings and argument in pointing to strong links between upward social mobility and migration into the GSE. But this effect now seems to be specific to Central London job opportunities –and , in that context to be predominantly a matter of once-for-all (elevator) gains from migration rather than continuing movement up the escalator.

From these short-term observations, however, we clearly cannot tell:

- what kind of qualities were deployed by the migrants in pursuing and then securing higher status jobs in Central London;
- how these might feed into superior long term progress as compared with others within that labour market; nor
- what part of the non-migrant population within the escalator region shares the capacity to take advantage of superior opportunities for progression.

To follow these up we turn to the longer term change (and attitudinal) data available from the BHPS. The analyses here first relate job changes to a combination of personal attributes (including job-related ambition, and qualifications) and location/relocation of residence, and then explore the geography of ambition and qualification.

4.2 Long Term Occupational Progression

Two initial sets of exploratory regressions were undertaken in order, firstly, to identify the personal attributes and regional distinctions that actually mattered and, secondly, to find the most appropriate form for the dependent variable. Among the independent variables, these analyses made it clear that age, degree level qualifications, and job-related ambition were all salient, whereas gender, race and religion were not – and that the really significant regional distinction was between the GSE and the rest of the UK. With the aim of

distinguishing between potential escalator and elevator effects, regional indicators were defined both in terms of the proportion of the period spent in a region (representing exposure to any escalator processes), and also in terms of inter-regional shifts between the start and end of the period (to pick up any elevator effects). For the dependent variable, an adjusted job-status change measure was defined which set the baseline in terms of the average of recorded JS scores for the first few years (in order to mitigate measurement errors) and discounted these by a factor (intended to allow for reversion toward the mean or bottom). These decisions were guided by effects on the RMSE for a preferred model specification, leading to choice of a 5 year average for the baseline (as the point of diminishing returns to adding further years) and a 28% discount factor (as the value minimising the RMSE).

Regression results with this adjusted job change measure, for what is effectively a 15 year period (1993-2008) are presented in Table 2. A basic model (in column 1) shows that occupational progression was strongest for young people and those with degrees (with additional one-off gains for those acquiring a qualification at this level during the period), while those who had significant spells out of employment suffered big setbacks, especially if they were older. There is also evidence here that those with higher levels of job-related ambition did significantly better. As far as geography is concerned, the results suggest to that continuing residence in the GSE led to rather stronger progress – not quite significant statistically at the 5% level, but equivalent to about half the value of a degree in terms of long term advancement. None of the migrational variables appears to have any real effect, however: for inter-regional migrants as a group, the suggestion is that they did a bit worse than stayers, with no indication that those moving toward London or the GSE did any better, and the more positive sign for those moving away from London is far from being statistically significant.

A second model discards these migration variables and concentrates on seeing whether there was evidence of a stronger GSE escalator effect among sub-groups who might be particularly suited to exploiting its opportunities. Three hypotheses – relating to the young, to graduates, and those with higher levels of ambition – were tested by interacting the relevant variables with the measure of time spent in the GSE. Results (in column 2) suggest no particular advantage for graduates, an averagely positive (though not significant) effect for those under 32 at the start of the period, but a clearly stronger effect of GSE residence

for those with higher levels of ambition. For those lacking any of these attributes, the suggestion (from the coefficient on the simple measure of time spent in this region) is that they did less well in the GSE than elsewhere. This is a bit misleading, however, since no-one in the sample actually received a zero score for job-related ambition – but it does seem to be the case that the average middle-aged person with low levels of ambition could expect no benefit from a GSE escalator, beyond the modest gains they might enjoy elsewhere.

This finding suggests the possibility that such benefits might actually be quite heavily concentrated among a small minority of highly ambitious people enjoying very much faster progression within this opportunity-rich region. Experiments replacing the scalar measure of ambition with a set of quantile dummies indicate, however, that those with very high levels of ambition did not gain much more than those with median levels – the real contrast being between the latter and those at the bottom end of the distribution. This can be captured roughly by a division between the bottom 40% and the upper 60% of observations on the ambition scale. A third model thus replaces all the other GSE residence related variables with a pair which interact (the proportion of) time spent in the GSE with dummies for these two groups of less/more ambitious people, applying this first to our full sample (column 3) and then to a sub-group of the youngest (column 4). The results now show clearly significant gains (averaging 6.3%) from continuing residence in the GSE for the more ambitious group, and none for the less ambitious. When this analysis is broken down by age, these gains seem to be heavily concentrated among the youngest (those aged between 22 and 28 in 1991), with average increment to their JS level of 16.6% over the period. Though not shown here (since the GSE effects are not statistically significant), the corresponding results for those in the older (29-47 year old) group suggest gains to the more ambitious group from staying in the region which are only about a fifth of those enjoyed by the younger cohort. Given the large overlap in ages between members of the two groups during the observation period, this contrast implies that escalator effects may only really apply while people are in their 20s and early 30s.

4.3 Social and Spatial Influences on Job-Related Ambition

These results point to a very strong interaction between job-related ambition and residence in the escalator region (i.e. the GSE in this case), both in the sense that only the more ambitious seem to benefit from the escalator, and also in that access to this escalator seems necessary for this group to convert their ambition into faster progress in the job market. But

there is also a question as to how far ambition itself may be unevenly developed among residents of different regions. This cannot be explored in much depth with the BHPS since the relevant questions were only asked in two waves of the survey, and the derived measure clearly contains quite a lot of noise. Nevertheless, patterns and associations in the data provide some basic evidence about the geography of ambition and its role in reproducing social positions.

On a cross-sectional basis, individuals' scores on the index of job-related ambition are most clearly (and positively) associated with their levels of academic achievement, and with their father's social class^{xxv} (both directly, and also indirectly, via educational outcomes which are linked to parental class). There is also a statistically strong, though substantively much weaker, association with gender – women recording significantly higher levels of job-related ambition^{xxvi}. Marital status also seems to be a factor, with the never married displaying significantly higher levels of ambition, and with entry into couplehood as one of the clear influences (together with acquiring additional qualifications) on changes in measured job-related ambition between the 1991 and 1999 waves. This looks like a question of trade-offs between priorities.

Spatial variables all seem to have weaker links to ambition, though ambition levels do tend to be rather higher among residents of the GSE. On what now seems the most salient measure - based on the split between those in the bottom 40% on the ambition scores, or above that – just 32% of GSE residents in 1991 were in the former group, as compared with 42% in the rest of the UK. Controlling for qualifications and parental class (both favouring the GSE) only reduces this gap by about a quarter. It seems that this regional disparity could have come about in 3 main ways. It could reflect differences in the context of primary socialisation and attitude formation; or it could involve a subsequent adaptation to the differential availability of relevant opportunities in the region of residence; or it could reflect selective migration of the more ambitious toward regions in which they could realise their drive for advancement.

Taking the 1991/1999 based ambition classification as a constant reference point and comparing residence inside or outside the GSE for the first and last survey waves (1991 and 2008), it is evident both that a much smaller proportion of the low ambition group actually shift between these two broad regions (2% as compared with 7%), and that the higher

ambition group is entirely responsible for the net shift into the GSE. But, even over 17 years, this shift is quite modest, representing just 4% of the GSE sample, and lowering the share in the low ambition group by only 2% (as compared with the 10% gap to be explained). Looking at the relation between place of birth and region of residence in 1991, however, it is striking that the bias toward the upper ambition group within the GSE then seems almost entirely attributable to people born outside the GSE, whether elsewhere in the UK or overseas. Earlier movement to the GSE seems to have brought it (by 1991) a group of people who whether naturally (through primary socialisation) or subsequent adaptation have proved more than usually ambitious – rather than this being a natural advantage of (and for) those born and brought up there.

5. Conclusions

Starting from a conception of occupational progression focused on development of human (and social) capital, this paper has emphasised the crucial contributions of *both* dynamic human capital (including ambition as well as learning skills) *and* access to opportunities for acquiring tacit knowledge, together potentially with those urban contexts (in leading agglomerations) which have concentrations of both.

A distinction has been drawn between three processes that contribute to an uneven geography of human capital stocks: *bumping down* of displaced workers in slack labour markets; an *elevator* operating at the point of migration for those whose talents have been underemployed in such areas (or whose promotion within a specialist role depends on taking opportunities where they arise); and an *escalator* offering continuing prospects of upgrading for those workers in the core region who are able and willing to pursue them. Within the last of these a further distinction has been made between two versions of an escalator region hypothesis: a ‘weak’ one simply reflecting compositional effects stemming from a highly selective mix of resident and job types in successful high order centres; and a ‘strong’ one, involving positive interactions between each of these in the context of particularly thick and competitive sub-labour markets.

Empirical investigation with two British surveys confirmed Fielding’s observation for an earlier period that some version of the London region stood out in its association with strong progress up the occupational ladder. From observation of short term changes the dominant

effect appeared to be an elevator one associated with graduates coming to work in Central London jobs. Evidence on long term changes, however, clearly showed the operation of escalator processes for residents of a much wider GSE region, though essentially confined to young people with at least reasonable levels of job-related ambition. And, consistent with a strong version of the escalator thesis, such ambition appeared only to be rewarded within the context of this region. This is only a partial test of the thesis, since other sources with larger samples are required to examine how much of the escalator effect is simply dependent on a concentration in/around London of job opportunities offering privileged access to cutting-edge stocks of tacit knowledge.

Within this account it is not specifically migrants who benefit from the escalator process, but they are found to include a disproportionate share of the relatively ambitious people who are the main beneficiaries. Job-related ambition is found to be a mediating variable which contributes to inter-generational continuities in relative job status, with the GSE having the biggest share of those likely to produce ambitious offspring. But their strong representation within this region has much more to do the selective attraction of ambitious migrants, both from abroad and from the rest of the UK.

A key aspect of the version of the escalator thesis developed here is that it makes a substantial part of the rewards derived from operating within the leading city-region contingent on (effective) efforts by the workers concerned to develop their capacities. Together with the specificity of job opportunities to which migrants are attracted, this can help to explain how, even with strong spatially equilibrating forces operating in the labour market, large inflows of migrants continue to be attracted to the core region.

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APPENDIX

BHPS Questions used to construct the indicator of Job-Related Ambition

1. The most (and second-most) important reason for working:
 - Follow my career; *[scored positively]*;
 - Essential foods etc; and People's company *[both scored negatively]*;
 - Working is normal; Enjoy working; Money for Extras; Earn Money for self; and Other reason *[all unscored]*;
2. The most important (and second-most) aspect of a job:
 - Promotion prospects; Using initiative; and Actual work *[all scored positively]*
 - Total pay; Good relations with manager; Job security; Hours worked; and Something else *[all unscored]*.

Tables

Table 1: Regressions of Single Year JS Change on Individual and Spatial Attributes

	Full Sample		JS Changers only	
Constant	.122*** (20.3)	-.006*** (3.0)	1.061 *** (29.6)	-.046 (2.8)**
Job Status at start of year	-.057*** (29.6)	..	-.477 (34.4)	..
Age <50	.004* (2.2)	.004* (2.5)	.002 (0.9)	.037* (2.5)
Higher Education	.029*** (15.2)	.005** (2.7)	.196*** (16.1)	.036** (2.6)
Resident in Southern England	.007*** (4.1)	.005** (3.1)	.002 (0.9)	.038** (3.0)
Inter-regional mover + Working in Central London	.186*** (4.3)	.183*** (4.2)	.789** (3.0)	1.085*** (3.7)
Other Central London worker	.006 (1.3)	-.009 (2.0)	.054 (1.9)	-.063* (2.0)
Other inter-regional mover	.017 (1.7)	.017 (1.7)	-.012 (0.3)	-.032 (0.7)
N	34230	34230	4564	4564
Adjusted R ²	0.026	0.001	0.212	.007

Source: Analysis of QLFS 2nd qtr. 2009

Notes: 1. dependent variable is JS change since reported occupation and status 12 months previously; 2. Inter-regional movement is over previous year, between standard regions, excluding moves between parts of the GSE; 3. Southern England comprises London, East Anglia, East Midlands, South East and South West 4. Bracketed figures are t statistics, asterisks indicate significance (*=5%, **=1%, ***=0.1%)

Table 2: Regressions of Long Term JS Change on Personal and Spatial Variables

	1	2	3	3a
Age Range (1991)	22-46	22-46	22-46	22-28
Constant	1.809*** (11.4)	1.748*** (9.8)	1.839*** (11.8)	0.593 (0.7)
Age	-0.364*** (8.0)	-0.338*** (6.7)	-0.361*** (8.0)	0.032 (0.1)
Ambition: scale	0.146* (2.5)	0.063 (0.9)		
upper 60%			0.013 (0.6)	-0.044 (1.0)
Degree:				
At start of period	0.074** (3.0)	0.069* (2.2)	0.081*** (3.4)	0.089 (1.9)
Gained during period	0.151*** (3.9)	0.153*** (3.8)	0.156*** (4.1)	0.225*** (3.2)
Proportion of Time out of Work:				
Aged < 32 in 1991	-0.631*** (4.1)	-0.639*** (4.1)	-0.618*** (4.0)	-0.536** (2.8)
Aged 32 + in 1991	-0.910*** (3.9)	-0.927*** (4.0)	-0.971*** (4.1)	..
Proportion of Time Spent in GSE	0.035 (1.8)	-0.081 (1.6)		
Interacted with:				
< 32 in 1991	..	0.037 (1.0)		
Graduate	..	0.009 (0.2)		
Ambition: scale	..	0.271* (2.1)		
bottom 40%	-0.017 (0.6)	-0.056 (1.0)
upper 60%	0.067** (2.7)	0.186*** (3.3)
Inter-Regional Migrant	-0.026 (0.8)			
toward London / GSE	0.002 (0.0)			
from London beyond GSE	0.042 (0.5)			
SE	0.063	0.062	0.062	0.070
Adjusted R²	0.135	0.141	0.141	0.096
N	868	868	868	238

Source: Micro-Data from British Household Panel Study (via ESDS)

Note: Dependent Variable is calculated as: JS score for 2008 less 0.72*mean of JS scores for 1991-5 – for respondents in employment and with recorded occupation at each date.

Notes

- ⁱ These labels for the two processes reflect the implied time profiles of change in occupational status: with a simple vertical uplift in the elevator case; and movement on a continuing upward slope in the escalator case. This (more natural) usage differs from that of Findlay et al (2009) who apply the 'elevator' term to promotions that do not require a residential move, and 'escalator' to ones that do.
- ⁱⁱ Formally such items of human capital which are wholly embodied are to be distinguished from elements of social capital which involve the active participation of others. In the (micro-level) context of the present paper, that distinction is neither crucial nor very clear, since key skills often involve managing social interactions, and both involve context-dependent elements.
- ⁱⁱⁱ including the 'erotic capital' to which Hakim (2010) has recently drawn attention
- ^{iv} Though aspects of McClelland's own empirical work were challenged, and this social psychological approach to mobility studies later lost out to more structural perspectives, the classic sociometric modelling incorporating such factors did find 'that the influence of education on occupation is mediated by motivational as well as cognitive and institutional factors' (Duncan and Featherstone, 1972).
- ^v accounting, on Gathmann and Scholberg's (2010) estimates, for upwards of 25% of wage growth overall, and at least 40% of (the more substantial) growth among university graduates.
- ^{vi} or in the original 1977 Fred Ebb lyric, for a singer 'leaving today' from his 'little town': 'If I can make it there, I'll make it anywhere It's up to you, New York, New York'.
- ^{vii} Same source as previous note
- ^{viii} which might only be a relatively small part of the general labour market, even in a high order centre.
- ^{ix} with X and Y [anonymised].
- ^x This survey is undertaken by the Institute for Social and Economic Research, and distributed via the UK Data Archive, both at the University of Essex.
- ^{xi} For the form and scoring of this question see the Appendix.
- ^{xii} True longitudinal analyses are being undertaken separately using the ASHE data-set, to investigate other issues about the escalator region hypothesis.
- ^{xiii} among other factors, including migration policies and the social attractiveness of different kinds of work.
- ^{xiv} This categorisation is based on answers to questions about such responsibilities, applied independently of employee/self-employed status.
- ^{xv} To limit duplication of cases (among people surveyed over 5 successive quarters) responses from only one of the four quarters was used for each year, yielding a total of some 67 thousand usable observations for the calculation of the JS scores.
- ^{xvi} Because logged values were used for all calculations, 'averages' all relate to geometric means.
- ^{xvii} In fact, just 3 regions – London, Eastern/South Eastern, and the rest of the UK - differentiated on the basis of housing costs, as an independent influence on earnings.
- ^{xviii} Distinguishing those in establishments with 1-10, 11-24, 25-49 and 50+ workers.
- ^{xix} Standard errors for the simple averages were computed on the basis of simple random sampling and the number of cases observed in the niche, while those for the regression estimates were simply derived from the standard error of estimate, which (in relation to true population values) was assumed independent of the number of cases in a cell. Weights were then computed to minimise expected error in the synthetic estimates. In the largest cells, the simple averages were given weights

over 0.9, while for the smallest they were below 0.1; for cells with 50 cases in the sample the two estimates received equal weights.

^{xx} Where the same edition of the Standard Occupational Classification has been applied. This includes the 1991-2000 rounds of the LFS, but all waves of the BHPS.

^{xxi} References to pay, security, hours, and relations with managers were discounted.

^{xxii} As will be noted in the analysis section, explorations of differences in values between the two surveys suggested some real shifts associated with changes in marital status and qualification levels – though not with job status.

^{xxiii} These were computed using a parallel methodology to that described in section 3 for the BHPS data set, though benchmarked with later earnings data and occupational classification.

^{xxiv} The analyses reported here rely on retrospective reporting of baseline jobs etc. 12 months previously, taken together with reports of current positions from a single wave of the LFS, rather than using its longitudinal element to compare responses made in two separate waves. The former were judged to produce more reliable JS change measures because of the potential for inconsistent recording and coding of occupations in the latter case (which suggested that 35% of respondents changed niches over the year, as compared with just 15% from the retrospective data).

^{xxv} based on their occupation when the respondent was aged 14.

^{xxvi} The fact that this is not translated into higher rates of JS advancement seems to reflect the much greater incidence of periods of non-employment among women.

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