DEMOS

The Place Race

The role of place in attracting and retaining talent in Scottish cities

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Executive summary

Introduction

This report is about the relationship between mobility, talent and place. More specifically it is about how four of Scotland's city regions – Aberdeen, Dundee, Edinburgh and Glasgow – can influence this complex relationship to attract and retain talented workers.

The competition for talent is hotting up thanks to two trends: the transition to a knowledge economy and the greying of the UK population. Highly skilled people have become the most critical factor of competitive advantage. Economic development has become less about creating and attracting firms and more about training, retaining and attracting skilled people. In a reversal of what seemed an economic law, jobs have begun to follow people.

But at the same time as demand for talent has been increasing, economies are questioning their capacity to supply this essential resource. The UK is getting older. By 2020 there will be over two million more people aged 50–65 than in 2005. In fact, over half of the working-age population of 2020 are today already over 25. Scotland is likely to be hit especially hard. While the number of 'prime age' (25–49) workers in England is set to increase slightly until 2020 and remain constant in Northern Ireland, it is due to fall by 11 per cent in Scotland.[i] Increasing migration is therefore critical. Three-quarters of migrants to the UK are of working age and a higher proportion is qualified to degree level than the population as a whole.[ii]

Coordinating the response to these challenges is a task that will increasingly fall to city regions. One of the paradoxes of globalisation is that cities and the functional regions to which they belong have become more, not less important, in part because of the benefits of clustering knowledge-intensive organisations in close proximity to one another. City regions have increasingly become an important scale at which to coordinate economic development, planning and policy implementation. The result is that Scotland's city regions are both able and expected to take more responsibility for aligning strategies for retaining and attracting talented people to their own distinct economic development needs.

This report explores how Scotland's four city regions are currently performing and their prospects for improving their performance across the broad range of issues that impact on the place/talent relationship. Three core questions structured the research:

- What affects where talented people choose to move for work?
- How and why does 'place' matter to these decisions?

- How can governments, public agencies and the private sector use this knowledge to improve the ability of places to attract and retain talent?

A talent's eye view of place

While there is a growing body of international research on talent attraction, the evidence tends to focus much more on why talent is important to place than why place is important to talent. The factors that affect mobility are complex; while place frequently features among them, the conditions under which it becomes important and its relationship to other factors are not clearly understood.

This report therefore explicitly focuses on a crucial but neglected part of the story: the perspectives, experiences and behaviour of talented people themselves, the issues that they identify as important, and how they make decisions about where to live and work.

Taking this 'talent eye view' reveals that people's relationships to place are unique and determined by individuals' 'social biographies'. However, the research also identified a number of general factors that act as positive or negative influences on decisions to move to a place. These are:

- *Identity*: Places with a distinctive identity in architecture, nature, history and strong communities are viewed positively. Clone towns and identikit places are perceived negatively.
- *Diversity*: Visible difference and variety in culture and ethnicity is valued, as is tolerance and more active forms of integration, rather than just co-existence of different communities.
- *Public services*: Decent healthcare, education and transport are minimum standards that talented people expect any place to have.
- *Natural environment and beauty*: Quality and access to the natural environment are valued.
- *Night-time economy*: An 'open all hours' culture is important – not just bars and clubs, but cafés, shops, wi-fi access, culture and community events.
- *Open-air culture*: Free cultural and sporting events – from 'big ticket' fixtures and festivals that help build a place's profile among potential migrants to more low-key community gatherings that make existing migrants feel at home.
- *Transport connectivity*: International airport, high-speed rail links and decent public transport are attractive, because they make it easier both to visit home and to explore the surrounding region.
- *Culture*: Museums and galleries are important to talented people – not just as amenities, but as status symbols of city identity.

- *Participation and change:* Places that are undergoing a process of renewal appeal. It is important for talent to feel part of a place and to have an opportunity to shape it and connect meaningfully with 'the local'.
- *Liveable city centre*: Cleanliness, pedestrianisation, walkable city centres and quality shopping, public art, and a mix of old and new all make a city liveable in the eyes of talent.
- *Housing*: Affordability and quality are talent's main concerns. Life stage frequently affects whether this is in the rental or buyers' market.

Central to this understanding of place is the public realm: the shared spaces and places, both virtual and physical, that make up a city. The design, quality and cleanliness of the public realm has risen up the political agenda in the last decade, with more resources – and more care – devoted to urban development strategy. The importance of these issues to talent is evident in the rejection of 'clone town' architecture and the strong preference for diversity, individuality and design quality. However, the research also points to the need for an expanded definition of the public realm. High design standards and demanding planning systems are important, but investing in a quality public realm also means going beyond the physical. The public realm also means the shared values, experiences, events and culture a city supports, How accessible, open and welcoming these are to new people is therefore an important issue for talent policy.

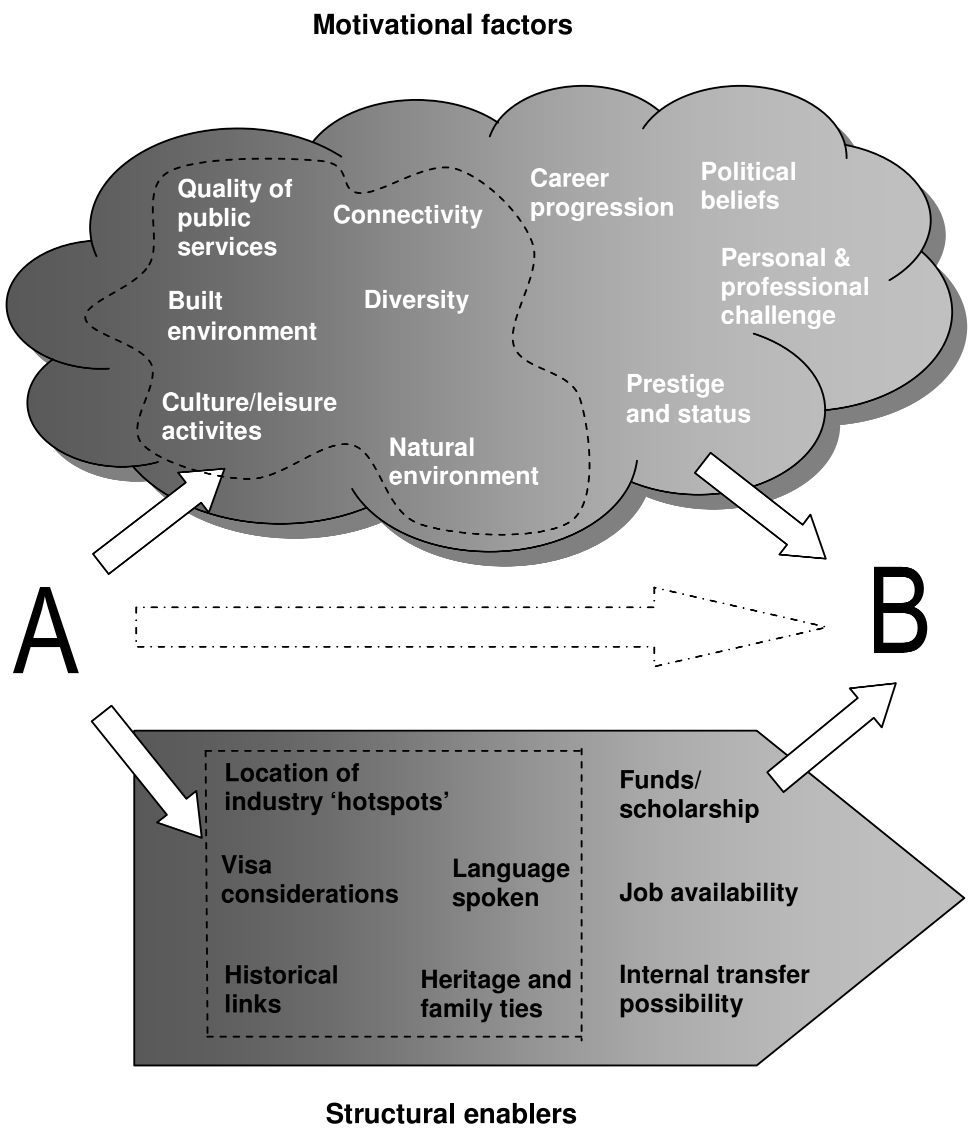
Putting place in its place

The research found that while place is important, it is rarely the principal reason for moving to a certain city. Career and personal factors tend to play a greater role than place alone. But under certain conditions, place can play a significant part in the migration decisions of talented people.

Migration decisions of highly skilled workers are a mix of 'motive' and 'opportunity'. They reflect both **motivational** factors, such as personal or professional aspirations, and **structural** enablers, such as historical linkages and the availability of scholarships or opportunities for internal job transfer. Figure 1 illustrates the different influences on mobility pathways that emerged from our research.

While the impact of place on these mobility pathways is distinctive to each individual, it is shaped by some common factors. The research found that the most important are: **life stage** and **career type**.

Figure 1. Mobility pathway model



Life stage

The research found that people tend to be at their most mobile when they are at a crossroads in life. For example, school leavers moving away for university, young

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parents taking the last chance for adventure before children start school, or older parents expanding their horizons after their children have left home.

The research found that the aspects of place that matter most vary at each of these peaks of mobility. For example, those deciding where to go to university tend to prioritise issues such as quality of nightlife, distance from family and housing costs, whereas, for a couple with young children, place considerations tend to focus on safety, public space and public service provision.

Career type

The research methodology gave a particular emphasis to six 'priority industries' identified by Scottish Enterprise. The research identified significant differences between expectations of mobility across these industries. Life sciences stood out as the industry in which mobility was most important to career progression, although it was also a common way for those working in digital media and financial services to 'move up the value chain'. In contrast, those working in tourism treated mobility as an end rather than a means: they chose their career partly because of the opportunity to travel, rather than choosing to travel because of the career opportunities.

It is more difficult to generalise about how working in different industries affects where people choose to live. However, the research identified the impact of a number of obvious 'structural' constraints for different professions, for example, the location of oil fields in the case of those working in the energy industry; cities with top-ranking research universities in the case of life sciences; or the existence of a clearly identified set of global financial hubs (London, New York, Tokyo, Frankfurt etc) and the role of internal company transfers in the case of the finance industry.

How Scotland's city regions are performing

To complement the qualitative research, we designed a quantitative benchmarking tool for analysing the relative performance of Scotland's city regions on four important dimensions of talent attraction which emerge from the qualitative research:

- a place's **reputation** and 'brand', both generally and in relation to specific industries
- the commercial and intellectual climate of a place and the **opportunities** it seems to afford
- the social and cultural **values** of a place, including the sense of community cohesion and openness to newcomers it projects
- the physical **assets** of a place, including its geographical connectedness, retail offer and the quality of its public realm

The ROVA model – short for 'Reputation, Opportunities, Values and Assets' – uses a number of proxy indicators to measure the performance of the Scottish city regions along each of these dimensions and compare this performance with city regions in other parts of the UK.

The purpose of ROVA is to provide a methodology that can be used and adapted by policy-makers and others interested in assessing their city region's relative performance, identifying its strengths and weaknesses, and prioritising areas for improvement.

There are inherent difficulties in undertaking an exercise like this, including the availability of good data, the porosity of city region boundaries, and the natural limitations of trying to capture a process as complex and context-specific as talent attraction. For these reasons, the results need to be interpreted carefully and in the context of the findings of the qualitative research and other evidence.

With these caveats in mind, the 'traffic light' in table 1 is a heuristic device designed to offer a snapshot of the city regions' comparative performance on the four dimensions of Reputation, Opportunities, Values and Assets. City regions earn a green light for those dimensions in which they feature in the top three of our sample, a red light for those in which they feature in the bottom three, and an amber light for those in the middle.

Table 1. ROVA results

City region	Reputation	Opportunities	Values	Assets
Aberdeen	Red	Amber	Green	Green
Dundee	Red	Red	Amber	Red
Edinburgh	Green	Amber	Green	Green
Glasgow	Amber	Red	Amber	Green
Birmingham	Green	Green	Red	Amber
Bristol	Red	Green	Green	Amber
Leeds	Amber	Green	Red	Amber
Liverpool	Amber	Red	Amber	Red
Manchester	Green	Amber	Amber	Amber
N/G	Amber	Amber	Amber	Amber
Sheffield	Amber	Amber	Red	Red

Note:
N/G, Newcastle/Gateshead
Green Amber Red

- **Aberdeen** receives good scores for Values and Assets, but its strong profile within the energy industry does not translate into a high score on the Reputation dimension.
- The strengths that emerged in the qualitative research in relation to **Dundee** do not come through in the ROVA model. The city region scores relatively poorly on three of the four dimensions, although it scored higher than most of the English city regions on Values.

- **Edinburgh** emerges as the strongest performer among the Scottish city regions and indeed in the sample as a whole.
- **Glasgow** scores highly on the Assets dimension, boosted by its transport connections and strong retail offer, offsetting a low score on the physical quality of its built environment (proxied by the amount of derelict land).

Ways forward

How can governments, public agencies and the private sector use this knowledge about the motivation and behaviour of highly skilled individuals to make places more attractive?

From the research, a set of broad principles can be identified which help to frame a response. In summary these are:

1. Levels of mobility and demands of place change as people pass through different phases of life, so tailor talent attraction strategies that relate to place by life stage.
2. Invest in broad networks to build affinity and generate 'motives' for talent to relocate.
3. In talent attraction, its not just about increasing the general 'pull' of a place, it's about creating 'hooks' specific to target industries.
4. People care what a place stands for, not just what it looks like, so make the values of a place tangible within the physical public realm, events programme and public services.
5. First impressions count, but talent attraction is a long-term process: take a wide view of 'the rules of attraction'.
6. Collaborate to attract: within sectors, within city regions, across boundaries of city regions, and with citizens.
7. Integrate talent attraction into broader strategies of economic development.
8. There is no blueprint: the best talent attraction policies are home grown.

Priorities for the city regions

Bearing these principles in mind, a number of particular priorities can be identified for each city region.

Aberdeen

The research identified that Aberdeen's reputation is its main weakness in its overall appeal to talented migrants. The city has a strong reputation in the energy sector (and specifically in oil and gas), but it has struggled to diversify its offer beyond this traditional specialism. Aberdeen's talent attraction efforts need to be strongly allied with efforts to improve the public realm of the city region in terms of creating a cultural, retail and leisure offer that better matches and serves its moneyed, entrepreneurial population.

Priorities, actions and recommendations

- Invest in both the daytime and evening economy of the city centre.
- Identify and support regional hubs for cultural and social activity.
- Use the strong enterprise culture within Aberdeen's population to help socialise and animate Aberdeen's cultural programme and public realm.
- Support stronger branding of the city region's unique natural environment assets and evaluate success at reaching target groups through branding to date.

Dundee

Dundee is changing rapidly and has at least two high-profile, internationally focused industries: life sciences and digital media. It has successfully created new assets such as the Dundee Centre for Contemporary Arts and the pedestrianised town centre. However, Dundee suffers from a relatively low profile outside Scotland and a persistently poor image within Scotland. Dundee's talent attraction and retention efforts need to be closely allied with mainstream policies to improve the reality and perceptions of place.

Priorities, actions and recommendations

- Diversify and extend the play economy, including retail, culture and night-time economy.
- Develop a place agenda that adds to pride and distinctiveness – for example around child friendliness of the city and environmental quality.
- Develop Campus Partnerships with the city region's universities to deepen relationships and interactions between the city region and migrant students, helping to create touch points and warm up future mobility pathways for talent attraction.
- Investigate the benefits of greater city region branding to bring together Dundee and St Andrews.

Edinburgh

Edinburgh emerges as the strongest performer in terms of its talent offer among the Scottish city regions. But its strong reputation creates high expectations that are sometimes left unmet. These shortfalls include a labour market (particularly at the senior level) that is not yet able to match the opportunities available in other major financial centres, a city centre that many of those interviewed felt was dominated by tourists, and the perceived lack of integration between the settled population and newcomers. Edinburgh's priority in terms of talent attraction and retention is minding the gap between its promise and the reality. An important part of addressing this will be deepening the collaboration between Edinburgh and Glasgow, not least because this could enable Edinburgh to draw on a wider set of assets and opportunities to better meet the needs and aspirations of talent.

Priorities, actions and recommendations

- Continue to deepen the city's collaboration with Glasgow as partner, with complimentary assets.
- Rebalance the city centre so that the perception and reality of the city centre provide a better offer for residents by making time and space for activities that serve local needs – both on a symbolic and practical level.
- Develop and support alternative and distinctive neighbourhood centres like Leith, which appears to excel at supporting local needs, aspirations and crafting a local sense of identity.
- Identify 'latent talent' among the young, transient and international population of the city.
- Develop prompts for better integrating the settled and migrant population through schools, culture, professional networks and neighbourhood activities.

Glasgow

Glasgow has been one of the star cities of the urban renaissance. But of the four city regions studied, it still has the furthest to go in terms of the 'basics' of the urban realm: crime, grime and dereliction. The research indicates that improvements need to be felt next at the local and neighbourhood level, and less in terms of iconic set pieces – of which the city has plenty. The huge investment in marketing Glasgow has been successful, but our research suggests that maturing its offer and image will be a long-term process and there could be a considerable lag in reaching certain groups. Glasgow will benefit from greater collaboration with Edinburgh in a number of critical areas, not least financial services.

Priorities, actions and recommendations

- Engage Glasgow's creative community in the grime and crime agenda.
- Continue to develop Glasgow–Edinburgh collaboration to add depth and breadth to the labour markets of both cities – a particular benefit to Glasgow in the case of financial services.
- Develop a wider range of 'iconic' anchor institutions, including hospitals, parks and companies to help foster a broader sense of civic leadership within the city and visible touch points for migrant and potential migrant populations.
- Diversify the branding message and use Glasgow's assets to target different and more nuanced life-stage demands of talent.

1. Introduction

This report sets out to answer three questions:

1 What affects where talented people choose to move for work?
2 How and why does 'place' matter to these decisions?
3 How can governments, public agencies and the private sector use this knowledge to improve the ability of places to attract and retain talent?

We focus on Scotland and, in particular, its four main city regions of Aberdeen, Dundee, Edinburgh and Glasgow, where these questions have a particular resonance.

Scotland as a whole benefits from what, by international standards, is already a very well-educated workforce. It is well positioned to take advantage of the increasing returns to skills that individuals and whole economies now enjoy. But its workforce is getting both older and smaller, and at the same time it faces the now familiar challenges of stiffer competition from dynamic, low-cost production centres in east Asia and other parts of the developing world. Retaining and attracting talented people is therefore critical to Scotland's future prosperity.[iii]

The city regions of Aberdeen, Dundee, Edinburgh and Glasgow find themselves at the centre of two related trends. The first is their integration into an increasingly European (indeed, global) market in people, products and ideas. The second is the growing acceptance among policy-makers, for reasons that we review in the next chapter, that the city region itself has become an important scale at which to think about economic development, planning and policy implementation. The result is that Scotland's city regions are both able and expected to take more responsibility for aligning strategies for retaining and attracting talented people to their own distinct economic development needs than they were even 15 years ago.

The scope of the report

Put simply, then, this report is about the relationship between talent and place, and what different actors can do to influence it. But before proceeding, it is worth saying a little more about whom we mean by talent, what we mean by place, and how we define influence.

Defining talent

We discuss the issues surrounding the definition of talent in more depth in our review of the literature in chapter 2. To précis this discussion, we define talent in this report broadly as 'highly skilled, qualified, entrepreneurial or creative people who are of high potential value to a city region'.

Our focus is *not* on low-skilled workers, although it is perfectly possible that some of the issues we identify and strategies we propose may also be relevant to that segment of the workforce too. Indeed, an important issue beyond the scope of this report is the skills waste caused by skilled migrants working in low-skilled jobs. Some initial research suggests this is particularly relevant for the high number of central and eastern European country migrants working in Scotland since the 2004 accession to the European Union.

Defining place

As we have already noted, our focus in this report is on the relationship between city regions and talent. But city regions are only one, and not always the most influential, tier in the system of multi-level governance through which places are governed. What happens above the city regional level – at regional, national and supranational level – matters a great deal, as does what happens at the local level within city regions. The question of what policy-makers can do to make places more attractive therefore depends on which policy-makers we are talking about.

This will become particularly important in chapter 3 when we develop our model of the factors that seem to shape the mobility of talented people. Some of these factors are conducive to intervention at some levels of governance but not at others. In short, we look at this issue from a city regional perspective, but do not pretend that this is the only possible vantage point.

Defining influence

The reality of multi-level governance further complicates how we understand policy-makers' ability to influence the relationship between talent and place. Broadly speaking, there are two main types of policy for attracting talent. The first are policies aimed directly at attracting talented people to a particular geographical jurisdiction, be it supranational, like the proposed EU 'blue card'; national, like the migration points systems of Canada and the UK; regional, like the regional fast-tracking systems in some Australian states; or city-regional like the Shanghai City green card. The second are policies that do not aim to attract talent directly, but may nevertheless fulfil that purpose indirectly. For example, many policies to improve the physical environment of a place or the quality of life of its residents may help to make that place more attractive to talented people, even if that is not their primary aim. For sensible, practical reasons, the emerging division of labour is broadly (though not exclusively) that policies at the national and supranational level tend to fall into the first category, and policies at the regional and city-regional level tend to fall into the second category. Again, this discussion will be important when we introduce our model of mobility in chapter 3, because different types of policies are likely to be effective in addressing different influences on mobility.

Outline of our approach and the structure of the report

To address our three principal research questions, we conducted a comprehensive review of the literature on the relationship between talent, mobility and place. The results of this literature review are summarised in chapter 2. Our assessment is that we know much more about why talent is important to place than we do about why place is important to talent. The factors that affect mobility are complex. While place frequently features among them, the conditions under which it becomes important and its relationship to other factors is often unclear. In chapter 3 we set this analysis against the context of Scotland and the city regions of Aberdeen, Dundee, Edinburgh and Glasgow. Those with an in-depth knowledge of the context may wish to skip over this context setting.

In chapter 4, we analyse extensive qualitative fieldwork, including 42 interviews and nine focus groups, to develop a finer-grained understanding of what drives the mobility decisions of talented people. We outline a conceptual model that tries to draw together these various influences and illustrate the relationship between them. In particular, it revises the traditional notion of 'push' and 'pull' factors, preferring instead to distinguish between what in TV courtroom dramas would be called 'motive' and 'opportunity' – factors that affect the motivation to move, and structural enablers which make it possible to move. We argue that place influences both motive and opportunity, but in different ways and over different timescales.

In chapter 5 we apply this understanding of the ways in which place matters to the mobility of talented people to the specific case of Scotland and its four main city regions. We report what talented migrants or potential migrants to Scotland told us about their perceptions of the country and the different city regions, how this shaped their decision-making, and what this reveals about their strengths and weaknesses.

Chapters 6 and 7 situate this analysis of how well Scotland's city regions are measuring up within a more quantitative, and comparative framework. These chapters build on the evidence that emerges from our review of the literature and our qualitative research on why different aspects of place matter to the mobility decisions of talented people. Chapter 6 offers an original approach to benchmarking the Scottish city regions' attractiveness to talent compared with potential peer cities in England: the ROVA Index. It uses a series of quantitative indicators to assess and compare performance along a number of key dimensions that have emerged as important. Chapter 7 uses a number of qualitative case studies to explore how urban regions in other countries have approached the challenge of attracting talent in these dimensions.

Chapter 8 offers our conclusions and recommendations, which can be summarised as four main points:

- The mobility of talented people is determined by both ‘motive’ or motivational factors and ‘opportunity’ or structural factors, which interact in unique ways to create individual mobility pathways.
- ‘Place’ has an impact on both motivations and structural factors but is rarely the principal reason for moving to a certain city. That said, place can make or break the decision to move there.
- While relationships to place are unique, there are a number of general factors that act as positive or negative influences on decisions to move to a place.
- Common patterns also emerge when comparing different career types and life stages. Career type affects propensity for mobility, while life stage affects both this, and also the relative importance of place in decision-making and the type of place motivation that has the greatest impact.

We conclude by providing an account of key areas for action in each city region, and a set of universal recommendations for talent attraction policy.

2. Lessons from the literature

What can existing literature tell us about why competition for talent has become such an important issue? What are the dynamics at play, and what do they explain about the relationship between talent, mobility and place both in general and in the specific Scottish context of this research?

In essence, three conclusions emerge from the literature:

1 The emphasis on attracting and retaining talent is due to the increasing importance of, and returns on, skills in the knowledge economy, and on the changing demographic profile of the workforce.
2 This is an issue that city regions and not just national governments have to care about. A lot of the reasons why knowledge is more important have to do with how it interacts with aspects of place. Agglomeration effects and functional spill-over are all complicated ways of saying that putting smart people together in cities creates a kind of multiplier effect that doesn't happen either at the smaller or the much larger scale.
3 While we know a fair amount about why talent is important to place, we know less about why place is important to talent. What we do know is that mobility decisions are not always strictly 'rational', but conditioned by availability of information and other constraints; they vary across different types of career, and they are heavily influenced by earlier experiences.

The talent squeeze

The competition for talent is hotting up thanks to two 'megatrends': the transition to a knowledge economy and the greying of our society.

National governments and supranational institutions are now only too familiar with the challenges posed by the dramatic economic shifts that have taken place over the last 25 years. While manufacturing contributed over ten percentage points more of the UK's GDP than financial and business services in 1980, by 2002 the exact opposite was true. The skills requirements of the average job have risen rapidly in the knowledge economy, and coupled with the challenge to established economies by the growing global output of 'emerging giants' like China and India, this means there is a pressure to take advantage of innovation like never before. This requires talent.

Highly skilled people have become the most critical factor of competitive advantage. Economic development has become less about creating and attracting firms and more about training, retaining and attracting skilled people. In a reversal of what seemed an economic law, jobs have begun to follow people.

But at the same time as demand increases, economies are questioning their capacity to supply this essential resource. The UK is getting older. By 2020 there will be over two million more people aged 50–65 than in 2005. In fact, over half of the working-age population of 2020 are today already over 25. Scotland will be hit badly. While the numbers of 'prime age' (25–49) workers in England are set to increase slightly until 2020 and remain constant in Northern Ireland, they are due to fall by 11 per cent in Scotland.[iv] If this trend should continue, Scotland risks a serious deficiency in its ability to cover the tax bill for an ageing society, to maintain competitive pace in the global economy and to energise the creative capacity of its population.

Migration has a significant impact on both trends, particularly since three-quarters of migrants to the UK are of working age and a higher proportion than the UK average are qualified to degree level.[v] Understanding and influencing the movement of skilled labour has become a priority for policy-makers at every geographical scale, but this research concerns possibly the least well known, and potentially one of the most influential – that of the city region.

City regions as drivers of competitiveness

It is a paradox of globalisation that as transportation and communications technologies improve, and networks of both production and innovation become more distributed, cities and the functional regions to which they belong become more, and not less, important.[vi] Three main factors from the rich academic literature on this subject are worth noting:

1. *Proximity*: A powerful knowledge spill-over effect comes from interaction between clustered institutions and organisations – for example, in the networks of academic researchers, commercial research laboratories, biotechnology start-ups and venture capitalists that have clustered around Cambridge.[vii]
2. *Diversity*: Economic and social variety provide a boost to innovation and problem-solving capacity. This is not a new idea, nineteenth-century philosopher Herbert Spencer wrote: 'From the earliest traceable cosmical changes down to the latest results of civilisation, we shall find that the transformation of the homogenous into the heterogeneous is that in which progress consists.' Jane Jacobs updated this theory in the 1960s: 'City areas with flourishing diversity sprout strange and unpredictable uses and peculiar scenes. But this is not a drawback of diversity, this is the point… of it.'[viii]
3. *Population*: As concentrations of human capital, cities and their tributary regions are the engines of the knowledge economy.[ix] Proximity of people leads to the transfer of tacit knowledge and catalyses the effect of diversity.

In other words, what is interesting for our purposes is that the increasing returns to knowledge and skills noted above are mediated by place, and specifically by the cities that are best placed to exploit them.

The literature is also replete with lessons for public policy about the nature of competition between cities. Two of these seem particularly relevant to the issue of talent attraction. The first is the need to focus on long-term 'strategies of gain' rather than short-term zero-sum competition. Rodriguez-Posé, for example, suggests that the pay-off in increased competitiveness from investing in socio-economic stability and equality could be greater than the short-term win of an investment contract.[x] Although the 'hard' achievements of infrastructure and investment are easier to assess, this doesn't mean they should be prioritised over 'soft' investments in, for example, workforce inclusion and entrepreneur development.[xi]

The second surrounds the danger of 'weak competition'. This happens when, under pressure to act quickly, successful economic development policies formulated in one location are adopted by other cities without sufficient consideration of the uniqueness of the locality. This 'serial reproduction' of policies 'in which every city feels external pressure to upgrade continually its policies, facilities, amenities and so on to stave off competition and maintain its position in the competitive urban hierarchy'[xii] leads to a kind of 'generica' in urban development. This undermines the authenticity or uniqueness that is so essential to comparative advantage, ultimately losing local legitimacy and credibility, as well as failing to capitalise on local creativity and opportunities.

Why skilled people move where they do

To recap, attracting talent is important because of increasing returns to skills. Cities mediate this relationship, in part because features of the economic organisation of cities – such as the concentration of valuable, specialised expertise in specific clusters of institutions – are what help to determine how great these returns are.

But the relationship between city regions and talent is important in another, more straightforward respect: talent is not infinitely mobile. Talented people are not pure calculating machines, who automatically converge on wherever the rewards happen to be greatest. Financial incentives matter, but so do a range of other factors, and some of them almost certainly have a lot to do with place. Unfortunately, it turns out that we know more about why talent matters to places than we do about why places matter to talent.

Let us begin by reviewing what we do know about what matters to the mobility decisions of talented people.

In debates on talent attraction and retention the movement of skilled labour is often represented as a zero-sum game between regions: what one place gains another place loses. This is one reason why our understanding of skilled migration has been framed for so long by the polemic of *brain gain* and *brain drain*. In effect this is only one of many binaries that have for so long shaped our understanding of migration: for example skilled or non-skilled, domestic or international, temporary or permanent. This kind of binary is inadequate in explaining and predicting the movement of 'talent'. For example we know that some people, 'unskilled' by formal indicators, may have a disproportionate impact on the creative economy, or others may move domestically only as a precursor to an international move, which, intended as a temporary relocation, may end up permanent due to anything from vigorous planning to sheer chance.

There is a growing body of literature that argues we should move away from the limitations of these binaries when addressing issues of talent attraction and instead concentrate on gaining a greater understanding of 'brain circulation' and the *mobility* of talent rather than its migration.[xiii] Analysing and influencing mobility is a complex undertaking. As well as taking into account the wider dynamics of the systems within which movement takes place, it implies the need for a far more individualised (personal) account of movement. Recently scholars have referred to this as a 'total human capital' approach, which pays close attention to 'individual social biographies'.[xiv]

Relatively little research has been carried out into these social biographies, but over the last five to ten years, there has been a growing amount of work on the systems in which they inhabit. We can draw from this three issues that are most relevant to talent attraction and place:

1 The decisions talented people make about their mobility are not always 'rational'

First, they are heavily influenced by personal and professional networks. Family ties are a considerable influence on skilled migrants, particularly at certain times of life.[xv] Professional organisations, recruitment and relocation agencies, organisational links and partnerships as well as professional social networks provide pre-existing links and channels through which talent may relocate. Jean-Baptiste Meyer, one of the most highly cited scholars of network influences in mobility, remarks that we need to think of talent:

> *not as a volatile population of separate units in a fluid environment but rather a set of connective entities that are always evolving through networks, along sticky branches.*[xvi]

Evidence suggests that the influence of networks does, however, vary according to sector: although scientific researchers enter the 'mobility stream' through their own ad hoc networks of colleagues and project collaborators, other professionals, such as engineers and IT workers, more often move through institutional channels of migration such as recruitment and relocation agencies.[xvii]

2 Mobility is more important for some types of careers than others

There is a growing amount of empirical evidence that working in another country or region is important for career advancement. Berset and Crevoisier,[xviii] for example, have studied how mobility is increasingly valued as a 'strategic competency'. Some career paths, such as that of scientists, have been studied in considerable detail. For example, in Morano-Fouadi's work on the 'expectation of mobility' in science and technology careers, he asserts:

> *For those working in science or research careers, the relationship between employment trajectories, progression and mobility have been very much bound together for some time.*[xix]

In contrast, there is little specific empirical evidence about the value of mobility in many other sectors or the value of specific places in the employment trajectories of talented individuals.

3 Previous experiences have a considerable impact on future decision-making about mobility

The need for a greater understanding of the 'individual' stories of migrants appears particularly relevant with knowledge of the extent to which previous experiences affect future decisions. For example a number of studies have empirically proved that the experience of being a foreign student significantly increases the likelihood of being a skilled migrant at a later point.[xx]

Given these insights into mobility, and having outlined why talent attraction is so important for cities and their competitiveness, we now turn to explore how this relates to the specific issue of 'place'. What do places, and particularly cities, mean to people? And why are some more adept at attracting talent than others?

For Richard Florida,[xxi] the American urban geographer whose work has become central to this debate, the tripartite of technology, talent and tolerance are the basic recipe for any successful and creative city. 'Cultural cosmopolitanism' (in the form of bohemian, diverse, eclectic and individual neighbourhoods) is the key to attracting more talented people to work in more 'high-tech' or high-value enterprises, which in turn create more opportunities for people like themselves.

Although Florida's formula describes the milieu in which the 'creative class' would often like to live and work, there is considerable disagreement about whether the factors Florida describes are actually sufficient to instigate movement and relocation to a new place. In fact, several authors have argued that Florida's work is not wholly relevant to the European context. Previous research commissioned by Scottish Enterprise has found that rather than the cultural context of a place, it is the economic incentives such as new job and better salary that are more likely to initiate movement of skilled professionals.[xxii]

At the same time, as economic constraints are reduced, place 'quality' is likely to grow in importance. There is a growing amount of evidence that the basic quality of places – such as perception of safety, quality of housing, attractiveness of surroundings, air quality and access to public services – can have a significant effect on people's well-being, including on measurable parameters such as mental health.[xxiii] 'Quality of life' has become a staple phrase of the policy-making community, despite significant variations in what this really means for different people. For example proximity to nightlife and the buzz of the city centre may be some people's idea of heaven, while for others this could spell noise, danger and a lack of greenery.

In addition to research into the importance of the physical desirability of places, a fairly distinct body of research has studied the value of the social characteristics of place to reputation and local well-being. In practice this might mean a desire to locate nearby people of similar or higher social status to have easier access to neighbourliness, trust and other aspects of social capital.[xxiv]

A growing amount of research is beginning to highlight the way in which aspects of 'place' can be important in different ways at different times.[xxv]

There is surprisingly little existing research that looks at talent attraction in specific cities and regions, and even less that has a focus outside North America. Previous research into talent attraction in Scotland has described place as being of 'second-order significance' in decision-making about relocation.[xxvi] This research categorised the reasons for relocating to Scotland into four main groups:

- pragmatic (economic/educational purposes)
- life experience (adventure)
- life stage (family ties/homecoming)
- lifestyle (eg leaving the 'rat race' for the quiet life)

Considerations about place, the research found, had by far the most influence in the latter two groups.[xxvii]

This research provides a useful starting point for understanding how talent is attracted to Scotland as a whole, but provides little detail on the specificities of Scottish city regions or the multidimensional aspects of the importance of place. Harrison in particular recommends that the only way to gain a deeper understanding of migrant decision-making processes, and therein the importance of place, is to concentrate research on migrants themselves (rather than for example employers or professional organisations) and their individual stories of mobility.[xxviii]

Conclusion: the gaps in our knowledge

Our review of literature supplies us with a series of givens about the relationship between talent, place and mobility but betrays a number of serious gaps in our knowledge.

We know why talent has become such a prized commodity in view of the transition to the knowledge economy and our ageing society. We know the primordial importance of healthy 'talent accounts' for city regions for their evolving position as drivers of the globalised economy. Yet we have a limited hold on why place is important to talent, and in particular, what factors about place inspire movement among talented individuals.

Evidence from the literature builds a strong argument that we should move away from discussions of 'skilled migration' and the binaries (push–pull, skilled–non-skilled) involved to an analysis of *mobility*. The motivations for this are both varied and variable and our understanding is limited. This creates the first pillar of our qualitative research:

- What is the relationship between talent and mobility and how does it vary between different careers?

Although the work of Richard Florida has brought our attention to the mobility choices of the 'creative class', the majority of the literature concedes that when place does play a role in decisions about mobility for work, it is of 'secondary importance'. Can we support this hypothesis? Our second pillar is therefore:

- When and in which ways does 'place' have an impact on decision-making by talented people about where to live and work?

Existing literature in this field focuses more on generalities and less on the specific factors that attract, retain or repel talent from certain places. Our third pillar will therefore look in detail at the four city regions covered by this research, as well as placing these in the wider Scottish context:

- In terms of 'place', what assets attract talent to Aberdeen, Dundee, Edinburgh and Glasgow and what factors 'repel' talented people?

Focusing on the individual and personal stories of migrants, this should tell us what issues talented migrants think should be prioritised in increasing the attractiveness of these places, providing much-needed lessons for policy-makers.

Before we introduce the findings of the qualitative research, in chapter 3 we set out the specific context of Scotland and in finer detail, the city regions of Aberdeen, Dundee, Edinburgh and Glasgow.

3. Background to Scotland and the city regions

Scotland and the search for talent

In 2004 former first minister Jack McConnell launched a new keystone policy for Scotland: 'New Scots: attracting fresh talent to meet the challenge of growth.' This formed the basis for the Fresh Talent initiative, a programme designed to counter demographic change. To prevent the Scottish population from falling below the 'symbolic' figure of five million by 2009, this is a plan to attract an additional 8000 people a year.

This plan included the creation of a Relocation Advisory Service and the Fresh Talent: Working in Scotland scheme, which allows graduates to stay on and work for two years after university. The latter has since been rolled out across the UK. The initiative has its home in the 'Scotland is the Place' website (www.scotlandistheplace.co.uk) and has additional tools such as the Scottish International Scholarship Programme and the Global Friends of Scotland group.

'Dare to be Digital' is one of the schemes that the Fresh Talent initiative has helped fund. This video games development competition for undergraduates was first developed by the University of Abertay in Dundee and Scottish Enterprise Tayside. Recent Fresh Talent funding for the initiative has helped expand it to be national and international in scope, enabling teams from China and India to participate alongside local talent.

Managed by Scottish Development International, Scottish Enterprise's website Talentscotland.com has provided industry and regional information to prospective incomers to Scotland since 2001. Particular attention has been paid to attracting and retaining talented international students, with, for example, world-renowned bio-informatics researcher Professor Geoff Barton promoting Scotland and the City of Dundee to prospective students and to other academics in his field; also, the Supporting International Students Challenge Fund recently allocated £200,000 to 13 educational institutions for a range of activities that support international students towards the end of their studies. One of the projects included in the programme is the University of Aberdeen's Fresh Talent Career Club, which provides vital networking opportunities for international students, graduates and local businesses.

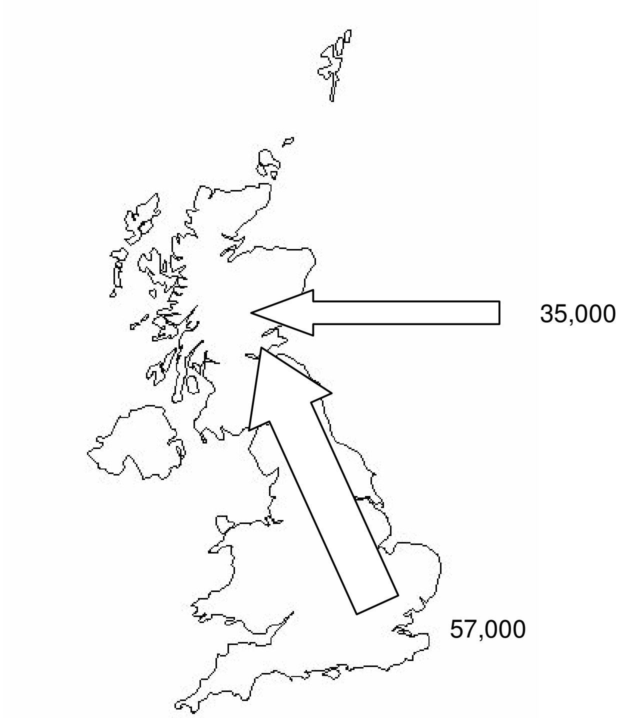
In addition to current policy initiatives, migration patterns have an important mitigating effect on natural demographic decline. It is important to place talent attraction in the context of Scottish migration trends.

People flow
Between 1999 and 2006, the Scottish population has shown slow growth of 0.9 per cent, which is markedly less than that of the UK overall in the same period (3.6 per cent). However, while the first few years of this period saw slight decline, Scottish growth has picked up in the last few years. The growth is due to a positive net migration, more than offsetting the trend in natural population decline. Immigration has increased markedly from 2004 onwards.[xxix]

Migration flows into Scotland and out of Scotland are on average fairly equal. Around 50,000–55,000 people leave Scotland for the rest of the UK each year, and 15,000–20,000 leave for foreign countries.[xxx]

A 2003 study of migration patterns in Scotland found that the top countries of origin for in-migrants were Ireland, Germany, Pakistan, US and India, while Australian and South African populations were growing rapidly. Consistently high proportions of in-migrants were born in Scotland, emphasising the importance of 'homecoming'.

Figure 2. Snapshot of in-migration to Scotland, 2004–05



Source: Home Office data cited in 'Accession 8 Migration to Scotland', review of existing evidence and knowledge gaps, Scottish Enterprise

But in 2004, everything changed. The snapshot of in-migration in figure 2 shows an elevated number of in-migrants thanks to the unprecedented flows as a result of the 2004 accession of several central and eastern European countries into the EU, giving their citizens the right to work in the UK. In the period between May 2004 and September 2006 37,570 workers from the 'A8' countries registered to work in Scotland under the Home Office Workers Registration Scheme.[xxxi] Real numbers of Poles, for example, in Scotland could top 100,000 when the number of self-employed trades people and 'unskilled workers' are taken into account.[xxxii] According to anecdotal evidence there is a huge amount of 'brain wastage' among overseas migrants, particularly among those from central and eastern Europe, due to language difficulties or non-transferability of qualifications.

Migrants to Scotland from within the UK

The main channel of flow within the UK is between Scotland and the south east of England. According to Findlay et al,[xxxiii] Scotland welcomes 10,000 more undergraduates from England than leave to study elsewhere. Graduate retention is reasonably high according to the same study, with a small overall loss to the rest of the UK.

Little detailed work has been undertaken on migration flows within industrial sectors, but we do know that Energy is one of the industries most dependent on in-migration to feed its skills base. It is unsurprising then, that Aberdeen boasts the third largest number of in-migrants after Edinburgh and Glasgow.

In preparation for answering the challenges set by the literature review, let's look in detail at the distinctive case of each city region. For comparison, a profile of Scotland is also outlined. Summary statistics data for Scotland and the city regions are derived from the Experian/Scottish Enterprise *Economic Reviews Database* (2007) unless stated otherwise.

Profiling Scotland and the city regions

Scotland

Table 2. Summary statistics – Scotland and the UK[xxxiv]

Demography	Scotland	UK
Total population	5,116,900	60,587,300
Population growth 1999–2006	0.9%	3.6%
Population projection 2020 (growth 2006–20)	5,127,717 (0.2%)	64,449,074 (6.4%)
Net migration 1999–2005	55,606	1,138,000
White[xxxv]	97.1%	91.3%[xxxvi]

Born outside Scotland (outside EU)[xxxvii]	12.9% (2.5%)	16.3% (6.6%)[xxxviii]
Economy		
Average annual GVA growth 1999–2006	2.0%	2.8%
No. of registered businesses (growth 2000–06)	147,490 (–0.1%)	1,849,418[xxxix] (8.1%)
Annual income per head – 2003 prices, residence-based (average growth 1999–2006)	£12,237 (2.8%)	£12,910 (2.3%)
Labour market		
Economically active population	2,497,600	27,936,500
Unemployment rate (ILO)	5.3%	5.5%
Economic activity rate	80%	78.6%

Economy: the six priority industries
From 1999 to 2006, average gross value added (GVA) growth in Scotland at 2.0 per cent has been consistently lower than the UK average (2.8 per cent), though generally healthy and avoiding the instability of many EU economies after the Millennium (see table 2).[xl] In the same period, employment growth in Scotland outpaced the UK overall, as did growth in average income per head. On other headline indicators, such as the three-year business start-up survival rate and knowledge-based industries index, the Scottish and UK economy score similarly, although in the case of the latter it is striking that the Scottish score is significantly much lower if only knowledge-based employment in the private sector is taken into account.[xli]

Table 3 shows employment across Scottish Enterprise's six priority industries per city region.

Table 3. Summary statistics – priority industries

Employment in priority industries[xlii] 2004	Aberdeen	Dundee	Edinburgh	Glasgow	Scotland
Energy[a]	–	–	–	–	110,710
Food and drink	7,287	4,735	14,178	21,530	58,134
Tourism	21,432	16,368	60,903	76,605	204,229
Financial services	3,798	6,557	58,737	40,400	113,159
Life sciences	1,235	3,404	13,133	9,815	29,129
Electronic markets[b]	9,273	14,189	72,120	70,946	96,862[xliii]
Total employment[xliv]	245,930	194,501	693,804	938,931	2,307,656

[a]Due to definitional issues, no fully comparable data relating to the energy priority industry sector are currently available for publication. Scottish Enterprise will be undertaking further research in this area in the near future.
[b]Electronic markets is a generic term used to cover Digital Media and Creative Industries (DCMI), Micro and Opto Electronic Technologies (MOET) and Electronics.

Energy
The energy sector is crucial to the Scottish economy, comprising 110,000 jobs and £7.4 billion of output, around 9 per cent of the total Scottish GVA.[xlv] Employment figures for the oil and gas industry alone, including indirect employment, are estimated at around 145,000 people, representing 43 per cent of total UK oil and gas employment.[xlvi] While the oil and gas sector is generally healthy, there is

common recognition that, with long-term prospects of declining production, oil and gas companies must diversify, capitalising on technical know-how, both in niche products and transferable skills, to remain a global leader in the face of shifts to deep-sea extraction, sub-sea exploitation and technological advances such as oil-shale extraction.

Additionally, the rise of renewable energy brings opportunities and challenges. Countries such as Denmark have an edge over Scotland in markets such as wind energy (despite strong Scottish growth in the last few years), but Scotland has ample opportunities in wave and tidal energy, hydrogen and fuel cells, and biomass. Approximately 3,700 jobs in Scotland are provided by the renewable energy industry already, and this is set to grow. Renewable energy generation grew by 44 per cent between March 2005 and January 2007, with total installed capacity now exceeding 2GW. The value of the renewables sector increased to £232 million by 2006 from £80 million in 2003.[xlvii] One of many initiatives set up to facilitate and drive this transition, ITI Energy, was set up in Aberdeen in 2004 to fund research and development.

Food and drink

The food and drink industry employs over 58,000 people in manufacturing alone,[xlviii] rising to 122,000 people if the entire supply chain is taken into account.[xlix] The sector has an annual sales level of around £7.6 billion (including alcoholic drinks), of which £3.65 billion was accounted for by exports. Its industry association, Scotland Food & Drink, has rallied public and private partners to work together 'towards a common agenda that will deliver a £10 billion industry by 2017'.[l] Much of this growth will depend on how Scotland responds to the rapidly developing market for high-quality fresh products such as meat and dairy, as well as to the increasing demand for niche luxury products where considerable growth is expected. The latter fact points to the importance of maintaining close links with the tourism sector, where there is significant potential for synergy.

Tourism

Tourism-related industries account for 10 per cent of GVA in Scottish service industries (excluding financial sector and some of the public sector).[li] More than 200,000 people work in Scottish tourism-related industries.[lii] In 2006, nearly 16 million tourists took trips to Scotland, spending over £4.1 billion, as well as contributing to the reputation of Scotland and Scottish products abroad. In terms of recent trends, the picture is mixed: while spending by international tourists jumped by 19 per cent in 2005/06, domestic tourism was down, leading to a slight contraction of the overall industry in 2006.[liii] With a 50 per cent revenue growth target outlined in the *Tourism Framework for Change*, it is clear that there are significant challenges, in terms of concentrating on core strengths, new niches and new audiences – both internationally, and in England and Wales, where half of the population has never visited Scotland.[liv] A further challenge is to achieve growth while being environmentally sustainable, which is of huge importance to Scotland given the role of natural beauty in its tourism offer and place reputation.

Financial services

The financial services industry in Scotland accounts for nearly 110,000 direct jobs, over half of which (58,000) are based in Edinburgh with an additional 40,000 in Glasgow.[lv] If support services are taken into account, this industry employs one in ten workers in Scotland.[lvi] It has consistently outpaced the overall UK financial services sector in the past five years and is worth an estimated £7 billion, representing 7 per cent of total Scottish GVA.[lvii] It continues to be the fastest-growing sector of the Scottish economy: from 2000 to 2007 the financial services industry in Scotland grew by 60 per cent, while the overall Scottish economy grew by 14 per cent. The UK financial services industry as a whole grew by 47 per cent in the same period.[lviii] Scotland is increasingly acknowledged as a centre for financial services in Europe. Indeed Edinburgh houses the headquarters of two of the largest banks in Europe (Royal Bank of Scotland and HBOS), as well as employing nearly 20 per cent of UK life insurance and pensions sector staff in firms such as Scottish Widows and Standard Life. Scotland is also particularly recognised for its strengths in investment management and asset servicing.

Life sciences

Scotland represents the second largest life science cluster in the UK and one of the most dynamic and advanced clusters in Europe. Large companies include Charles River Laboratories, Invitrogen, GSK, Organon, and Serologicals, and close links with universities across Scotland's cities have generated a successful series of spin-outs. In 2005, 20 per cent of European life science Initial Public Offerings were Scottish organisations, including Ardana, ProStrakan, Stem Cell Sciences and IDMoS, demonstrating that attractive financial exits are available for investors in the sector in Scotland. There are over 590 organisations in Scotland employing 29,500 people.[lix] The main sector focus is on human healthcare with over 70 per cent of the life science organisations concentrating in this field. Specialisms range from drug development to advanced medical technologies. Equally strong is its presence in pharmaceutical clinical trials support and contract research, with more medical research being conducted per head of population in Scotland than anywhere else in Europe. In order to strengthen this position, ITI Life Sciences was set up in Dundee in 2003 to drive and fund innovation, creating and managing early stage research and development (R&D) programmes to generate intellectual assets that can be exploited commercially by new or growing companies.

Electronic markets/digital media

Digital Media and Creative Industries (DMCIs) in Scotland are estimated to be worth annual sales of £5 billion. They provide up to 94,000 jobs and contribute £2.8 billion of 'gross value added' to the economy – that's just over 4 per cent of employment and 5 per cent of the total GVA for Scotland.[lx] Scotland has particular strengths in games production, and film/TV/radio production, with an independent film industry and an international strength in commercial gaming. The sector has seen most rapid growth in companies employing between 20 and 100 staff. Many policy initiatives are thus focused on raising finance and providing workspace, such as ITI Techmedia, one of three intermediary technology institutes. ITI Techmedia was established in Glasgow to raise levels of research and development, and assist with managing and exploiting intellectual property industry in areas such as music.

Place trends

The enduring lure of Scotland's natural assets is complemented with increasing recognition for innovative architecture that enhances place character and distinctiveness. The Scottish Parliament building by Enric Miralles and Benadetta Tagliabue is one example of its international dimension, while home-grown talent is also thriving. For example, in 2006 NORD Architecture, based in Glasgow, won the prestigious Young Architect of the Year Award, the only practice outside London to have reached the final shortlist. Winning the bid to host the 2014 Commonwealth Games provides further opportunities to enhance the quality of architecture and urban design. This is something which, according to the Scottish watchdog for design quality Architecture+Design Scotland, is urgently needed to improve the overall quality of the built environment. The watchdog has repeatedly criticised the low standards of some new housing developments and public buildings such as schools procured through Private Finance Initiatives, and has called for skills building in local authorities to improve design and environmental standards.[lxi]

Scotland's first National Planning Framework was published in 2004 and is due to be updated in 2008, with increased planning coordination powers, including at the city region level. Closely linked to the government's Infrastructure Investment Plan, it outlines major infrastructure programmes in the fields of transport, digital connectivity, energy, waste management and water. A greater role for city regions, connectivity and enhanced capacity to ensure that developments are environmentally sustainable are three of the core priorities of the emerging framework, as is community participation in planning decisions.

City regional profiles

Aberdeen

Table 4. Summary statistics – Aberdeen[lxii]

Demography	
Total population (city)	440,860 (206,880)
Population growth 1999–2006	–0.2%
Population projection 2020 (growth 2006–20)[a]	415,494 (–5.8%)
Net migration 1999–2005	–5,325
White[lxiii]	97.1%
Born outside Scotland (outside EU)[lxiv]	15.7% (4.4%)
Economy	
Share of Scottish economy (GVA)	11.9%
Average annual GVA growth 1999–2006	1.0%
No. of registered businesses (growth 2000–06)	18,585 (–3.6%)
Annual income per head – 2003 prices, residence-based (average growth 1999–2006)	£15,645 (4.4%)
Labour market	
Economically active population	227,700
Unemployment rate (ILO)	3.8%
Economic activity rate	84.2%

[a]NB According to population and housing need projection figures recently released by Aberdeen City Council and Aberdeenshire Council, the period between 2006 and 2021 will see growth to 464,000 inhabitants, ie of 4.25%.[lxv]

People flow: a concentrated international population

There are conflicting forecasts regarding population growth or decline in Aberdeen city region (see table 4 and note). Aberdeen City has one of the youngest populations in Scotland. The city has low ethnic diversity, but has a relatively large population from the Other White British (7.86 per cent) and Other White (2.84 per cent) categories.[lxvi] Nearly a third of its Other White population comes from the Netherlands, Norway and the United States. Recent data on national insurance number registrations of non-UK nationals in 2006 reveal a large number of migrants arriving from the new EU member states to both the city and the wider region, the majority from Poland. While these data are imperfect, they provide an opportunity for comparison. It is noteworthy that the number of arrivals from the EU accession countries for the city region (2,720 in total) almost equals that of Glasgow City in the same period.[lxvii]

Economy: highly competitive but specialised

Over the last eight years Aberdeen region's annual rate of economic growth (GVA) has averaged at 1.0 per cent, which is 50 per cent lower than the Scottish average of 2.0 per cent. Indeed, year-on-year GVA growth was negative in 2003 and 2005.[lxviii]

This follows a number of consecutive years where growth in Aberdeen was higher than average. While both GVA and income per head are still markedly higher than in the other city regions and Scotland overall, the gap seems to be narrowing.

Energy

Aberdeen's growth is driven by the energy industry, and in particular the oil and gas sector. As of 2007 the energy industry employs around 40,000 people directly across Aberdeen City and Shire and drives regional GVA.[lxix] However, the overall prospect for the industry is slow decline, with contraction of up to 5 per cent per annum according to some estimates.[lxx] Although some large companies (for example Shell and BP) have scaled down their operations, this has stimulated the arrival of smaller, more flexible and specialised firms (for example Talisman, Paladin and Apache), which has stabilised employment levels yet exposed specific skills shortages such as for specific engineering experts. There is anecdotal evidence suggesting a danger of predatory competition for labour as some firms choose to lure experienced staff from competitors with high salaries, rather than investing in a more long-term programme of human resources development. At the same time, the considerable knowledge and expertise present within the sector, as well as tailored research base and business support infrastructure, provide a fertile testing ground for continued innovation and exploration of new technologies. Renewables, carbon capture and sub-sea drilling techniques are key opportunities and there is already some success with new projects and businesses developing. There is also a significant opportunity to capture market share in the emerging decommissioning market.

Food and drink

Aberdeen retains an important food-processing sector and remains a major node in meat processing and distribution chains, remaining an important fishing port in Scotland alongside larger ports in Aberdeenshire such as Peterhead and Fraserburgh. Food processing in Aberdeen City and Shire employs 3,000 people and the North East accounts for almost 30 per cent of Scotland's total food exports.[lxxi] Key companies like Mackies, Deans of Huntly, Macphies of Glenbervie and Deeside Water all saw increased profits in 2005. Jobs are mainly low skilled; a large proportion of the recent eastern European migrant population is now working in this sector. One of the problems facing the sector is the limited number of new academic research students in this field.[lxxii]

Tourism

In 2004 the overall revenue generated by tourism in Aberdeen and Grampian increased by 1.3 per cent to reach £512 million.[lxxiii] Tourist numbers have been boosted significantly by the 'Offshore Europe' conference and the 'Aberdeen International Youth Festival'. Employment in this industry has remained relatively stable. In fact, the proportion of tourism operators reporting difficulties in recruiting skilled staff fell from 66 per cent to 18 per cent over 2003/04.[lxxiv] Scottish Enterprise Grampian expects 1,000 new jobs to be created by 2015. The £50 million regeneration scheme for Aberdeen airport and the marketing of Cairngorms National Park as a major tourist destination could catalyse growth.

Financial services

This industry accounts for over 21 per cent of the workforce in Aberdeen City and 18 per cent in Aberdeenshire. While much of Scotland's exponential growth in financial services has been concentrated in Edinburgh and Glasgow, Aberdeen's financial services are growing at 7 per cent per annum, driven by specialised products for the oil and gas sector. Aberdeen City is headquarters to at least one significant player: Aberdeen Asset Management.[lxxv] However, the geographical location of the Aberdeen city region exposes it to stiff competition from the central belt and London, especially in terms of the recruitment of managerial staff.

Life sciences

Even though the regional sector is small in absolute numbers when compared with those in the other city regions, according to Talent Scotland, Aberdeen City has Europe's highest concentration of life scientists per head of population.[lxxvi] With several antibody engineering companies (such as Haptogen, Biovation and Novabiotics), it is second only to Cambridge in antibody engineering.[lxxvii] The University of Aberdeen provides a strong academic base for life sciences; for example, its Immunity and Inflammation Research Group received the highest 5* rating in the 2001 UK Universities Research Assessment Exercise (RAE). Its excellence as a research institution and success in spin-out efforts and research agreements with international pharmaceutical companies was noted in the *New Scientist* in late 2005.[lxxviii]

Place trends

The 'Granite City', nestled between the sea and the mountains boasts traditional architecture, preserved Victorian and Edwardian structures such as Mercat Cross, His Majesty's Theatre and Marischal College, which cohabit with modern projects such as Norman Foster's Scott Sutherland Library at Robert Gordon University. The surrounding region feels close not just for its physical proximity to the city, which is a widely recognised asset and a major factor in the city's reputed quality of life, but also because of the close traditional and institutional links between City and Shire, enabling close policy cooperation.

In the city, the planned pedestrianisation of Union Street is aimed at creating a more fluid and open city centre. Some have argued that until recently, too little public investment has gone into Aberdeen's public spaces, creating an imbalance between the private prosperity of firms and households, and a flagging public realm.[lxxix] The draft masterplan for the Bon Accord Quarter includes the regeneration of three neighbourhoods – a 'retail heart' around Bon Accord, a 'green heart' around St Nicholas and a 'civic heart' around Marischal. While being criticised for being too retail-driven, there are hopes that it can attract people to live and spend more time in the town centre and mitigate the effects of car-driven, rapidly suburbanising lifestyles.

Dundee

Table 5. Summary statistics – Dundee[lxxx]

Demography	
Total population (city)	467,055 (145.663)[lxxxi]
Population growth 1999–2006	0.3%
Population projection 2020 (growth 2006–20)	455,885 (–2.4%)
Net migration 1999–2005	4,453
White[lxxxii]	96.3%
Born outside Scotland (outside EU)[lxxxiii]	12.2% (3.4%)
Economy[lxxxiv]	
Share of Scottish economy (GVA)	7.9%
Average annual GVA growth 1999–2006	2.1%
No. of registered businesses (growth 2000–06)	14,361 (–1.7%)
Annual income per head 2003 prices, residence-based (average growth 1999–2006)	£12,746 (3.0%)
Labour market	
Economically active population	219,738
Unemployment rate (ILO)	5.3%
Economic activity rate	81.2%

People flow

The population of Dundee City has seen gradual decline since the 1970s, both through natural decline and out-migration. The Experian/Scottish Enterprise *Economic Reviews Database* (2007) projects this decline to continue (see table 5), but more recent data provide a mixed picture: the General Registrar's sub-national population projections for 2006–2031 foresee 5.8 per cent growth in the Tayside region. Within this aggregate picture, growth trajectories are divergent: Dundee City is expected to decline further, by 9.2 per cent, while Perth and Kinross especially will see growth of 22 per cent. All areas, meanwhile, will see a gradual ageing of the population. In terms of its ethnic profile, Dundee City is very similar to the overall picture for Scotland. It has a smaller overall white population (96 per cent against 98 per cent for Scotland as a whole) due to its relatively small proportion of Other White British residents (5.4 per cent against 7.4 per cent).[lxxxv] Dundee has the second-largest proportion of Asian residents in Scotland, behind only Glasgow. According to the 2001 census, nearly 3,500 (2.3 per cent) of the residents of the urban core are Asian. Nearly half (1,700) are of Pakistani origin. More recently the region and city have seen a rise in migrants from new EU countries such as Poland and the Czech Republic; according to national insurance number registration data for 2006, more than two of every three new arrivals to the city region came from the EU accession states.[lxxxvi]

In addition to this growing international population, the city has other interesting international strategic alliances. One of these is undoubtedly the Dundee–Dubai sister city agreement, the result of the presence in Dundee of the Al Maktoum Institute for Arabic and Islamic Studies.

Economy

Dundee's economy has undergone a transformation from an industrial economy to a much more mixed pattern. Today, the once-dominant manufacturing sector provides only 10 per cent of jobs in Dundee City, while healthcare, wholesale and retail trade, and education make up 40 per cent of employment.[lxxxvii] In 2006, GVA in the city region was £6.6 billion, accounting for 7.9 per cent of Scottish GVA.[lxxxviii] In the same year, GVA per capita in the region was £14,101. However, yearly growth has been on average above the Scottish national average. Unemployment is on the decline with the number of Jobseekers Allowance claimants falling from 7.3 per cent of the resident working-age population in 1997 to 4.2 per cent in 2006. The number of jobs in Dundee is increasing steadily, with a growth of over 1 per cent annually over the past nine years: from 75,232 in 1997 to 83,790 in 2006 – a rise of 11.4 per cent.[lxxxix]

Life sciences

The Dundee life sciences industry, clustered around the School of Life Sciences at the University of Dundee, has a world-class reputation, as was evidenced by the establishment of the Wellcome Trust Biocentre in 1997 and the awarding of a series of Cancer Research UK grant programmes in 2005. In the 2001 RAE, both Clinical Laboratory Sciences and Biological Sciences received 5* ratings. In 2000, the cluster was reported to have had the highest concentration of bioscientists outside Oxford and Cambridge.[xc] This was even before ITI Life Sciences was established in Dundee in 2003. Set up by Scottish Enterprise with the support of the Scottish government to drive Scotland's ambitions to identify and commercialise valuable technology bases and intellectual assets, ITI Life Sciences has now allocated £51.65 million into five R&D programmes involving 12 Scottish and international organisations. ITI Life Sciences is beginning to realise some of the commercial value through licence agreements resulting from the R&D programmes.

Concurrently, academic research has seen a number of successful spin-outs such as Cyclacel and GenTech. Life sciences alone employ over 3,900 people, and a recent survey of US-based scientists ranked Dundee as the third most desirable place to work outside North America.[xci] In 2006 Wyeth Pharmaceuticals announced a £50 million investment to create the world's first Translational Medicine Research Collaboration in Scotland. The Central Core Research Laboratory to be based at the University of Dundee will be a national resource and will be responsible for promoting innovative and novel scientific developments.

Electronic markets/digital media

Dundee City is increasingly recognised as a hub for games development. The cluster comprises both large companies in digital media terms such as Real Time Worlds and a series of smaller companies, many with deep and fruitful links to University of Abertay. Abertay's School of Computing and Creative Technologies offers a series of courses in games production and technology, and its role in sustaining and encouraging growth in the games sector is widely recognised. There is ample evidence of growth: recent research has revealed that the number of companies in the digital media sector in Dundee grew from 150 to 350 between 2000 and 2007, and that the sector employed 3,400 full-time equivalents in 2007 compared with 1,400 in 2000, with expectations that almost 2,000 jobs will be created over the next three years in Tayside.[xcii] The sector's annual turnover now exceeds £185 million.[xciii]

To accommodate further growth and drive synergy, a public–private partnership led by Scottish Enterprise is investing £50 million over the next ten years in Seabraes Yards to transform the former railway goods yard into a Creative Media District. Part financed by the European Union, the area close to the Dundee Contemporary Arts facility and Dundee's universities will provide business space and supporting infrastructure.

Tourism

The tourism sector in the Dundee region is focused mostly on the natural scenery. For example, Perthshire has encapsulated this in the 'Big Tree Country' slogan, attracting upscale leisure as well as business tourism.[xciv] In Perthshire, direct employment in tourism accounts for 12 per cent of the workforce, which is higher than in Fife (9 per cent of workforce, on par with the Scottish national average),[xcv] the second tourism hub, which includes St Andrews. Both Perthshire, which boasts historic and natural heritage such as Blair Castle, Lock Tay and Gleneagles, and St Andrews are included in Visit Scotland's six designated national 'key destinations'; St Andrews is undoubtedly the central focus of Fife's tourism offer, which, however, also includes unique assets such as the Fife Coastal Path and the historic city of Dunfermline, a former capital of Scotland. In recent years, rural Perthshire has seen continuous growth in the sector whereas the picture for the rest of region is more mixed.[xcvi] Despite having some of the most important tourist attractions of Tayside, both with and without entrance fees, within the City boundaries (Camperdown County Park, Dundee Centre for Contemporary Arts, Discovery Point),[xcvii] Dundee City tourism development does not show significant growth. Like elsewhere in Scotland, the sector has recently employed many immigrants, for example from eastern Europe, because of a persistent lack of people with the right qualification and skills profile.

Energy

The energy sector in the Dundee region has significant potential for growth, particularly in the renewables segment, where recent research and manufacture of components are compared favourably with renewables development in Aberdeen. The growth is diverse, focusing on emerging markets for biomass and marine generation as well as on the more established wind power sector.[xcviii] The local Universities of Dundee and Abertay have recently started or expanded programmes relating to this sector, such as BSc and MSc programmes in renewable energy at the former, and programmes at the Abertay Centre for the Environment, which has developed extensive links with small and medium enterprises (SMEs) in the region to drive innovation. The perception is that as the opportunities within renewable energy increase, so does the need for an adequately skilled workforce; Dundee College has responded to one part of this challenge by offering a course in Renewable Energy Installing.

Dundee was also the first city to sign up to the Solar Cities Scotland programme, which promotes the development and uptake of small-scale renewables. As Dundee 'Sun City', the city is reaching out to involve residents in turning Dundee into Scotland's greenest city; as part of the campaign, a dilapidated 1960s house is being turned into a Demonstration House to showcase and test micro-generation technology. Meanwhile, the enterprise climate for this sector is further enhanced by programmes in the Port of Dundee, which is being marketed under 'Locate Dundee Renewables' as a location for the manufacture of renewable energy devices and components, servicing the onshore and offshore wind market, combined heat and power (CHP) systems, marine market (encompassing wave and tidal technologies) and the biomass market. Specific competitive advantage in the biomass market is derived from existing skills and experience in handling timber and grains. Furthermore, the Fife Energy Park in Methil, located at an equal distance between Edinburgh and Dundee on a former oil fabrication yard, will offer new opportunities for companies in the engineering, oil, gas and renewables sector, with business space, high-spec facilities and dedicated business support services.

Financial services

Compared with Scotland overall, the financial services sector in Tayside has both a relatively high share in the regional GVA (5.8 per cent for Tayside, 5.6 per cent for Scotland in 2005) and projected growth rate (3.6 per cent vs 3.2 per cent, 2004–08).[xcix] Already with over 6,500 employees the sector has a significant presence in the regional economy, and it is expected that there is considerable scope in the wider sector for further growth. This is evidenced, for example, by the ongoing expansion of both international companies such as BNP Paribas and long-established firms such as the Alliance Trust, which has announced plans for a new head office building designed by the renowned architectural practice RMJM. Part of this growth is a result of overspill from the Edinburgh region, causing growth in small, niche-related companies, as well as partial transfers of operational divisions towards the Dundee region. An instance of the latter is the large number of people employed in contact centres by Norwich Union and HBOS.[c] The overspill also occurs in terms of the residential choices of Edinburgh finance workers: places such as Kinross are equidistant to Dundee and Edinburgh, and therefore within commuting distance for the latter.

Food and drink

The food and drink sector has a relatively small share in Tayside's GVA (2.1 per cent vs 2.5 per cent for Scotland overall in 2005), and has a lower share in the regional exports than is the case for the Scottish economy overall. However, despite a long-term downward trend, the sector remains a feature of the regional economy, employing 4,735 people altogether. The food sector has seen recent growth, particularly in high-end, high-value quality products with significant export potential. Companies such as Highland Game (Dundee), R.R. Spink & Sons (Arbroath), Mackays (Carnoustie) and Rannoch Smokery (Kinloch Rannoch) all capitalise on the quality of raw materials available in the region, and brands such as Highland Spring from Perthshire are famous far beyond Scotland. Additionally, the sector has been strengthened by innovative research-based firms such as Nandi Bio-Technlogy, originally a spin-out firm from Heriot-Watt University, which has recently moved to the region and is set for growth.[ci] However, skills shortages and hard-to-fill vacancies are still a problem across the sector, even though the arrival of migrant labour has to a great extent eased the problems of hard-to-fill vacancies and skills shortages.

Place

A city-centre overhaul including the major redevelopment of the Overgate shopping centre has had a transformational effect on Dundee City Centre, which previously had an unremarkable, if not negative reputation; the town centre pedestrianisation is also regarded as a success. The development of a cultural quarter surrounding the new Dundee Centre for Contemporary Arts, and the ambitious waterfront regeneration programme are other major developments for Dundee. The waterfront regeneration scheme is the biggest capital investment being made in the city for years, with a long-term programme of new mixed-use offices and residential accommodation as well as retail and leisure facilities, linked with a series of new and improved public spaces. If fully developed and mainstreamed into planning policy, the Dundee Sun City campaign could make an important contribution to the attractiveness and image of the city.

Despite regeneration, the city is still feeling the effects of industrial decline, with high-profile job losses in the remaining manufacturing sector. The percentage of the urban population that was income-deprived in 2005 was 18.6 per cent as opposed to the Scottish overall percentage of 13.9.[cii]

The wider Dundee region has many other nodes, such as Perth and St Andrews. Both towns are well known for their built heritage and surrounding natural beauty. Both towns and their surroundings are already on the maps of prospective residents seeking living environments with a high quality of life, as exemplified in their reputation for recreation possibilities, public safety and quality of education, for example. In this context, balancing development pressure with the imperative to maintain the quality of the landscape setting, while ensuring affordability of housing, is a crucial long-term challenge. Projects such as the development of a university quarter in St Andrews seek to strengthen and build on existing assets for the long term.

Edinburgh

Table 6. Summary statistics – Edinburgh[ciii]

Demography	
Total population (city)	1,481,515 (448,624)[civ]
Population growth 1999–2006	3.6%
Population projection 2020 (growth 2006–20)	1,575,278 (6.3%)
Net migration 1999–2005	45,107
White[cv]	96.1%
Born outside Scotland (outside EU)[cvi]	22.2% (5.8%)
Economy	
Share of Scottish economy (GVA)	30.8%
Average annual GVA growth 1999–2006	2.6%
No. of registered businesses (growth 2000–06)	43,079 (0.8%)
Annual income per head – 2003 prices, residence-based (average growth 1999–2006)	£12,969 (2.5%)
Labour market	
Economically active population	753,762
Unemployment rate (ILO)	5.3%
Economic activity rate	81.7%

People flow

Edinburgh's ethnic diversity is low for a major UK city (London – 71.3 per cent white, Manchester – 81 per cent white) (see table 6). It does have a large Other White population at 11.4 per cent, and the lowest proportion of indigenous Scots of all Scottish cities. Students boost the international nature of the city, with five higher education institutions in the city. According to The Work Foundation, Edinburgh has the seventh largest student population in the UK (around 51,500), which amounts to a quarter of the Scottish total.[cvii] Tourist flow is very high, with 2.78 million trips to Edinburgh in 2005 alone. National insurance number registration data for 2006 show that the region received more eastern European, North American and Chinese migrants than any other in Scotland (7799, 829 and 580, respectively), while the number of arrivals from south and south east Asia was lower than in Glasgow.[cviii]

Economy

Over the last ten years Edinburgh city region has experienced strong growth in employment (7.8 per cent) that has outpaced growth in population.[cix]

Edinburgh's workforce is highly skilled (41 per cent of the population is educated to NVQ Level 4 or above) and a significant 9 per cent of the population is classified as 'higher professional' in the 2001 census (compared with 7.7 per cent in London).

Almost half of the population are employed in 'knowledge-intensive' occupations (compared with 38 per cent in Glasgow and Manchester).[cx] The city boasts more graduates per head of population than any other city in Europe, and the quality of research at the city's universities is renowned: for example, in the 2001 RAE Edinburgh University achieved a 5 or 5* rating in 27 of 49 subject areas where research was carried out. Heriot-Watt University achieved such a rating in four of 17 subject areas.[cxi]

Life sciences

Home of the Roslin Institute, birthplace of Dolly the sheep – the first mammal cloned from an adult somatic cell – Edinburgh has a global profile in life sciences. The industry currently employs around 13,000 people in the city region, which is 45 per cent of Scotland's total.[cxii] The industry has grown at a respectable rate of almost 5 per cent a year between 1991 and 2004.[cxiii] Key research strengths are in stem cell research and clinical applications, as well as neuroscience, genomics and bioinformatics at Edinburgh University, which houses centres of excellence such as the Centre for Genomic Technology and Informatics and the new Centre for Regenerative Medicine. Overall Edinburgh is ranked joint 53rd in terms of academic performance according to the Shanghai Index of academic ranking of world universities.[cxiv]

The latter will be the core of the Edinburgh BioQuarter, a biomedical research centre focused on translational medicine located alongside the Royal Infirmary of Edinburgh, which will combine teaching, research and practice. Already, there are over 70 companies engaged in collaborations with Edinburgh scientists, including 17 of the world's top 20 global pharmaceutical companies.[cxv] It is projected that the BioQuarter will ultimately provide more than 500,000 square feet of academic research space and an additional 900,000 square feet for commercial research-based companies. Spin-out companies will be able to draw on specialist advice and financial support to grow. Although this initiative is Edinburgh-based, the Scottish stem cell initiative is treated as very much a pan-Scottish initiative seeking collaboration with strengths in the other city regions.

Part of the ambition is to increase the number of large pharmaceuticals companies in Scotland. The current limited pool of large pharma companies limits the opportunity for horizontal movement between companies, which is seen as a hindrance to attracting and retaining world-class talent. Rather than graduates, of which there is a strong supply, experts feel the city region is short of senior scientists with a desire to commercialise their research, as well as senior commerical managers and CEOs who can develop businesses beyond the start-up phase. This implies a need to seek individuals with a world-class profile and ample international experience, which poses evident competitive challenges. Specific concerns surround retention of Edinburgh's stem cell specialists when the US government reverses its ban on related research.

Finally, within the sector as a whole there are opportunities to build on successful companies that are located throughout the region, such as Prostrakan in Scottish Borders, a specialty pharmaceutical company, and Optos, a leading medical technology company based in southern Fife.

Tourism

Tourism in Edinburgh continues to expand, particularly due to the rise in the city-break market and increasing conference capacity during non-festival periods. With over 60,000 people working in the sector throughout the region, and around half in the city itself, Edinburgh and the surrounding region are a key driver of the Scottish tourism sector, with nearly one in every three Scottish tourism jobs being located in Edinburgh.[cxvi] In 2006, the sector generated £1.7 billion expenditure in the city alone, and provided jobs to around a tenth of the workforce.[cxvii] As one of six key tourism destinations in the area covered by Scottish Enterprise, Edinburgh will continue to be a focus for investment, development of opportunities and revenue growth.

Six decades after the Edinburgh International Festival began, Edinburgh currently hosts 12 major annual festivals, including the hugely successful Fringe, generating £184 million for the Scottish economy altogether.[cxviii]

Additionally, the sector adds significantly to the national and international reputation of the city and the region, with the Edinburgh Festival being a 'household name' in many parts of the world. According to the recent report, *Thundering Hooves*, on how to maintain the international competitiveness of Edinburgh's festivals, one key consideration is the challenge of continuous artistic and business innovation, which poses a need to attract 'executive leadership of internationally competitive character'.[cxix]

Tourism is a sector with significant skills gaps, particularly surrounding soft skills such as communication and teamwork. Another acknowledged skills shortage in Edinburgh is the lack of professional chefs. Currently, migrants from central and eastern Europe are recognised as plugging shortages in the lower-skilled jobs while large establishments such as the Balmoral Hotel are actively recruiting abroad.[cxx]

A key strength of the region's tourism offer is its diversity, with areas such as East Lothian, Clackmannanshire, the heritage-rich City of Stirling and the Scottish Borders all being part of Edinburgh's hinterland while having their own complementary identities. East Lothian is already promoted as a sport (golf), leisure and food destination accessible from the City of Edinburgh. Other areas face challenges. For example, in Clackmannanshire the challenge is to strengthen transport links and accommodation as well as generate product innovation and marketing, lest the area become dwarfed by the image of surrounding places. This indicates a need for entrepreneurship as well as strong policy coordination.[cxxi]

Financial services

Banking has been a focus for Edinburgh for over 300 years. The UK's second financial centre after London (fifth in Europe), Edinburgh is home to the headquarters of the Royal Bank of Scotland and HBOS banks as well as housing many other high-grossing financial services companies such as Standard Life, Scottish Widows and Bank of New York. The sector accounts for a much higher percentage of employment in the city region than the Scottish average, with over half of Scotland's nearly 120,000 financial services jobs clustered here.[cxxii] In 2005 this sector accounted for 27 per cent of Edinburgh's jobs and is expected to increase its employment levels by 8 per cent between 2003 and 2008.[cxxiii] Financial services are proportionately more important to the economy of Edinburgh than they are to London.[cxxiv] Particular strengths are in banking, life insurance and pensions, asset management and asset administration. Judging the talent 'need' for financial services in Edinburgh is not a straightforward exercise. One report by Futureskills reported 27,100 financial and business services vacancies in 2004/05 in the city.[cxxv] Elsewhere, however, the report argues that the skills gap problem (inappropriate qualifications or a lack of 'soft skills') is greater than that of skills shortage (a lack of applicants).[cxxvi]

A recent report by the City Council found there was no shortage of talent in banking, but remained inconclusive regarding other financial services jobs. A reported increase in poaching bears witness to a limited top talent pool. On the one hand, this mirrors the UK situation generally[cxxvii] but it has been argued that finding people to fulfil the sector's leadership and management needs is a particular challenge for Scotland.[cxxviii] Experts highlight a continued need to strengthen both its attractiveness as a career path to people within Scotland, and its international profile. There could be benefits to strengthening links between the financial services industry in Glasgow and Edinburgh, particularly in terms of the scale and breadth of job opportunities.

Food and drink

Despite employing 14,178 people in Metropolitan Edinburgh, the food and drink sector is underrepresented in the regional economy, and performing relatively weakly according to a recent 'performance scorecard'.[cxxix] However, within this overall picture there are many stories of success and potential. For example, investment in the meat-processing sector and bakeries, and a very large and growing number of food service outlets strongly related to tourism demand. The wider region has many innovative SMEs that focus on adding value from primary produce.[cxxx] Further opportunities exist in enhancing links with academia to boost

R&D, product development and inward investment, in particular in the luxury niche and health foods segments.

Energy

The energy sector in Metropolitan Edinburgh is small, employing just 0.6 per cent of the workforce.[cxxxi] Whereas significant growth in this sector is foreseen across the Metro East region, such as in the Fife Energy Park (see under Dundee), the Edinburgh city region is not seen as a strong player in the sector.[cxxxii] However, there is a potential for building on the wider manufacturing base of the city region in this market segment, opening the doors for entrepreneurial energy and the creative use of transferable skills. A recent project with Heriot-Watt University has been trialling very targeted interventions to support the attraction of talented 'star researchers'. Evidence so far indicates that the renewable energy sector has benefited from this project, and it may be rolled out more widely.

Electronic markets/digital media

The electronic markets sector is the third largest in the city region, employing 72,120 people overall.[cxxxiii] Although a number of high-profile plant closures in the recent past (such as the Motorola plant in West Lothian) have seen significant job losses, the activities within this category are still broad-ranging, encompassing software activities, digital media, creative industries and (opto)electronics. There are fruitful links with the University of Edinburgh, which has a 5*-rated research department in this field, and the creative industries cluster in Leith provides many opportunities for further cross-fertilisation between different sub-sectors.

Place

A UNESCO World Heritage City, Edinburgh boasts a distinctive medieval and Georgian townscape, world famous landmarks such as Edinburgh Castle and Holyrood Palace. While these assets make highly attractive high-end housing and tourism attractions, the city feels a crunch on affordable housing, suffers from congestion pinch points and inter-regional links are perceived to be very poor. Some of these latter issues may be ameliorated by new transport measures, including a tram system for the city, which is due to be operational in 2010. New projects such as the ambitious waterfront development aim to generate wider benefits for the city and could begin to address housing pressures. However, it is unclear how the development will meet other equally pressing needs. Edinburgh has persistent pockets of deprivation and long-term unemployment, which cannot be easily solved with high-profile physical regeneration measures alone.[cxxxiv]

Coordination of housing, transport and other public service policies is sometimes difficult because of the wider city region's administrative fragmentation and lack of coherent identity, which has led to problems in policy delivery, such as the roll-out of the city regional brand and competition over company locations between local authorities. However, policy coordination and collaboration is no doubt where future opportunities lie. Growing and deepening the links between Glasgow and Edinburgh in terms of faster transport links and economic integration will be crucial to create a 'single business space' in addition to maintaining distinct cultural identities. This requires significant transport investment as well as policy innovation. It will be important to integrate these talent considerations into the ongoing Glasgow–Edinburgh collaboration project.

Similarly, the immediate hinterland of the city has ample opportunities: the presence of places with a range of qualities – from Stirling (Scotland's smallest city with its strong service sector, renowned playgrounds policy and strong built heritage) to the low-density Borders – can provide a wide offer of housing and lifestyle options to talented individuals. In order to make the most of this, strategic regional planning will be vital.

DEMOS

Glasgow

Table 7. Summary statistics – Glasgow[cxxxv]

Demography	
Total population (city)	2,147,697 (577,869)[cxxxvi]
Population growth 1999–2006	–0.6%
Population projection 2020 (growth 2006–20)	2,100,928 (–2.2%)
Net migration 1999–2005	–874
White[cxxxvii]	94%
Born outside Scotland (outside EU)[cxxxviii]	10.9% (4.0%)
Economy	
Share of Scottish economy (GVA)	41.4%
Average annual GVA growth 1999–2006	1.7%
No. of registered businesses (growth 2000–06)	51,245 (–0.1%)
Annual income per head – 2003 prices, residence-based (average growth 1999–2006)	£10,795 (2.5%)
Labour market	
Economically active population	1,024,210
Unemployment rate (ILO)	6.2%
Economic activity rate	77.0%

People flow

Glasgow is Scotland's largest (12.5 per cent of the Scottish population) and most diverse city (at 6 per cent, the largest non-white population in Scotland) (see table 7).[cxxxix] In addition to well-established Irish, Lithuanian, Italian and Chinese communities there are nearly 22,000 Asians living in Glasgow, the majority of which are of Pakistani origin.[cxl]

Between 1991 and 2001, Glasgow City experienced one of the largest population declines of any UK city, and the region as a whole is projected to see a structural, albeit small, loss of population to 2020. There is still a net loss of migrants across the region, despite a considerable yearly arrival of migrants in the last few years, particularly from eastern Europe and the Indian subcontinent. National insurance number registration data for 2006 show 4,894 registrations from the former and 1,517 from the latter.[cxli]

Economy

The Glasgow city region generates 41.4 per cent of Scottish GVA and has performed strongly in terms of growth more recently; indeed, employment has increased 9.3 per cent since 1999, against a 6.5 per cent increase for Scotland overall, and also outstripping UK growth in the same period.[cxlii] The city region has Scotland's largest and most diverse labour market and is the UK's fourth most knowledge-intensive economy with 38 per cent of the population employed in 'knowledge-intensive' occupations, above cities such as Birmingham, Newcastle/Gateshead and Liverpool, and on a par with Manchester.[cxliii] The region has a reasonably skilled workforce: data for 2006 show that 36 per cent of workers are trained up to NVQ level 4 or higher, which is on par with the Scottish average.[cxliv]

Earnings are above Scottish averages, and the labour market is considered quite stable with low rates of turnover. Simultaneously, though falling, unemployment remains high at 6.2 per cent,[cxlv] and there is evidence of a significant gulf between low-paid, low-skilled workers concentrated in certain urban areas, and the managerial and knowledge-rich class. For example, in 2006 the city had 1,076 millionaires – the fifth highest total in the UK[cxlvi] – and nine of the top 20 property streets in Scotland. At the same time, the city also has 226 of the neighbourhoods judged to be among the 5 per cent most deprived in Scotland, accounting for 70 per cent of the total of such neighbourhoods and over one-third of the city's population.[cxlvii] While Glasgow contains the largest number of further and higher education students in Scotland, the city also has a high proportion of workers with no qualifications at all – 12 per cent compared with the UK average of 10 per cent, and a lower proportion of school leavers going into further education (21 per cent compared with a Scottish average of 31 per cent). For the city itself, many of these data are even more negative, pointing to the challenges in achieving social cohesion and economic participation.[cxlviii]

Life sciences

The life sciences sector in the region accounts for over 33 per cent of Scotland's employment in the sector. With 9,815 employees in 2004 the Glasgow city region was the second-largest concentration of life-science employment in Scotland.[cxlix] Even so, BAK Basel Economics concludes that 'it is unlikely that Metropolitan Glasgow will gain a top position in the Life Sciences Industry' because with the city's relatively lower share (compared with key international metropolitan regions) it will be difficult to achieve critical mass.[cl] However, this is perhaps unduly negative, and critical mass within life sciences is perhaps better understood as a Scotland-wide issue. Glasgow has significant niches in high-value, specialised activities supported by an active academic research base and teaching hospitals – for example oncology, cardiology, clinical research and translational medicine. Other strengths are in high-tech enabling industries such as specialist engineering, for example photonics. Large life-science companies in the region include Organon, located in Lanarkshire on the M8 corridor between Glasgow and Edinburgh. A major initiative in the region is the development of a 'Science Diamond' linking up academic centres of excellence with NHS facilities and the private sector. This can further increase the size and quality of the region's NHS hospitals, adding to the breadth and depth of the regional labour market in the sector, which, though difficult to measure, can be a significant component of the attractiveness of the location for high-value talent.

The research institutions in the region are strong and get a significant share of the funding from charitable bodies such as the Wellcome Trust. The University of Glasgow is ranked in the top 150 universities in the world according to the Shanghai Index.[cli] Its Faculty of Biomedical and Life Sciences got consistent 5 or 5* ratings at the last RAE (2001), and was, with Dundee, the only European department in a top 15 Life Sciences ranking compiled by *The Scientist* in 2005, based on judgements from international academics.[clii] However, such strength and scale is also evident in other academic institutions with numerous other 5 and 5* rated units, such as the Strathclyde Institute for Drug Research, and Pharmaceutical Studies at Strathclyde University.

There are a number of spin-outs from this institute and from similarly successful institutes such as the University of Paisley and the Beatson Institute for Cancer Research, although many of these have had difficulties scaling up activities. According to one expert interview this is largely due to not successfully matching up research and academic skills with the senior business skills needed to grow beyond the start-up phase. She maintains that the main skills shortage within the sector is at this senior business level, while, conversely, there is currently an oversupply of graduates.[cliii]

Tourism

In 2006, tourism supported 76,605 jobs in the city region, representing around 8 per cent of all employment,[cliv] and in 2002 generating expenditure of £730 million.[clv] The City has profited immensely from the growth in short-break trips, owing to good airport and rail connectivity, high-profile investment in the city centre, which has become renowned for its innovative architecture, and proactive marketing campaigns. After London and Edinburgh, Glasgow has the highest number of visitors to any UK city, and growth in number of hotel beds has been remarkable.[clvi]

Business tourism is also particularly strong with 40 per cent of all business tourist spending in Scotland happening in or around Glasgow.[clvii] The city is a big conference destination with the location of the Scottish Exhibition + Conference Centre. The Glasgow City Marketing Bureau has been credited with boosting the number of conferences in the city, more than quadrupling the value of the conference sector in the city between 1996 and 2003/04,[clviii] and scoring a healthy 8 per cent further increase in the value of conferences booked, from £65.7 million in 2005/06 to £71.1 million in 2006/07.[clix]

The wider region has excellent natural assets such as Loch Lomond, Trossachs National Park and Clyde Coast, which significantly complement and diversify the strength of urban Glasgow's appeal to a wider range of audiences. There are significant opportunities in capitalising on the region's local historical and natural assets, local culinary traditions as well as on the city's reputation for innovative design. The hosting of the 2014 Commonwealth Games will be a further boon for the city and is seen as a significant milestone towards achieving the overall target of growing tourism revenue by 50 per cent by 2015.

Financial services

Glasgow's International Financial Services District or the 'square kilometre' has grown rapidly over the past decade. It is now home to many of the world's largest financial services companies and since 1998 has added over 14,800 jobs to the sector, strengthening the thickness of the regional labour market.[clx] The region is home to over one-third of all financial services workers in Scotland.[clxi] Growing at 3.9 per cent per annum between 1995 and 2004, Glasgow's financial services sector is above European averages but well below the prime players such as London, Frankfurt, Edinburgh or Munich. Glasgow's key financial services strengths tend to be in back office services. In their 2005 benchmark report for Glasgow, BAK Basel Economics caution that given the intense competition with other cities in this sector, closer collaboration with Edinburgh will be necessary to achieve critical mass and international visibility.[clxii] This holds equally for Edinburgh and there are reciprocal benefits from the two cities deepening their collaboration efforts.

Electronic markets/digital media

Glasgow has utilised its manufacturing base and its reputation for creating cross-overs between art, design and technology to make some headway in electronic markets. The regional sector spans from specialist manufacturing to the arts and design sphere, with research and teaching institutions across this range, such as the Institute of Photonics at the University of Strathclyde and the Thin Film Centre at the University of Paisley, as well as with the famous Glasgow School of Arts' Digital Design School. Regionally, the sector employs over 70,000 people, putting it nearly on par with the Edinburgh city region and making it a sector of considerable scale and impact.[clxiii]

The Intermediate Technology Institute works to match future technology markets with research and development. In 2005 Dell launched a new call centre in City Park that generated over 300 jobs. In software and gaming there has been some contraction; most prominently, DA Group has slashed their workforce by almost 40 per cent and games developer Steel Monkeys closed in 2004. In optoelectronics, Thales Optics and Intense are generally touted as success stories; other strong companies in the region include Logitech, Nallatech, Graham Technology, and the Scottish Media Group.

Pacific Quay, a 60-acre site on the south side of Glasgow, is also emerging as a digital media hub and business park, as part of the Clyde Waterfront regeneration plan. The site hosts the Glasgow Science Centre, an IMAX cinema, XFM Scotland and SMG. Perhaps most significant however is the new Scottish headquarters for the BBC, which opened in 2007 and is regarded as one of the world's most advanced digital broadcasting centres. Pacific Quay is also set to be the new home of Glasgow School of Art's expanded Digital Design Studio. This new media quarter builds on the reputation of the city as one of the UK's media centres. For example, Channel 4's Nations and Regions Headquarters (for all the UK) is based in Glasgow.

Energy

Scottish Power, based in Glasgow, is one of six energy suppliers that dominate the UK market. It recently pulled out of a joint venture with a US-based company and cost Glasgow a net total loss of 450 jobs, with more job cuts expected. However, British Gas recently moved its telesales operations to City Park and added over 100 new jobs. Generally, the energy sector is looking towards new opportunities for future technological development and growth in the region. Already, in 2004 the GVA of £7.4 million was eight times the Scottish average.[clxiv] Future prospects lie in exploring growth potential for renewables, such as the development of Lanarkshire Energy Technology Centre in East Kilbride and in capitalising on nuclear de-commissioning at Chapelcross Power Station. The higher education sector has a growing capacity for research in these fields, with different departments of Glasgow Caledonian University, University of Glasgow, University of Paisley and the University of Strathclyde teaming up in the Glasgow Research Partnership in Engineering (GRPE). The GRPE Joint Research Institute in Electronic, Communications and Power Systems is a recent initiative that will focus on specific energy research challenges such as autonomous power systems, active network management and energy conversion technologies.

Food and drink

Glasgow is the commercial centre of Scotland's whisky industry. The manufacturing of whisky is Glasgow's top export earner accounting for 36 per cent of all manufactured exports and 21 per cent of the city's international trade in 2001/02.[clxv] With a booming global market for whisky, this success can be built on. More generally, however, Glasgow's food sector saw export sales decline from £36 million in 1992 to £10.8 million in 1998, a trend that seems to be continuing; employment in food and beverage manufacturing in the city has fallen from 6,630 in 1998 to 5,690 in 2003.[clxvi] Even so, the city region is still home to the largest concentration of firms in the sector, with altogether some 21,530 people employed.[clxvii] Many large companies, such as Allied Bakeries (the UK's largest baker), have consolidated around 'core' facilities in Glasgow, stabilising their employment levels, and many small specialist companies continue to thrive.

Place
A distinctive mix of medieval, Victorian and modern, Glasgow was designated UK City of Architecture and Design in 1999. This built on and added to the glow of the city's built heritage, such as the well-preserved Victorian city centre, the medieval Cathedral and Charles Rennie Mackintosh's Glasgow School of Arts. This institution is both a major tourist draw and a highly dynamic institution. Its School of Architecture was ranked in a survey by the *Architects' Journal* as the best architecture school in Scotland and third in the UK,[clxviii] and the School as a whole has many international networks with other arts institutions, making it a multifaceted asset for the city.

The city is building on this design reputation; between 1991 and 2001, Glasgow invested £28 million in its urban realm (compared with only £4.5 million in the same period in Edinburgh). Some suggest that in regeneration there has been too much emphasis on large urban development projects (eg the Clyde Waterfront Project), which have proved in other cities not to be unqualified routes to success. Recently a more balanced approach, incorporating more community and public participation based projects, seems to be taking root. For example, public participation was effectively integrated into the Crown Street project in the Gorbals. And in the wider region, a public space initiative in Neilston has been praised by CABE (Commission for Architecture and the Built Environment) for involving community groups in the design process. Elsewhere, the regeneration of Merchant City has introduced a more European-style café and street culture though it has been criticised by some for being too tourist-focused.

The socio-economic challenges in the city remain considerable. As The Work Foundation concludes in its review of the city, 'indeed Glasgow is well-known for trans-generational unemployment, low life expectancy and poor health'.[clxix] Glasgow has 23 of the 25 most deprived areas in Scotland when judging employment, income, housing, health and access to services.[clxx] However, in recent years the regional economy has shown significant growth, which in terms of GVA per head has been on par or above the Scottish average for the last four years. There are encouraging signs that this might be benefiting at least some of the less well-off: the unemployment rate has fallen to come much closer to the Scottish average, and the city's skills profile is improving, and the number of youngsters Not in Employment Education or Training (NEETs) is falling.[clxxi] Hence, there seem to be signs that the regional economy might be spreading the benefits of growth, which would be important to sustain the long-term social cohesion and latent talent pool in the city.

Finally, the need for further and deeper collaboration and integration between Glasgow and Edinburgh has been discussed in the city region profile for

Edinburgh. This is an issue of equal importance for both cities and needs to be understood in terms of reciprocity – economically, socially and culturally.

4. A model of mobility

After an insight into specific city region scenarios, let's zoom out once again. In the previous chapter we highlighted considerable gaps in our understanding of the relationship between talent, mobility and place. This chapter is about the big picture: the underpinning principles of the relationship between talent, mobility and place. It draws together the findings from an intensive qualitative research exercise designed to fill some of those gaps.

We begin by outlining a conceptual model of mobility. This model is based on four main principles:

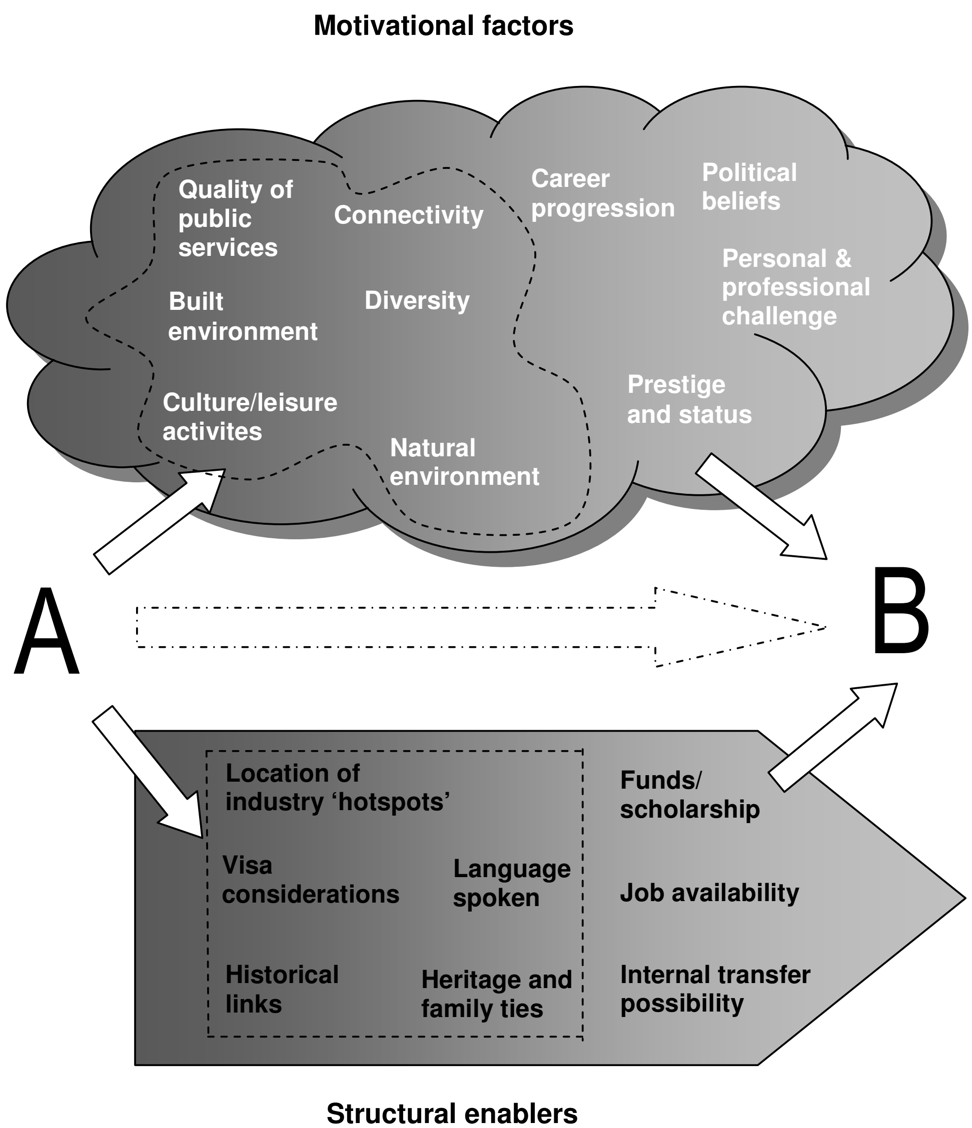
- First, migration decisions of highly skilled workers are a mix of 'motive' and 'opportunity'. They reflect both **motivational** factors, such as personal or professional aspirations, and **structural** enablers, such as historical linkages and the availability of scholarships or opportunities for internal job transfer.
- Second, these motivational and structural factors interact and combine to create distinct **mobility pathways** that determine whether and where they will migrate.
- Third, although place is rarely a primary factor in any decision to move for work, it has an important impact on both motivational and structural factors. The physical assets and social values of places can be a significant source of motivation, while a place's reputation and the opportunities located there are important structural enablers of mobility.
- Fourth, while the impact of place on these mobility pathways is distinctive to each individual, it is shaped by some common factors. We focus on two: **life stage** and **career type**.

Methodology
During the course of the public research we interviewed over 110 people identified as 'talent' in a combination of single and paired depth interviews and focus groups split by city and life stage. Over two-thirds of these were people who had moved to Aberdeen, Dundee, Edinburgh or Glasgow to work in one of the six priority industries identified by Scottish Enterprise. These interviewees originated from the rest of the UK, Europe and further afield, including countries in North America, Asia Pacific and Africa. We selected a mix of gender, life stage and country of origin. The remaining interviewees were a combination of 'potential talent' (talented people who might consider moving to Scotland for work) divided by life stage and international/domestic origin and 'lost Scots' (talented Scots or people previously working in Scotland who had left to work in the South East). For a more detailed account of methodology please see appendix 2.

A model of mobility

The model shown in figure 3 represents the variety of forces acting on an individual's decision to move for work. Our research found that these forces can be broadly divided into two groups: motivational factors – shown at the top of the diagram, and structural enablers – shown at the bottom of the diagram. Where these interact or overlap creates the mobility pathway. The dotted lines group the factors that are most directly related to place.

Figure 3. Mobility pathways model



Let's consider each of these elements in turn.

Motivational factors

These aspects share strong similarities with the push–pull forces of migration literature. Leaving aside the aspects most closely related to place for the moment, how did these factors manifest themselves in the mobility decisions of our interviewees? The following quotes are representative of common motivations for mobility.

- Mobility sets one apart from the crowd in employment terms

Whereas moving around would once have made an employee seem uncommitted or flighty, our interviewees regarded it as an unequivocal strength on their CVs.

> *It is important to be prepared to move. I don't think it is very realistic to think that every opportunity is going to exist in one place … you never know what will come up and where it might take you. You limit your horizons if you won't move.*
>
> Financial services, London; origin England

- Mobility brings professional challenge

> *I took on this job because I felt it was a great opportunity to put things I had learnt into practice. A lot of people I spoke to thought I was a little mad … but I just saw it as a challenge.*
>
> Senior Manager, Tourism, Edinburgh; origin England

In this case the test was to turn an ailing arts institution into a vibrant cultural hub. Once that is achieved this interviewee had little doubt it would be time to move on to the next test of his talents.

- Mobility brings personal challenge

Often there was a desire for adventure, for experiences outside the comfort zone of a home town or country. A large proportion of the people we interviewed saw moving for work as a way to find out more about themselves.

> *I have learnt a lot about what makes me tick … I have exposed myself to aspects of life and people I wouldn't have otherwise experienced. That was what I came for.*
>
> Financial Services, Glasgow; origin Australia

- Mobility is one way to speed up career progression

For some relocation was the only way to climb the career ladder in a restrictive career hierarchy, or one where there was a glass ceiling for those without international experience:

> *I suppose it was the opportunity to have a chance to put my own team together and to control my own research … it was what I had been striving for.*
>
> Senior Life Scientist, Dundee; origin the Netherlands

- Being mobile could increase disposable income.

Salary was of course an important motivation for mobility, with varying importance across careers.

> *At the end of the day if the money is right, and it looks good on my CV I'll go there, you can always find somewhere OK to live within 30 minutes drive.*
>
> Food and drink manager, Aberdeen; origin England

But whereas few people were willing to receive a pay cut when they moved, there were exceptions if the job or project would set them apart from the crowd. Rather than judging an opportunity on a net salary itself, people are most likely to assess the wider issue of disposable income.

- Moving to work with the 'best' brings prestige and status.

Whether it is to work for a blue chip company, a famous scientist or a cult hero, moving to work with the success stories, wherever they are, can be a major CV boost.

> *I came to Glasgow because it is the best centre for my area of research, we are known to be the best and that is important.*
>
> Senior Life Scientist, Glasgow University; origin England

- Political environments can motivate mobility.

Fleeing Far Right regimes, working abroad to gain the 'legitimacy' to later return to one's home country and fight for its development or freedom were all motivations that surfaced in our research. Being able to participate politically was also a concern for some.

> *I didn't want to go back to Germany, but I wanted to be in Europe again so I could vote.*
>
> Life sciences, Dundee; origin Germany

Structural enablers

Structural enablers of mobility are the pre-existing frameworks and channels that direct and catalyse flows of people. In the case of international mobility these include immigration systems, historical links between countries and established patterns of migration as well as ancestry and internal transfer opportunities.

Individual stories of migrants express the power of these structural considerations most clearly. Let's take as an example the story of Ling.

Ling was a top student at high school in Singapore. She never doubted that, like all her friends, when she graduated she would leave to continue her studies in Europe, the USA or Australia. Despite the fact that Australia was closer and the US more fashionable among her peers, she chose the UK, since it was a long-established university route, and colonial ties meant she knew the education systems would be similar. She did her first degree in Cardiff, before returning to Singapore to work in 2000. After a year of travelling in Australia, and a few years of work in Singapore, she decided it was again time for a change. At a British Council careers fair she came across an advert for the Scottish Executive International Scholarship for postgraduate studies and decided to apply – 'It was a very fast decision. The opportunity knocked on my door, so I went with it.'

She told us: 'I didn't really consciously pick Scotland, I just went with the flow.' But Ling had prior connections. She travelled to Scotland in 1999 for a six-day backpacking tour and had fallen in love with the scenery; she also had a friend in Singapore who had been to Strathclyde and praised Glasgow's cosmopolitan feel. Probing deeper, the decision was provoked by a number of structural factors. The major structural advantage was the Fresh Talent scheme – although this was brand new, the British Council had informed Ling of the possibility of staying on in Scotland to work after she had finished her postgraduate course. Ling now works as a scientist in the food industry in Aberdeen – her job secured through the Fresh Talent scheme.

In Ling's story we see the effect of structural influences such as historical colonial ties between countries, scholarship availability, immigration incentives and positive reputation (through prior experience and word of mouth advice). Her positive experience of a holiday in Scotland may have been a decision-maker, but it is more likely to have been simply the icing on the cake.

In a second example, the impacts of some of the most common structural links are shown: ancestry and internal transfer within a company.

Thirteen weeks ago, Marion packed up her possessions and, with her husband and their two children, moved from New Zealand to the other side of the world. A senior executive within a major international bank, a few months previously she had been offered an internal transfer to Scotland. It was an offer that after much soul-searching, she decided she couldn't refuse.

The timing was the first issue – I mean I'm 49 and a half, the children have left school for university – we are 'free' for the first time in however many years, and it's our last chance for an adventure.

But Marion admits all this would have remained a pipe dream if it hadn't been Scotland. 'The place was everything – I suppose it comes down to our heritage.' It turns out that both Marion and her husband had Scottish grandparents. Jeff's grandfather even served as a sailor on the Cutty Sark. They had a romanticised view of Scotland and a strong affinity with the country having chosen it as the destination for their 25th wedding anniversary a few years' previously. When Marion came over for interview, her visit coincided with an international football match, meaning the streets were full of cheering kilted supporters. She took an open-top bus tour of the city and decided this was somewhere they could be happy.

Mobility pathways

Although these personal migration stories emphasise different elements, the mobility pathways to different places are mitigated each time by a different combination of structural enablers and motivational factors.

Mobility pathways are formed when structural and motivation factors interact – no single element dominates.

The interplay of these factors is present throughout our research, but one particularly illustrative case is that of a Brazilian couple who had moved from Brazil to Aberdeen.

Fernando and Marie-Luisa, originally from Rio de Janeiro were both working in the oil and gas industry in Manaus, Brazil, when the opportunity to relocate came up. Fernando is a young high-flying senior manager, and knew there was a certain glass ceiling for people of his level without international experience. So after discussing the implications with his wife, the couple jumped at the chance. Their three-year-old daughter was only at nursery school, and the couple knew they only had a small time window 'for this kind of adventure'.

They were presented with a number of options by the company, but after deciding there was 'too much George Bush' in Texas, and 'even more George Bush' in the Middle East, they plumped for Aberdeen. They considered the location carefully, and despite being warned by local Scottish expats ‘you’re crazy – you’ll freeze to death up there’ – they decided it was the best option to choose the energy hub in English-speaking Europe.

‘We probably won’t be here for many years, and after this its back to Brazil for sure,’ they tell us, but this relocation wasn’t as much of a challenge as they feared it might be. In the end, the original move from Rio to Manaus to take a more senior position had been much more of an upheaval.

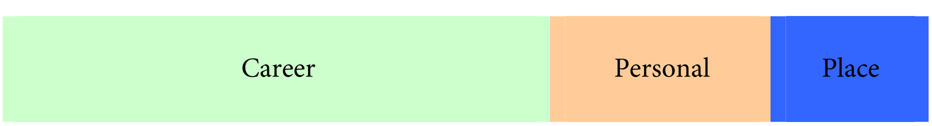
This couple’s relocation was driven by a desire for adventure, a sense of ambition and a need for personal and professional growth. These are qualities that many of the mobile and talented people we interviewed held in common. But in this case these attributes were catalysed by a number of additional structural factors – a career path in an industry that required international mobility for advancement, a limited number of global industry ‘hotspots’, an opportunity for internal transfer and a young daughter of pre-school age – a last chance for free movement before the school years begin.

The role of place

So far in this chapter we have argued that mobility decisions are shaped by motivational factors (will to move) and structural enablers (opportunity to move), and it is the interplay between these that creates mobility pathways. Place has an impact on both structural and motivational factors, but up until now we have focused on the structural enablers of mobility related to place. Let’s now turn to the motivations.

The model of mobility shows that although place does play an important role in decision-making about relocation, it exerts an influence within a combination of factors. In fact, place is often less important than career or personal considerations. Where ‘career’ is job opportunity and ‘personal’ is personal life, estimating the proportionate importance of place in mobility decision-making gives us a picture as shown in figure 4.

Figure 4. The relative importance of place in decisions about mobility



Our research found that although this represents the broad picture, the boundaries can be blurred since structural factors relating to place frequently act as part of career or personal motivations; think for example about the Scottish scholarship scheme in the case of Mo or the personal heritage links to the country in the case of Marion.

For this reason we will now turn to take a look at place as a motivational factor, and to be precise, the aspects of place that might clinch the decision to move in the favour of a particular place. Rather than addressing the specific attributes of Scottish city regions, which is an issue for chapter 4, in table 8 we will look at the general aspects of place that motivate decision-making about mobility by talented people.

Table 8. Aspects of place in decisions about mobility

Identity	
It doesn't really matter where the place is, it should make the most of its individuality, that is what is interesting, you don't want to go somewhere that is just the same as anywhere else. Financial services, London; origin UK	A strong theme throughout the research was a desire for a place with an individual identity. While some thought this could be boosted through iconic building projects, others disagreed and instead emphasised making the best of natural assets, history and communities. There was a widespread strong negative reaction to certain visual prompts of malls and streetscapes which interviewees described as an extremely undesirable 'identikit' uniformity.
Diversity	
I wouldn't live anywhere that wasn't multicultural, I think it is important, attitudes are different and it is more interesting. Tourism manager, London; origin UK	There was a strong attraction to places with visible manifestations of different cultures and a variety of cultural provision. This wasn't only a case of favouring tolerant and welcoming attitutes to difference, be it sexuality, race or age, but positive spaces for real integration. The message was fusion and not just co-existence.

Public services	
Norway has the best social system in the world ... [in a place] which is constantly rated the best place to live in the world by the UN, there is no reason not to move there. Life science academic, Dundee; origin Germany	Public services were not something that the respondents mentioned much without being prompted. Most tended to regard it as a minimum condition, which they expect to be fulfilled where they settle: local public transport, healthcare and schools, even though a high cost for education was mentioned by some as a prohibitive factor for settling in the UK with children, when compared with other countries and countries of origin. Otherwise, talented people take a decent public service offer for granted without expecting particularly much from it.
Natural environment and beauty	
I loved the scene here. I'm from Singapore, a large city, and all you see are concrete, bricks, and not much of a skyline, quite polluted sometimes. So seeing nature, the animals, the Highlands, made me feel really at ease. So, I thought, why not? Food and drink, Glasgow; origin Singapore	There is no doubt that for a large part of our sample, access to and the quality of the natural environment are major factors in the quality of life that they appreciate or even seek in places. Additionally, the quality of the natural landscape for some can compensate for negative place aspects or associations, both at the decision-making moment itself and in terms of longer-term well being.
Night-time economy	
We need much more to do in the evenings, everything just shuts down. I don't want to go and drink ... that is not part of my culture. Life sciences, Dundee; origin the Netherlands	There were strong messages about night-time economy throughout the interviews. Rather than focusing on entertainment provision, this was often just as much about the buzz of an 'open all hours culture'. Late-night shopping and wifi cafés open late were far more frequent demands than more bars. Decorative lighting and free night-time community events were appealing ways to reclaim the evenings for safety as well as entertainment.
'Open air' culture	
Having events like festivals brings people together and gives you a feeling of being part of something. Tourism manager, Aberdeen; origin Scotland (returnee)	Accessible and affordable (or free) events were a considerable pull to a place. While city-wide fiestas raised awareness of places, local community events were regarded an important way to feel 'at home'. Sporting events were also a draw, linked to city pride. Café culture was an almost universal prerequisite in an ideal place.

DEMOS

	But although this is an important cosmopolitan lifestyle aspiration, it is also about reclaiming and inhabiting public space and creating opportunities to interact with the life of a city on an 'everyday' basis.
Transport connectivity	
Transport is really important, you want to be able to get about for work and living but you also want to be able to get out of the centre too … Food and drink, London; origin UK	There was a clear preference for international airports, high-speed rail links, functional public transport to surrounding areas and indeed walkable city centres. Easy transport links to one's motherland was an important pull to a location, while many chose places as viable 'hubs' to explore Europe. Talent likes places where it doesn't have to stay put.
Culture	
I like to know they're there even if I don't make the most of them. IT entrepreneur, London; origin Spain	While some were keen to live close to this type of institution, others were interested only in ease of access. Museums and galleries were regarded as important aspects of place not only as leisure activities, but as 'status symbols' of city identity.
Participation and change	
When I got here you could feel that the place had a buzz to it – like things were happening, I wanted to be part of a place like that. Financial services, Glasgow; origin USA	Places that were under major or constant change and renewal were appealing. It was important to feel 'part' of a place and to have an opportunity to shape it (one focus group participant even suggested that participatory budgeting practices would be appealing). For many this meant a desire for community, although meanings of this varied. The majority of interviewees expressed a desire to connect with the 'local' aspects of a place, with community shops and recognisable quarters a draw.
Liveable city centre	
City centres should be made for people not for cars … cafés, shops, art, parks … you should want to spend time there. Digital media, London; origin Liverpool	Cleanliness, pedestrianisation, quality shopping were frequent issues raised as attractive. Public art was positive – a sign of investment and personality. Although tastes varied, interviewees often suggested that they favoured a mix of old and new architecture – a living and liveable city.
Housing	
It is important to have affordable housing throughout a place, we have to live on the edge as it is the	Housing preferences varied according to previous location lived in. For example, commuting distance was relative. Affordability was important, but so was quality. A high

only place we could afford … we'd prefer to be more central. Life sciences, Dundee; origin the Netherlands	proportion of the younger interviewees had no cars and preferred to live in city centres.

In terms of what might repel talented people from a city, deficiencies in any of these factors might be dissuasive or a decision-breaker in terms of moving there. However, there were strong negative feelings towards derelict buildings and a lack of green space. The majority of interviewees were quite 'urban' in their outlook, with a strong affinity for the countryside. However, there was a notable dislike for a 'suburban' character, mainly because this was synonymous with a lack of strong identity.

So far we have constructed a model of mobility based on the combination of motivations and structural enablers that create mobility pathways, as well as looking more deeply at the motivational factors for mobility that relate to place. But as we pointed out, each mobility pathway is a unique combination of factors. Our research also found two external variables that exerted strong influence on the model: life stage and career type.

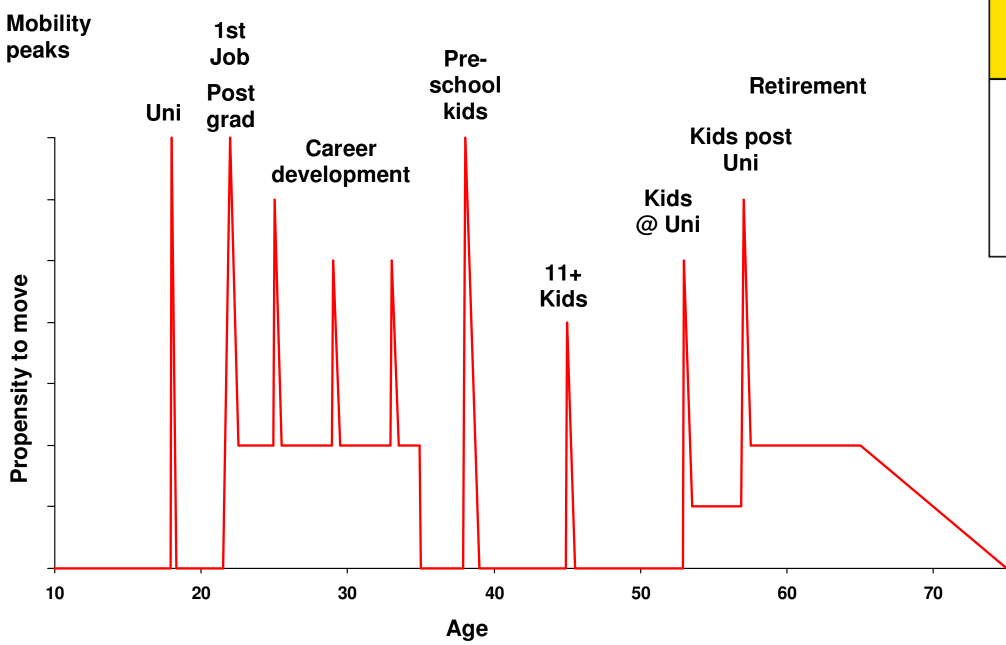
Common influences on mobility pathways: life stage and career type

Our research showed that two variables are likely to have a considerable impact on the model of mobility. The first of these is the most significant – life stage.

Life stage

From 'fleeing the nest' and 'expanding horizons' like Mo, or taking the last chance for adventure before the children go to school like Fernando and Marie-Luisa to doing something for oneself after the children have finally left home like Marion, people tend to be at their most mobile when they are at a crossroads in life. Figure 5 represents the peaks of mobility throughout life.

Figure 5. Levels of mobility through the life stages



At these different peaks in mobility, our research found that different aspects of place are likely to play a role in decision-making. For example, although place may play an important role in decisions about where to go for university (for example, quality of nightlife, distance from family, housing costs), by the time it comes to taking a first job the role of place may become less prominent as decisions are driven by pragmatic considerations regarding job availability (figure 6). When it comes to a couple with young children, place may again increase in importance as considerations about crime and safety, public service provision and distance from grandparent childcare grow in value (figure 7).

Figure 6. First jobbers

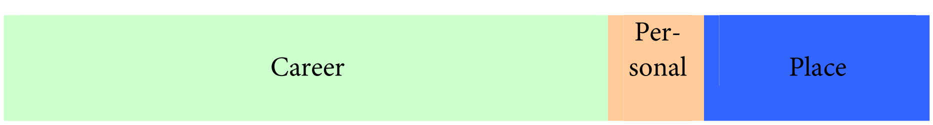


Figure 7. Family with young children

Table 9 summarises some of the defining place issues at each stage.

Table 9. Key place issues throughout the life stages

Life situation	Age group	Key place issues
Singles	(18–30+)	o Study/career development leads movement o Individual decision to be made, trade-offs more easily rationalised o Entertainment and Social are key factors in place choice
Couples	(25–35+)	o Taking into account a lead career vs balancing two careers o Lifestyle factors and thus place becomes a greater factor in decision as now joint decision o Ability to get onto housing ladder becomes more important
Family – young children	(30–40+)	o Often a key period of movement (away from bigger cities) driven by child lifestyle o A point where one career (male) often takes the lead in decision-making o Priorities shift to include schooling, safety and crime, communities and 'child nationality' o Often also an age where links to extended family become stronger – support for child and also support for elderly parents
Family – older children	(45+)	o Often unwilling to move children except at natural breaks in schooling at 11, 16, 18 years of age o Often beginning to consider retirement location/final move

Career type

We know that life stage affects mobility and what people want from a place. The other thing that affects mobility pathways is career type. In this research we focused on mobile talent working within the six areas designated as priority industries by Scottish Enterprise: Life sciences, Financial services, Energy, Food and drink, Tourism and Digital media.

There is some variation in overall mobility across the different industry areas – for example, life scientists are in general very mobile – and in the mechanisms driving that mobility – for example financial services mobility is frequently driven by internal transfers. When it comes to place, this does have an impact according to industry sector, but the impact is structural – the location-specific character of some jobs (eg in the oil industry). The difficulty from a research point of view is that these structural effects are very significant in mobility decisions, drowning out the motivational effects. This makes it difficult to draw any firm conclusions about how attitudes to place vary across industries. We can highlight a number of conclusions for some priority industries, namely life sciences, financial services and digital media. For the other priority industries we feel further research is required to be able to draw firm conclusions.

Life sciences

In keeping with the results of the literature review, life sciences stood out as the industry with the highest expectation of mobility for career progression, and continuation since contracts tend to be fixed term. All life sciences interviewees expected to move regularly (every 2–5 years) until they reach a very senior position. At the same time, choice of place is severely limited by hierarchical university career structures and a limited number of specialist, high-ranking institutions. Key factors in making a move to a certain place tends to hinge on institutional reputation and prestige, funding availability and presence of leading specialists. Professional 'icons', sometimes referred to in the literature as 'star scientists' are a big draw since they help scientists make a name for themselves, through boosting the potential for publication among other things. In commercial life sciences, international experience is a *sine qua non* of senior positions. On the commercial side, the 'thickness' of the labour market in this specialist area is a strong consideration in mobility decisions.

Digital media

Talented individuals working in digital media also tended to be highly mobile. Those working in gaming, for example, acknowledged the small number of high-quality nodes for this industry and were willing to relocate for the most interesting projects. Industry thickness in terms of number of companies was less important than quality of project and prestige of company and creator.

Scotland is one of the global hubs for gaming, I knew about it – so when an offer came I thought why not?

Digital Media, Dundee; origin USA

Since the industry attracts a high number of single males under 30, life-stage factors also boost mobility. We found a tendency among digital media professionals to prefer city centre living and working and to value the trappings of creative society such as cultural institutions and diverse entertainment opportunities. Since digital media companies tend to be small in size, cheap, flexible and interesting, work spaces can be a draw.

Financial services

In financial services, although interviewees were conscious of the 'career boost' provided by an overseas position, mobility seemed largely driven by the possibility of internal transfers. Private sector agencies specialising in international mobility of financial services people also appear to have a significant effect. These are heavy structural influences on mobility. Where influences relating to place were more on the motivations side, they related to the prestige of the global financial hubs like Tokyo, Frankfurt and London as key forces of attraction and CV boosting experiences.

Quality of housing and opportunities for investment therein are also likely to be important motivational factors, as are big brand companies and financial packages. But further research would be needed to corroborate these findings.

Tourism

This industry stands out from the other priority industries both due to the high number of low-skilled jobs encompassed and because people often choose careers in tourism from the outset as a means to travel. With a strong career hierarchy, progression can require a large number of career moves and mobility is often inspired by a desire to move up the career ladder. Certain employer brands, institutions and resorts/festivals/events may carry prestige, and it is having those rather than particular locations on a CV that will drive career advancement. Edinburgh is a global hub for tourism careers due to the fame of the Edinburgh festival.

Entrepreneurs

Although it is an area that requires further research, entrepreneurs appeared to have a singular relationship to place. We interviewed a number of entrepreneurs across the priority industries and beyond. Although one might expect those who are self-employed to be the most mobile, in fact, entrepreneurs tend to be bound into individualised social networks that are often tightly focused geographically.

> *My contact base in the city is extensive, and it would be hard to rebuild that if I leave. I'm sort of stuck here.*
>
> Financial services entrepreneur; origin England

At the same time, they are a group that commonly split their time between more than one location and are frequently willing to make a move to access funding or improve their odds of business success. Access to high-quality and relevant skilled labour supplies is absolutely crucial. As one entrepreneur described:

> *We talk about entrepreneurship as happening in garages – we all know the stories – well it's very important who you invite into that garage!*

Financial incentives such as tax breaks, availability of public or private sector venture funding or even availability of mentors are likely to have the greatest impact on this group. Depending on the business, entrepreneurs may be as interested in a place for its local market as for the access to international markets.

Due to a combination of issues surrounding quality of interviews and smaller sample sizes since they were prioritised in only one location, we believe that the energy and food and drink sectors require further research before any firm conclusions can be drawn. Within the oil and gas sector mobility choices are clearly determined by the structural limitations of extraction locations but we can make few generalisations beyond that.

This research could usefully be supplemented by a more detailed study on each 'priority industry' – first because these categorisations group an often heterogeneous set of careers with different place requirements, and second because in each case the impact on decision-making that working in a particular industry, or in a particular career entails, is mitigated by a number of other factors such as life stage and previous mobility decisions.

With the mobility pathways model in mind, and important impacting factors outlined, we now move on to the specific case of Scottish city regions in search of a new perspective on talent attraction policy: what does Scotland look like from a talent-eye view?

5. A 'talent-eye view' of Scotland

In chapter 2, we examined what the existing literature says about the relationship between talent, mobility and place. We concluded that, in most analyses, place appeared to be of only secondary importance but that under certain conditions it did play a significant part in the migration decisions of talented people. We also suggested that the literature has relatively little to say about which specific features of place are important, and to which people.

Table 10. Summary of place strengths and weaknesses for each city region

	Strengths: Why people come, and why they stay	*Weaknesses*: Why people stay away, and why they leave
Scotland	○ Natural environment ○ Strong cultural identity ○ 'Work-to-live' not 'live-to-work' culture	○ Remoteness ○ Bad weather ○ Perceived lack of depth of opportunities for career progression
Aberdeen	○ International community ○ European leader in energy – status ○ Natural coastline	○ Remoteness ○ Night-time economy
Dundee	○ 'Niche' industry excellence and 'local heroes' ○ Overgate development ○ Dundee Centre for Contemporary Arts (minimum)	○ Low self-confidence and bad image among Scots ○ Night-time economy ○ Waterfront (with caveats)
Edinburgh	○ Tourism profile and capital status ○ High culture ○ Beauty of built and natural environment ○ Connectivity ○ Leith	○ Exclusiveness ○ Shallowness of labour market compared with other capitals ○ Deficiencies in 'liveability' (but context important – still hugely more liveable than London)
Glasgow	○ Chance to be part of the next 'big thing' – visible investment ○ Individual character and diversity ○ Subculture	○ 'The basics' – safety, cleanliness ○ Traditional industrial image ○ Pockets of poverty, dereliction and crime

	○ Retail ○ Parks and green spaces ○ Connectivity ○ Clyde regeneration	

In the last chapter, we began to address this gap in the literature by summarising the results of our qualitative research into how place shapes the motivations and opportunities to move of highly skilled people.

In this chapter we set this analysis within the specific context of Scotland and the four city regions of Aberdeen, Dundee, Edinburgh and Glasgow. We describe it as a 'talent-eye view' because our focus is on the perceptions of talented people, and on seeing these places as talented people see them. We want to understand which aspects of these places are their greatest strengths, and which their biggest weaknesses, in attracting and retaining talented people. We summarise our results in table 10, before addressing each area in detail.

Scotland

The bad news is that talented people's perceptions of Scotland as a whole are rather clichéd. The good news is that these clichés tend to be much more positive than negative, and are rooted in a distinctive cultural and physical identity that is one of Scotland's greatest assets.

The most common preconceptions of Scotland were rooted in the traditional images of tourism: countryside, kilts, whisky and castles. There was widespread prior knowledge of the Edinburgh festival, and of Scotland's strong cultural identity. For non-UK talent the Mel Gibson film *Braveheart* had a particular influence on expectations:

> *There's a big thing in America for Scotland because of Braveheart and I know that sounds funny, but that was a huge film there. People view Scotland the same way they view Ireland – there are these green rolling hills and it's a beautiful country and life's simpler and calmer.*
>
> Senior manager, Digital media, Dundee

Closer to home, domestic migrants, particularly potential migrants from London and the South East, associated Scotland somewhat negatively with bad weather, remoteness and an anti-English nationalism. Those who had previously worked in big cities found the relaxed, 9–5 working culture of Scotland particularly attractive:

> *If you've lived in big cities and done lots of hectic work then you think that [Scotland] would fit the bill perfectly. A nice calm place where you can just have a cup of tea and everyone goes home at 5 and doesn't work 18-hour days.*
>
> Manager, Digital media, Dundee

Family holidays, word of mouth through social networks, ancestral links and university experiences tended to have strong and durable positive effects on preconceptions.

Policy-makers may rue their inability to influence Scotland's national image – as reflected in some of the difficulties experienced by the 'Best Small Country in the World' campaign – but the strong national cultural identity of the country seems to be one of its greatest assets in talent attraction.

> *Because you are Scottish people know something about you – it's an attractive identity. There are quirky things that everyone recognises – like haggis – we have something to sell. Investors, people, they know about things like whisky and haggis.*
>
> Entrepreneur, Edinburgh; origin England

Finally, it is worth noting that the Scottish countryside emerged from our research as a kind of collective good: because of the country's relatively small size, it did not disproportionately benefit one city region over another but was a distinct and powerful asset on which all of them could draw.

The city regions in detail

While Scotland's national image may be very durable, perceptions of individual cities appeared far more dynamic.

Aberdeen

Although our research found low awareness of Aberdeen outside the UK, among industry specialists and the majority of UK talent, there was an awareness of its relationship to the energy industry. Indeed, among those connected to the energy industry it was a reputed European leader. The area was considered by far the most remote of the city regions in the UK and yet still functions as an international node. The international airport is clearly key to talent attraction in Aberdeen. Weaknesses associated with the urban realm focus on the city centre, where a low proportion of interviewees live compared with other cities in this study.

Strengths

Despite fears about over-reliance on the industry, the strong reputation of the energy industry is still the city's strength and key feature of its identity. The city was a worthwhile addition to any energy CV. Those who knew of the university also held it in high esteem.

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We didn't really know much about the place, I spoke to people and they all warned us about the weather but also said it was a good place to work and would be good on our CV.

Energy, Aberdeen; origin Brazil

A strength for Aberdeen appears to be the strong international community. Our research found very few interviewees who had experienced difficulties integrating, perhaps in large part due to the commonality of the energy industry. We heard, for example, that it was easy to make friends with 'other oil mums'. However, our research suggested that although international communities were integrated, indigenous communities remained more insular.

It is nice that the place is very multicultural and you have the seafront and the fresh air and the views. We like it here.

Energy, Aberdeen; origin Ukraine

The natural environment featured more obviously as an asset of Aberdeen City compared with other cities, primarily due to the natural beach and promenade and associated activities.

The amusement park seems to be quite good – there are a lot of people. Even if you don't take part in the activity yourself, just having them around you feel all that vibrancy.

Food and Drink, Aberdeen; origin Singapore

Weaknesses

The refrain 'it's alright as long as you like granite' was common in descriptions of the city centre. Although there were clear strengths like the medieval university quarter, interviewees generally regarded the city centre as underinvested in and there was little indication of how the university related to the rest of the city.

It is like the city has grown and quite a lot of wealthy people are here now but the place hasn't kept up – it needs more places to go out and spend.

Energy, Aberdeen; origin Mauritius

Our research also indicated that for those outside the oil industry there may be a limited number of cultural hubs:

Chinese people here go all the way to Glasgow to get authentic Chinese food. There is only one Chinese supermarket in Aberdeen even though there are a lot of Chinese restaurants. The stock can get low and take days to replenish … they don't have to be big, but at least you know you have a little spot in the community for people to come together. That is if you want to attract international people.

Food and drink, Aberdeen; origin Singapore

The city centre's liveliness is limited by a high level of out-commuting, which in turn means a significant lack of night-time economy outside large pubs and drinking culture.

> *There's **a** theatre, not a nightlife.*
>
> Entrepreneur, Aberdeen; origin England

Dundee

Dundee has a low general profile, with the apparent exception of life scientists and computer gamers – the majority of whom had strong, positive preconceptions of Dundee as a hotspot for their industry before moving, if not as a city. The potency of these links is a key strength for the city. Dundee clearly met some of the 'minimum place requirements' for shopping, culture and transport links. However, there is a diversity of opinions about the quality and programming of the new waterfront redevelopment scheme, with many welcoming the project and its ambitions but others being less positive about the mix of uses and design quality achieved so far.[clxxii] Other weaknesses included a low self-confidence and negative attitude confined to other Scots that was a frustration to incomers who manifested high levels of support for the city's development. The night-time economy was an area marked for significant improvement.

Strengths

Dundee's foremost key strength in the interviews was its excellence in certain 'niche' industries and folklore surrounding the success of local heroes. This is a source of pride in the city, even for incomers not working in these industries.

The first instance is life sciences, the reputation of Dundee University for research, the highly cited resident scientists and the considerable investment in new facilities was a major draw to job opportunities in the city.

> *The place is consistently high on the ranking of the best places to work in life sciences … This is good advertising, even if I'm dubious about what the criteria for getting on the list is. It certainly contributed to a decision to move here … That I have worked here is a big plus for the next move. It will be an advantage not a disadvantage.*
>
> Life Sciences, Dundee; origin Germany, via California

The second instance is digital media, and particularly gaming, where Dundee has developed a strong reputation, due in large part to the work of one local hero – Dave Jones, who created blockbusting games Lemmings and Grand Theft Auto in Dundee.

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> *I looked at the board of the company and the guys had great pedigrees. I thought, what the hell are they doing in Scotland? Then I dug into the history and discovered that all the Grand Theft Auto games are made in Dundee. I had no idea; they seem so American. On their website they were advertising for a new producer and I applied on a whim. And then they interviewed me. And then they flew me out. And before I knew it I'd accepted.*
>
> Digital Media, Dundee; origin USA

Within these two industries the population is hugely diverse. But there is concern that this does not connect with the rest of the city.

While the retail and cultural offer may be on a different scale from cities like Edinburgh, Dundee's leisure resources were regarded as adequate by most. The Overgate shopping centre redevelopment is seen as a turning point for Dundee for those who witnessed its genesis and is frequently cited as an asset.

The Dundee Centre for Contemporary Arts (DCA) was a focal point of Dundee for many interviewees. Although many thought the cultural offer was not strong in Dundee, this celebrated centre fulfilled a kind of 'minimum requirement' for talented incomers. One interviewee told us his decision was clinched to come to Dundee after being shown the DCA and surrounding quarter in a tour of the city:

> *I've got to admit, I did feel a tiny bit cheated – I thought this would be one of many.*

As another interviewee put it:

> *[Dundee] is compact, the Overgate is good but we definitely couldn't live here without the DCA.*
>
> Senior Digital Media; origin California

Weaknesses

Dundee's low profile is a weakness for the city region. A very small proportion of the 'potential talent' we interviewed had heard of the city, let alone had considered visiting or living there. There were far stronger and more positive images of St Andrews, largely due to golf tourism and the University but there was little connection between this and Dundee. The surrounding area clearly has the power to make a lasting impression on talented migrants:

> *[St Andrews] made such an impression I can almost taste the sunny day … I would have sold my granny 10 times over for that job … I accepted it and told my wife, who wasn't then my wife and proposed to her that day.*
>
> Tourism, Dundee; origin England

But despite the high quality of life in St Andrews and Perth, interviewees were looking for more in the long term. Whether it was improved public transport in Dundee compared with Perth, or the 'grittiness' of Dundee – the city had a high level of 'liveability'.

The same interviewee explained his motivations behind moving to Dundee from St Andrews:

> *It's a bit artificial … It's really conservative. Very beautiful. Very surreal. It's full of people from around the world wanting to play golf … There's no grittiness to it. There was a class there – everyone was the same class. Everyone there was for the same thing. It was all golf. All woolly jumpers.*

In contrast to interviewees from overseas and the other home nations, Dundee had a strong and negative reputation among Scots. Although they may have been able to refer to assets such as the Discovery ship and traditional associations with Jute, Jam and Journalism, these were mixed with impressions of urban decline, poverty and teenage pregnancy. Some interviewees were surprised that Dundee was considered a city.

Because of the powerful role of word of mouth as an influence there is a danger of the 'viral' spread of this image.

> *We had got our jobs in Dundee and my friend's boyfriend was from Glasgow and I asked him for advice on where to live. I trusted him and he was so negative about Dundee that we ended up living in Perth.*
>
> Life Sciences, Dundee; origin Ireland via England

A second weakness was missed opportunities in the urban realm. A prominent example was the waterfront. Our research indicated that the waterfront development in Dundee had achieved far from optimum results so far, not managing to connect the city to the water. It was regarded as a development 'for the rich' – while for some that was a positive, exclusive location, for others it was exclusive in a far more negative sense.

> *I like living by the water – but I do not like the development. I do not think it is what the area needs. It is exclusive, for the rich. It's increasing the division instead of integrating the city. I'd rather they took it away. None of my colleagues would want to live there. Neither would I – it is not a pull to live here.*
>
> Life sciences, Dundee; origin Germany

Research suggested that other points to work on in the urban realm included the entry points to Dundee and the number of derelict buildings – apparently all the more noticeable in a smaller city.

For me it is the approach; driving into Dundee is depressing. I may visit it now and then for things like the DCA, but these good parts are hidden away. First impressions count, unfortunately for Dundee.

Digital Media entrepreneur, Edinburgh; origin Newcastle

[Buildings are] the first thing you notice when you are walking around – is this place happy and thriving or dying and deserted? There's this one beautiful old building that looks like an opera house, but who's going to let it – the phantom of the opera?

Digital Media, Dundee; origin California

A third weakness according to a number of interviewees was a certain local–international divide, particularly in relation to the lower-income populations towards the north of the city.

There are cultures at university but that doesn't translate into anything visible – apart from a few Indian restaurants. The foreigners are not visible in Dundee. You would not know if they were visitors or if they lived here. In San Francisco, where I used to live, they are integrated – they live their culture there too.

Life Sciences, Dundee; origin Germany

A fourth issue is deficiencies in the night-time economy. Although small-scale live music was of good quality many interviewees thought that Dundee was 'let down' by the quality of its provision in restaurants and bars.

A fifth issue is the issue of low self-confidence as a city, although our research suggested that incoming talent is keen and active in attempting to change this.

If Scotland has a confidence issue, then Dundee has it the worst. You know, when Glasgow looks down on Dundee it says a fair bit … You don't have to care about the city [if you live somewhere like London]. Whereas in Dundee it becomes very obvious straight away that you do have to care.

Tourism, Dundee; origin English

People from Dundee don't complain about the bars and restaurants, but I think they deserve better, and I'm not afraid of making a pain of myself to the council to let them know what I think.

Life Sciences, Dundee; origin Ireland via London

Edinburgh

Edinburgh's key strengths centred on a high and positive profile related to tourism, cultural festivals and Edinburgh University. As a capital, Edinburgh was a relatively high-status addition to any CV and there were high expectations of job opportunities as a capital city. Its weaknesses as a place for talent were in some ways a by-product of success: a city centre that was defined by its tourists, not its inhabitants, leading to deficiencies in 'liveability' in the city centre and barriers to 'belonging'. Exceptions included the regenerated area of Leith as an affordable and up and coming area for young professionals.

Strengths

In terms of profile and status, Edinburgh was by far the most well known of the four city regions, largely thanks to its global tourism profile. The Edinburgh Festival, Tattoo and to a lesser extent the city's Hogmanay celebrations figured positively and prominently in people's preconceptions of Edinburgh, and almost all interviewees knew that Edinburgh had a famous castle. North American, Asian and Australasian interviewees regarded Edinburgh as the second tourist destination in the UK after London and an essential stopping-off point on the backpacker route. These assets created an image of Edinburgh as a beautiful, historical, somewhat 'genteel' city, which is a centre for cultural and artistic activities.

> *The place is a major draw – the institution itself [Edinburgh Festival] carries a great deal of prestige, and you can no longer really separate the festival from the city – the institution and place are inseparably connected.*
>
> Senior manager, Culture and Tourism, Edinburgh; origin English

The vast majority of interviewees had positive experiences of Edinburgh prior to moving, be they family holidays, weekend breaks or university experience. Edinburgh is commonly regarded as a breathtaking city. The topography, mountainous cradle and architecture create an undeniable lasting impression. People used superlatives like 'magical' and 'amazing' to describe their memories of Edinburgh, and one interviewee, now a successful entrepreneur, even moved to Edinburgh for university because she was convinced by her childhood memories that the students of Edinburgh University were allowed to live in the castle.

There were exceedingly few occasions during the interviews when there was ever a choice *between* Scottish cities, but in one instance an entrepreneur described how, as a start-up they had forsaken grants offered by other Scottish regions to set up in Edinburgh because the staff overwhelmingly thought it would be the best place to live.

> *We chose Edinburgh even though there were no local funding offers … no courting by the local enterprise company – nothing. In the end it was all about access to the best people.*

Entrepreneur, Digital Media, Edinburgh; origin England

Being a capital city gives Edinburgh an important edge, creating expectations about the breadth and depth of the labour market and prominence in international business links.
The city itself is regarded as an asset to any culture or tourism CV.

> *Competition is so fierce. Edinburgh has a 'name' in tourism – it's a festival city – it looks very good on a CV. But that means there are a huge number of people willing to come here and give up three whole summers for the price of a sandwich lunch.*
>
> Senior manager, Tourism, Edinburgh; origin Northern Ireland

Interviewees tended to remark on Edinburgh's strength in life sciences and financial services only if they were directly employed in those sectors; others were *aware* of the strong university reputation or the number of financial services company HQs, but knew relatively little about their specific strengths. Financial services insiders depicted an industry that is on the up, with more and better jobs available, but which does not yet offer the breadth of opportunities to put Edinburgh in the same league as London or Frankfurt.

When we asked interviewees to identify other cities that were similar to Edinburgh, common responses were Prague, Hamburg and Bath. Edinburgh is clearly associated with other cosmopolitan European cities with significant architectural heritage.

Another significant positive for Edinburgh was its connectivity. People were aware of the international airport and the relatively rapid rail link to London. But in the case of Edinburgh connectivity was not only an asset in the physical, infrastructure sense, but in a cultural sense. For domestic migrants, one of Edinburgh's assets was that it was 'quite South'. This tended to refer to distance from London, but also a cosmopolitan, international culture and strong business links.

Weaknesses

Expectations also played a role in Edinburgh's weaknesses. Edinburgh's key weaknesses included a failure to meet high expectations of the job market but concentrated around issues concerning liveability and integration. Liveability concerns the ability of the local population to function as a 'home town' as well as a tourist city. Our research revealed a concerning lack of 'ownership' over the city centre. First, the city centre was seen to be overwhelmingly geared to tourism. The festivals, which are such a draw to the city, can become 'an overload'.

> *Rather than having a city centre, Edinburgh has two streets, maybe three and a castle. There is only a tourist centre. You don't feel at home – there's no*

nucleus … It has the worst shopping street on the planet, and the Royal Mile is all shortbread and tartan.

Senior manager, Tourism, Edinburgh; origin Ireland

The relatively poor retail offer and the 'surprising' bad state of Princes Street was a recurring theme, but this was never bad enough to dissuade people from moving there – 'for shopping there is always Glasgow'.

House prices were certainly an issue, with some young professionals feeling they were being 'forced out' of the city. For more senior, corporate interviewees, the prices were less of an issue, and concerns were more focused on value for money and quality. There were reports that some financial services professionals in particular saw the price of housing stock in Edinburgh as an asset, since it allowed them to maintain an investment in housing that wouldn't price them out of the market on return to London.

There seemed a strong and somewhat unfulfilled desire for local community. One part of Edinburgh that the talent we interviewed seemed particularly keen on for this reason was Leith. The attraction was not only in lower housing prices, but in the strong and preserved individual personality of the area. The strength of this area as a 'draw' particularly for the so-called creative class was perhaps most clearly represented in the decision of one interviewee working in digital media to take a major potential client out in Leith rather than the city centre to impress him. There might be a 'slight feeling of dereliction', but this appears to be seen as a 'quirky' positive rather than a negative.

People from Leith are Leithers, they're not from Edinburgh. They have a collective sense that unlike those from Edinburgh they are the salt of the earth – they have their own culture (tonight is the opening night of the Leith music festival).

Entrepreneur, Digital Media, Edinburgh; origin England

Another weakness for Edinburgh was integration. While the city is perceived as 'international', our research found that the international population was fairly transient and local communities can be extremely hard to penetrate. This affected everyone from the antipodean life sciences researcher whom we interviewed on his way to a blind date, to the high-ranking bank executive returning to Scotland after time abroad.

The banking executive told us:

It's hard to begin with – not a friendly city. We were lucky to move as a family – it gave us some infrastructure – hooks into new friendships through school.

One of his big worries was the number of new arrivals to the bank, particularly from Dublin, who would stay a matter of months before leaving because they were lonely or friendless.

Talent appears to have very high expectations of Edinburgh, but this means the city sometimes fails to meet them.

> *I'd say come here for a few summers and use it as a springboard to elsewhere. That is what I should have done. People tend to feel they have to move on, they have to move out … it's not a city for people like me, not a city for people who are trying to make it.*
>
> Senior manager, Tourism; origin Ireland

Glasgow

Glasgow stood out during the research as a city with widely divergent reputations, from dark, dangerous and industrial to diverse, exciting and creative. Although these seem totally at odds, they express the ongoing emergence and regeneration of Glasgow. This identity as a 'city on the rise' was a considerable draw for many, particularly those in the more 'creative' professions and is one of Glasgow's major strengths. Other key strengths included the city's diversity, its transport links and its parks and green spaces. The major weakness to attracting talent, particularly corporates from southern England, was its residual bad reputation. Out of the city regions studied, Glasgow did seem to provoke the most criticism for a lack of urban cleanliness.

From potential talent to Scotland these views are representative of the polar tendencies:

> *It's rough and hard … simple as that – not somewhere I would want to go!*
>
> Financial Services, London; origin England

> *It is a passionate city, and one that is on the up…*
>
> Fashion and Tourism, London; origin Australia

There appeared to be variation according to career type, with far more positive images from those working in creative industries. The industrial landscape and gritty reputation were a major draw for some and comparisons were frequently made with 'masculine', industrial cities like Manchester, Liverpool, Newcastle and Sheffield.

Strengths

This unique city on the rise is one of Glasgow's major strengths in attracting the talent that had chosen to come to Glasgow. Interviewees often found it an attractive opportunity to be part of the 'next big thing'. In contrast to Edinburgh, a city with a more 'fixed' reputation and culture, Glasgow evoked the possibility to play a part in *shaping* the city's outcomes. Edinburgh's high culture was opposed to Glasgow's subculture.

> *Glasgow is a great place – it does have its problems but the place is changing so much it is so vibrant and alive. I love it.*
>
> Financial Services, Glasgow; origin USA

The benefits of Glasgow's strong historical identity bring dividends for some industries. One optoelectronics entrepreneur described to us how he persuaded a senior scientist from one of the world's most prestigious labs into a collaboration by showing him the place on a Glasgow canal where John Scott Russell discovered the Soliton wave – one of the most important theoretical underpinnings of modern telecommunications. The enlightenment still holds a prestige – '[scientists] feel grounded when they come here'.

The size of the academic population was also a motivational factor to choose Glasgow. One scientist told us his choice was down to the fact that both he *and* his scientist wife could get quality jobs in the local area due to the variety of academic institutions.

In contrast, financial services has yet to convincingly dispel its back office image and secondary status to Edinburgh among those interviewed, despite the history of financial services within Glasgow, the presence of big brand banks and recent growth in the sector. From the interviews, it does seem that some of these perceptions are beginning to shift, as one individual put it:

> *Financial services is quite big here, Glasgow is quite a cheap place for large investment companies to set up call centres and things like that. For example, 'Prudential' has a big call centre outside of Glasgow, and Morgan Stanley has quite a big office down here on the waterfront.*

There were contrasting opinions regarding the major regeneration projects, but there was consensus that this was a city that was the recipient of significant and visible investment.

The universities, including Glasgow School of Art, were widely known among potential talent, while it was Glasgow's strong reputation for creative industries that stood out as a defining feature.

Glasgow was regarded as far and away the best shopping centre, and Edinburgh's deficiencies in this were compensated for by Glasgow's proximity: one of multiple ways the cities supported each other's offer to talent.

Another key strength for Glasgow is its transport links. Although it is regarded as further from London than Edinburgh, both in transport and cultural terms, its international links were 'make or break' for talent in some cases.

> *Links are very, very important, the concept of living here for the full two years or longer and not doing any travelling is obviously something I would not do, I came here to look around … I chose Glasgow over Nottingham because there are two airports here.*
>
> Financial Services, Glasgow; origin Australia

Diversity was another of Glasgow's strengths. Glasgow is seen as cosmopolitan in a different way to Edinburgh; it may not have the gentility or the high culture to the same extent, but it has a thriving subculture and a powerful cultural and socio-economic mix. Shopping and entertainment are clear strengths. Interviewees from the surrounding towns and cities found Glasgow an accessible cultural hub, for everything from oriental food or gigs.

> *Glasgow has got everything London has got, it's just smaller and a bit more condensed. It has more benefits we've discovered since being here like the countryside.*
>
> Digital Media, Glasgow; origin England

Or as one financial services manager told us:

> *I think that's one thing [about] Glasgow which I was certainly drawn to: it does cater for all interests to put it in a nutshell.*

The talented incomers frequently expressed a certain surprise at how beautiful and unique Glasgow's architecture was. The signature regeneration buildings provoked mixed responses, but there was still a certain amount of kudos for Glasgow as a 'brave' city architecturally.

> *It shattered my preconceptions, coming here. I thought it would be all tower blocks, but I'm really impressed by the architecture, I really like the West End.*
>
> Life Sciences, Glasgow; origin England

The natural environment was very rarely mentioned as a *specific* strength of Glasgow compared with other Scottish cities, but interviewees frequently remarked on the number and quality of parks in Glasgow as an asset.

Weaknesses

One of the major weaknesses of Glasgow remains a level of negative preconception regarding deprivation and crime. The ghost of Glasgow's past lives on to some extent in pockets of serious deprivation and unpleasant rivalry between the city's football teams. At the same time there was a strong sentiment from talented residents that Glasgow's was an image that needed to catch up with reality.

> *It could do with getting rid of the Taggart and Heart Attack Capital associations – it is so much more than that these days, it has more to offer as a city than most places.*
>
> Senior Life Sciences, Glasgow; origin England

> *It's a difficult to make suggestions [about how to improve the city] because it really does tick all the boxes, it's just an image problem holding it back.*
>
> Digital Media, Glasgow; origin England

These were elements of a strong and portable Glaswegian identity that were nevertheless a source of pride:

> *It's something you can take with you.*
>
> Entrepreneur, Glasgow; origin England

6. Benchmarking performance – the ROVA framework

Introduction

In previous chapters, we showed what the existing literature and our own primary research tells us about the factors that shape people's mobility decisions. There are limits to the ability of government and public agencies to shape some of these factors. We argued that they should be realistic about these limitations, and ensure that they focus their attention on the areas where they can make a difference. For we also saw that certain aspects of place do play a role in influencing where people move, and, especially in the longer term, it can be an important and influential one.

In particular, four sets of place characteristics seem to emerge as important:

- a place's **reputation** and 'brand', both generally and in relation to specific industries
- the commercial and intellectual climate of a place and the **opportunities** it seems to afford
- the social and cultural **values** of a place, including the sense of community cohesion and openness to newcomers it projects
- the physical **assets** of a place, including its geographical connectedness, retail offer and the quality of its public realm

In so far as place matters to people's migration decisions, it matters most in these ways. In so far as differences in migrant flows are shaped by differences in places themselves, cities' performance on talent attraction should be judged along these dimensions.

In benchmarking the performance of places, we should therefore focus on these particular dimensions. We should not ask 'who is attracting the most talent?' because that is an unfair test: the reason one city may be doing better or worse on talent attraction may have nothing to do with the city itself. For example, if historically most migrants have settled in London, and family ties are a key driver of migration, then London has a built-in advantage. Instead, the right question to ask is: to the extent and in the specific ways in which differences between places matter, how do city regions compare?

This question is the focus of this chapter.

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A tool for benchmarking: the ROVA framework

To help us answer this question, we have developed what we call the ROVA framework. ROVA – short for 'Reputation, Opportunities, Values and Assets' – is designed to measure the performance of the Scottish city regions along each of the four dimensions that we have identified as important to talent attraction, and to compare this performance with other city regions both in Scotland and in other parts of the UK. The point of the exercise is not to create an absolute ranking system for talent attraction, nor to ensure that all cities get a gold star. It is about comparing in order to highlight priorities. ROVA is intended as a tool for action rather than public relations.

We want people to be able to use the framework without needing to understand the mechanics behind it. Nevertheless, it is important that we begin by explaining how the ROVA framework has been developed.

Behind the scenes of ROVA

First, the ROVA framework uses existing quantitative data from a range of respected authorities to ensure that they are as reliable as possible. For each of the four dimensions we have identified a number of performance indicators. Of course, it would neither be possible nor desirable to measure every aspect of each dimension – the result would be both opaque and unwieldy. Instead, we think the indicators we have selected are reasonable proxies for a city's underlying performance on that dimension.

Second, to ensure we are comparing like with like, we have had to ensure that the measures and data we are using are directly comparable. This necessity also drove our selection of comparator city regions – for the purposes of the quantitative benchmarking, we look to the major city regions in England[clxxiii] rather than internationally since this ensures that the data is uniform across all the cases. It becomes much more difficult to find useful comparative measures that work cross-nationally. In chapter 6 we offer more qualitative portraits of international policies that shed light on the relationship between talent and place and highlight ways in which other cities are improving their performance.

Third, the underlying data we are using are of many different types – some are survey questions, others are rates (eg of new business creation), still others are counts. Given this variety, it would be tricky to compare them – they are apples and oranges. To get round this problem, we perform a statistical operation to normalise them.[clxxiv] In essence, this converts all our measures into indicators that range from 0 to 1.[clxxv] This makes it much easier to compare and aggregate them.

Why ROVA isn't like other indices

Although it would be possible to aggregate each city region's score on each of the four dimensions into a single number, and rank cities against it, we have not chosen to do so here, for reasons both practical and theoretical. The practical reason is that we think the variation within cities on different dimensions is as interesting as the variation across cities, and this kind of nuance would be lost in a single aggregate score. The theoretical reason is that we do not think an aggregate number would be very meaningful. The four dimensions of the framework have been chosen because they emerged from our research as important to people. Aggregating the results would lose that connection with the empirical work on which the framework is based.

Caveats

Our goal in developing the ROVA framework has been to create something that is useful to policy-makers and others interested in trying to understand their city region's relative performance, to identify strengths and weaknesses and prioritise areas for improvement. But there are inherent limitations with any model like this. In the spirit of 'forewarned is forearmed', we have included a discussion of the issues in appendix 1 including boundary definitions, sample sizes and use of indicators in comparative studies.

Introducing the framework

Our in-depth qualitative research helped us to identify the categories in which to compare performance. Within each of the four ROVA dimensions, we have selected a number of indicators that, using available data, best portray the performance of places in each category. This section explains our rationale for choosing them.

Reputation

We saw earlier that a city region's reputation and brand play an important role in its attractiveness to talent. Many factors contribute to a place's reputation, but among the important ones are its 'mindshare' in terms of the media coverage it receives, the strength of its cultural offer, and the vibrancy of its nightlife. These are the factors that we try to capture within the Reputation dimension framework:

- To measure mindshare and media profile, researchers analysed newspaper articles from a selection of leading international English-language newspapers for the calendar year 2006 that referred directly or indirectly to each city region.[clxxvi] Stories were coded according to whether they suggested something broadly positive about the city, something broadly negative, or something mixed. Articles deemed irrelevant – for example, match reports from sports fixtures, were excluded from the analysis. The indicator itself is net positive coverage defined as *the total number of positive and mixed stories less the number of negative stories*.

- To measure cultural offer, we use visitor attraction data from VisitScotland and VisitBritain to measure the number of high-profile museums and galleries in each city region. We define this indicator as *the total number of museums and galleries attracting 75,000 visitors a year or more.*[clxxvii]
- To measure the vibrancy of nightlife, we have found it easier to identify measures of quantity rather than quality, although arguably quantity is an end in itself in so far as it means greater choice and diversity. Our indicator here is therefore simply *the total number of pubs, bars and restaurants listed under Google Maps as being near that city's urban core.*[clxxviii]

Opportunities

Another important aspect of a place's attractiveness is the quality of the commercial and intellectual climate it offers entrepreneurs, skilled researchers and other innovators. Our choice of indicators was limited by the degree to which the data in this category is proprietary at a city level. This is fertile territory for further research but our indicators provide a good starting point:

- To measure the commercial climate, we use two indicators of entrepreneurial activity. The first indicator is *the average annual number of new start-ups per 10,000 adults.*[clxxix] This speaks to whether a place is generally seen as a good place to start a business, but it does not capture whether a place is generally successful at nurturing new businesses. For this, we use a second indicator: *average three-year survival rates – the proportion of new businesses that are still going three years after setting up*.[clxxx] We combine these two indicators to create a single measure of commercial climate.
- To measure the intellectual climate, we use data from the 2001 RAE to measure the research excellence of universities within each region. The specific indicator is *the total number of 5 and 5* rated departments within universities based in the city region.*[clxxxi]

Values

The next set of indicators tries to capture the social values of the people in each city region. We saw in our qualitative work that people often want potentially contradictory things when it comes to social values. On the one hand, they want a place with a sense of togetherness; on the other hand, they do not want somewhere that is so tightly knit it is unwelcoming to outsiders, or intolerant of difference. Successful places will manage these somewhat contradictory impulses of community-spiritedness and tolerance.

- To measure community-spiritedness, we use two survey items. The first is social trust: *the percentage of people in a city region who think 'most people can* *be trusted'*. The second is neighbourliness: *the percentage of people in a city region who would be comfortable asking a neighbour for a £5 loan to pay the milkman*. We combine these two measures to create a single indicator of community-spiritedness.

- To measure tolerance, we again use two survey items. The first is attitudes to homosexual relationships: *the percentage of people who think that sex between two adults of the same sex is rarely or never wrong*. The second is attitudes to what Yasmin Alibhai-Brown has called 'visible minorities':[clxxxii] *the percentage of people who say they definitely or probably would consider a non-white person speaking with an English/ Scottish accent, who said they were English/Scottish, to be English/Scottish*.

These indicators come from the 2002–05 British and Scottish Social Attitudes Surveys.[clxxxiii]

Assets

Easily the dimension with the greatest scope to become unwieldy, the Assets part of the ROVA framework tries to focus on the particular physical aspects of place that make it attractive to talent. These include the upkeep of its built environment, the safety of its neighbourhoods, its geographical connectedness to other places, and its retail offer:

- To measure the upkeep of its built environment, we estimate *the percentage of its total land area that is derelict.*[clxxxiv]
- To measure the safety of its neighbourhoods, we use data on three categories of reported crime: *burglary, robbery and car thefts per 10,000 people*. A combined measure of *public safety* is created, reverse coded so that the places with the highest crime score the lowest.[clxxxv]
- To measure geographical connectedness, we look both to air and rail transport. Our first indicator is *the annual market share of airports in each city region of total UK passenger numbers*, using data from the Civil Aviation Authority.[clxxxvi] Our second indicator uses data from the Office of the Rail Regulator to measure the *total number of people boarding or changing trains at major railway stations in each core city.*[clxxxvii]
- To measure retail offer, we use the Experian 2007 Retail Centre Rankings, reverse coded so that cities near the top of the rankings score higher.[clxxxviii]

Results

This section examines our results: how do city regions measure up along each of the four dimensions?

Reputation

The big winners here are Edinburgh and Manchester (see table 11). They dominate when it comes to press coverage – only Birmingham can compete when it comes to the number of column inches received, and articles are more mixed in tone. As befits a national capital, Edinburgh scores top marks for its cultural offer, which makes up for a disappointing score on nightlife. Glasgow's strength in the visual arts and cultural sector puts it in second place on cultural offer and it scores reasonably well on nightlife, but is let down by a relatively low score on mindshare. Both Dundee and Aberdeen struggle on this dimension, placing near the bottom on all three indicators.

Table 11. ROVA reputation scores

City region	Nightlife	Mindshare	Cultural offer	Reputation[a]
Aberdeen	0.00	0.00	0.10	0.03
Dundee	0.08	0.06	0.00	0.05
Edinburgh	0.27	**1.00**	**1.00**	**0.76**
Glasgow	0.45	0.12	0.90	0.49
Birmingham	**0.98**	0.54	0.20	0.57
Bristol	0.51	0.05	0.00	0.19
Leeds	0.73	0.08	0.30	0.37
Liverpool	0.58	0.22	0.70	0.50
Manchester	0.94	0.78	0.20	0.64
N/G	0.41	0.14	0.30	0.28
Sheffield	0.57	0.16	0.10	0.28

N/G, Newcastle/Gateshead. Top score in **bold**.

[a]Reputation column denotes combined score

Opportunities

One, perhaps surprising, result in this dimension is that the Aberdeen City region emerges as fertile territory for entrepreneurs (table 12). When it comes to research excellence, however, Aberdeen cannot compete with Birmingham, Manchester and Leeds, whose strength in depth in the higher education sector reaps dividends on this measure. Glasgow fares the best of the Scottish city regions on research excellence but scores poorly on its commercial climate, while Dundee struggles on both measures, as does Edinburgh compared with other city regions in the UK.

It is important to note that the most recent RAE scores are from 2001. The next iteration of the exercise is due out in 2008 and we may expect marked improvement from some universities, for example Dundee, which has seen significant investment in recent years.

Table 12. ROVA opportunities scores

City region	Enterprise climate	Research excellence	Opportunities[a]
Aberdeen	**1.00**	0.04	0.52
Dundee	0.32	0.00	0.16
Edinburgh	0.45	0.64	0.54
Glasgow	0.22	0.49	0.36
Birmingham	0.39	**1.00**	0.69
Bristol	0.79	0.75	**0.77**
Leeds	0.54	0.87	0.70
Liverpool	0.32	0.26	0.29
Manchester	0.43	0.81	0.62
N/G	0.16	0.72	0.44
Sheffield	0.42	0.57	0.50

N/G, Newcastle/Gateshead. Top score in **bold**.
[a]Opportunities column denotes combined score

Values

The Scottish city regions come into their own on the values dimension (see table 13). Aberdeen and Dundee are easily the most community-spirited places in our sample. Bristol is the only one of the English city regions to match the four Scottish city regions on this measure. This reinforces other research suggesting that people living in Scotland tend to be richer in social capital than their counterparts in England.[clxxxix] On tolerance, the picture is a little more mixed. The Scottish city regions in general and Glasgow in particular score very highly when it comes to multiculturalism and accepting non-whites' claim to a Scottish identity. But the Scottish city regions tend to be less tolerant of gay people than their English counterparts. Still the overall results for this dimension see Scottish city regions take four of the top five places.

Table 13. ROVA values scores

City region	Community spirit	Tolerance	Values[a]
Aberdeen	**1.00**	0.41	0.71
Dundee	0.65	0.42	0.53
Edinburgh	0.67	**0.76**	**0.72**
Glasgow	0.55	0.66	0.60
Birmingham	0.00	0.07	0.03
Bristol	0.64	0.65	0.64
Leeds	0.37	0.43	0.40
Liverpool	0.27	0.59	0.43
Manchester	0.35	0.48	0.42
N/G	0.15	0.73	0.44
Sheffield	0.15	0.42	0.29

N/G, Newcastle/Gateshead. Top score in **bold**.
[a]Values column denotes combined score

Assets

Both Glasgow and Edinburgh score very well on this dimension, with strong performances on at least three of the four indicators (see table 14). Dundee's low mid-table performance is affected by its relative lack of geographical connectedness, and its retail offer. Although the latter will improve thanks to the success of the Overgate shopping development, the former will be harder to rectify. At the same time as the connectivity in its urban core is lower than other Scottish cities, Dundee has relatively easy access to Scotland's international airports. Perhaps there is a lesson here for marketing Dundee's proximity to other cities, or even better a strong narrative about the connectedness of the core Scottish cities as a whole. What is interesting about the place assets scores is how many of them cluster around the 0.5 mark, suggesting that many city regions have significant room for improvement on at least some aspects of their physical environment.

Table 14. ROVA assets scores

City region	Derelict land	Public safety	Connect-ivity	Retail offer	Assets[a]
Aberdeen	**1.00**	0.84	0.08	0.52	0.64
Dundee	0.96	**0.95**	0.00	0.00	0.48
Edinburgh	0.92	0.93	0.37	0.76	0.78
Glasgow	0.76	0.81	0.75	**1.00**	**0.83**
Birmingham	0.68	0.11	0.51	0.98	0.57
Bristol	0.88	0.19	0.23	0.62	0.48
Leeds	0.83	0.26	0.27	0.97	0.58
Liverpool	0.00	0.41	0.34	0.81	0.39

Manchester	0.57	0.08	**0.82**	0.93	0.60
N/G	0.57	0.62	0.18	0.79	0.54
Sheffield	0.83	0.49	0.08	0.43	0.46

N/G, Newcastle/Gateshead. Top score in **bold**.

[a]Assets column denotes combined score

Overall

ROVA is designed as a tool to stimulate activity around priority place issues for talent attraction. With this in mind we have created a traffic light system to give an accessible account of the overall picture that emerges (see table 15). City regions earn a green light for those dimensions in which it was in the top three in our sample, a red light for those in which it was in the bottom three, and an amber light for those in the middle.

Table 15. Combined ROVA results

City region	Reputation	Opportunities	Values	Assets
Aberdeen	Red	Amber	Green	Green
Dundee	Red	Red	Amber	Red
Edinburgh	Green	Amber	Green	Green
Glasgow	Amber	Red	Amber	Green
Birmingham	Green	Green	Red	Amber
Bristol	Red	Green	Green	Amber
Leeds	Amber	Green	Red	Amber
Liverpool	Amber	Red	Amber	Red
Manchester	Green	Amber	Amber	Amber
N/G	Amber	Amber	Amber	Amber
Sheffield	Amber	Amber	Red	Red

Note:
N/G, Newcastle/Gateshead

Green Amber Red

Aberdeen

Aberdeen scores very strongly on Values and Assets, and only Edinburgh gets more green lights overall. But it is let down by its score on Reputation. If the results are recalibrated to look only at the city core, its opportunity score diminishes in contrast to other Scottish cities, where it increases if this test is performed. This suggests a greater dispersion of opportunities throughout the region in contrast to other Scottish city regions – a potential strength, but also revealing of the under-exploited urban core. Although Aberdeen has a strong reputation within the energy industry, this again indicates a lack of spill-over into the mainstream. It could benefit from a strategy to develop a reputation that highlights its strength in community, values and enterprise – an interesting and unique mix.

Dundee

Dundee struggles on three of the four dimensions, and its performance on the Values dimensions is not enough to put it in the top tier. This is worse than one might have expected from the qualitative research findings, since it does not portray the positive reputation in life sciences and digital media that is emerging – an interesting indication that there is little overspill of this into the mainstream. If Dundee's performance in nightlife is recalibrated to be a per capita measure, it raises its game, something corroborated by focus group evidence in Dundee (other Scottish cities stay the same or do slightly worse). Dundee may have few cultural assets, but they are of high quality according to qualitative research. The targeted strategies may be proving successful according to incomers, but ROVA suggests a need to increase activity across the board in the city region.

Edinburgh

From this picture, Edinburgh emerges as the strongest performer among the Scottish city regions and indeed in the sample as a whole. It is in the top three on every dimension except Opportunities where it scores orange. The result is likely to be driven by the relatively low levels of entrepreneurial activity outside the City of Edinburgh: the score changes to green if just the City rather than the wider region is focused on. This raises questions about whether entrepreneurial opportunities are sufficiently dispersed across the city region.

Glasgow

Glasgow's performance is solid across all four dimensions save for a below-average performance on opportunities. It scores highly in the Assets dimension, which is boosted by a very high retail score. At the same time, it is striking that Glasgow's score for the percentage of derelict land is the worst of the Scottish city regions. In addition, if the results are recalibrated to look only at the cities excluding the surrounding region, Glasgow slips down significantly in performance on Assets, although it remains green (see Sensitivity testing below). This could indicate two things – a lot of basic work to do in the urban core, or a higher than average quality urban hinterland. As far as the Opportunities dimension is concerned, it is notable that Glasgow is only on the cusp of being weak – if we look only at the urban core, Glasgow's score is raised to orange. In addition, if Stirling was included in the Glasgow city region rather than the Edinburgh city region, their overall positions for opportunities would be reversed (see Sensitivity testing below).

Sensitivity testing

Because of the many methodological challenges in trying to construct an index like this, we wanted to see how sensitive our results were to different geographical definitions of the city region. To do this, we recalculated the Opportunities and Assets dimensions – the two dimensions that relied on data gathered at the local authority level – by focusing only on the results for the core local authority, not the overall results for all the local authorities that make up the wider city region.

On the Assets dimension, we found that our results were not particularly sensitive to recalculation. Only Glasgow is hurt by focusing on the urban core, as it slips from being one of the better performers on the percentage of derelict land to being the worse. However, focusing on the urban core makes little difference to cities' scores on public safety. As a result, the only real effect on the Assets dimension overall is to compress the distribution of scores – to further tighten the cluster around 0.5–0.6 – and to nudge Birmingham in front of Glasgow.

On the Opportunities dimension the results are slightly more significant. Glasgow and Edinburgh perform better while Leeds' performance slips. This makes sense given the economic geography of the regions. Glasgow and Edinburgh are city regions with a large and dominant city core, whereas the Leeds city region includes a number of medium-sized towns alongside Leeds itself. Glasgow and Edinburgh achieved higher results on new business creation as urban cores than when their wider city region was taken into account, but this was basically offset by poorer survival rates. Overall on the enterprise climate indicator only Aberdeen saw any significant changes, slipping down relative to Bristol, Birmingham and Manchester. On the research excellence scores, the city regions that have several elite universities spread across the region perform slightly worse compared with those like Glasgow and Edinburgh, whose main research universities are located centrally.

Size matters

In this exercise we are obviously comparing city regions of contrasting size, and it is important to get a 'fair' comparison. We decided on a case-by-case basis which indicators to analyse and score in proportion to population size – in some cases, per capita measures would not be more valid than the ones we have used, since in the real world it is often the absolute value and not the per capita value that counts 'from a talent eye view' – the perspective that underpins this report.[cxc] If, even after these adjustments, the benchmarking appears biased towards big cities, this is to some extent unavoidable, since talent attraction is biased towards big cities.

Conclusions on ROVA

In our view, three preliminary conclusions can be drawn from this attempt to apply the ROVA framework to the Scottish city regions and their peers south of the border.

First, the basic approach outlined here is a useful way of allowing people interested in a particular city region to identify its strengths and weaknesses when it comes to talent attraction.

Second, the picture that emerges is one in which these strengths and weaknesses are remarkably evenly spread. While some cities tend to be in the top rank more than others, none dominates in all four dimensions, and each shows significant room for improvement.

Third, the methodological challenges of this kind of exercise are significant. The availability of data, and the sensitivity of the results to different specifications of the geographical boundary of the city region, suggest that caution needs to be exercised in interpreting the results. They need to be carefully triangulated against other sources of evidence including our own qualitative research. Those interested in using the framework in the future may wish to refine it, including experimenting with different indicators.

7. Lessons from overseas

In the previous chapter, we showed how the Scottish city regions compared with some of their counterparts in England along four key dimensions that have emerged from our research as important in attracting talent: Reputation, Opportunity, Values and Assets.

This chapter adds to the comparative perspective of the previous chapter, and uses the same four-part framework, but the focus is more qualitative, more cross-national and more policy-oriented. We explore how city regions in other parts of the world have understood and responded to the kinds of challenges Scotland's now face.

We saw earlier that people expressed a strong preference for cities to have their own individuality, and our goal here is not to provide templates that should be copied. Nevertheless, we think that there is a value in understanding how others have tackled these issues, not least because the case studies underline the importance of working with the grain of each city region's individual needs and circumstances.

Reputation

Barcelona: the price of publicity
Prior to the 1992 Olympic Games, Barcelona was a city struggling with post-industrial decline and today, it is hard to believe what an unlikely tourist destination it was. The four-billion-strong global audience of the games changed that, and in a model that has been emulated closely and widely, it was one of the cities that led the trend for cultural regeneration and urban development. But according to some the city has developed 'an unhealthy obsession with modernity and grand interventions' that contribute to the government's 'increasing remoteness from its citizens'.[cxci] It seems even the 'Barcelona Model' has been far from an unqualified success.

One of the latest efforts at building Barcelona's 'star status' is *The Barcelona Project* – a new film by Oscar winning director Woody Allen starring Scarlett Johannsen and Penelope Cruz. According to media reports, around one-tenth of the film's budget will come from city and regional taxpayers, with €1 million coming directly from Barcelona City Hall and a further €0.5 million from the regional government. Jordi Hereu, the city's mayor, described the project as 'a huge advertisement for the city that will be seen all over the world'.[cxcii]

Milwaukee: building reputation through networks
Milwaukee, capital of Wisconsin with a population of just under 600,000, rose to prominence as a centre for beer brewing and manufacturing. After sharp industrial decline, its gritty industrial image is consistently cited as the major barrier to attracting talent. Over the last decade or more, the city has become a testing ground for urban regeneration projects. Iconic buildings like the Milwaukee Art Museum or festivals like Summerfest, said to be the largest music festival in the world, have combined with high-profile competitions for community-based urban design.

But what sets this city apart is the way it is attempting to use talent to attract talent in a programme called 'Fuel Milwaukee'. Since 2006, this dedicated 'regional talent network', facilitated by the local chambers of commerce, has the remit to attract and retain talent. This initiative, a membership organisation of individuals and employers, grew out of the Young Professionals Network of Milwaukee. Its ultimate aim is to improve the city's image, but rather than focusing efforts on a branding campaign, its aims are to grow more 'good places to work' through interaction with individual talent. It engages talent in projects to build the region's attractiveness. It measures success on a strategic scorecard using the categories that form part of this equation: Grow more great places to work + Increase community engagement = Improve Milwaukee region image.

Opportunities

New Zealand: tax breaks for workers
From 1 April 2006, New Zealand offers a four-year exemption from tax on most types of foreign-sourced income to new migrants and certain returning New Zealanders.[cxciii] The exemption, meant to reverse the risk of brain drain from the country, applies to first-time residents or returning New Zealanders who have been absent for a continuous period of at least ten years. The exemption is valid for up to 48 months and is available for those coming to the country for full-time employment, self-employment, retirement or for any other reason. The aim of the policy driving the proposals is to lower the costs of employing foreign staff, and to attract people with desirable skills to New Zealand.[cxciv] The exemptions cover, among others, interest and dividend income, foreign equities and other interests, royalties, recently earned bonuses, and offshore business income. In an interview, Steve Camage, a director at PricewaterhouseCoopers, said it was a positive, proactive development. 'These changes will enhance New Zealand's status as a destination for skilled people, and help to reduce employment costs … the new rules will lower the cost of doing business and allow New Zealand employers to remain competitive in attracting skilled migrant labour…'[cxcv] However, he and others add that the policies might not go far enough especially in comparison with Australia, where similar Australian measures are being considered as part of a package of reforms to attract both mobile capital and labour to Australian shores.[cxcvi]

Values

Chicago: green values for green notes

Twenty years ago Chicago was synonymous with post-industrial decline, inequality and suburban sprawl. But all that has changed and according to the *New York Times*, the city is now a 'global model for how a metropolis can pursue environmental goals to achieve economic success'. Its strategy has been praised by both the Sierra Club (a prominent environmental organisation) and the local Chamber of Commerce alike.[cxcvii]

The ambition was to become the nation's centre for environmental design and the manufacturing of components for the production of alternative energy, capitalising on the growth in green construction and wind and solar energies. But this ambition was matched with everyday action. Municipal departments began energy-saving practices; (native) trees and grassland were reinstated along main roads, parks extended and wetlands restored; and the city took a national lead in constructing environmentally sensitive buildings. The green roof on City Hall, and the Millennium Park built on top of a railway yard are symbolic manifestations of what the city has achieved throughout. Altogether, the city has planted or negotiated the construction of over two million square feet of rooftop gardens, more than all other US cities combined,[cxcviii] as well as planting 500,000 trees and creating 100 school campus parks.[cxcix] Chicago is now among the largest users of green energy in the country, with a goal of using renewable energy for roughly a quarter of city operations.[cc]

The change in policy tone and the visible improvement is credited with playing a large part in recent demographic turnaround: in the 1990s, after four decades of population decline, Chicago attracted more than 100,000 new residents,[cci] as well as adding tens of thousands of downtown jobs, prompting a high-rise housing boom, reducing poverty rates, building thousands of affordable homes, and spurring a $9-billion-a-year visitor and convention industry.[ccii]

Opzoomen: Taking to the streets to build communities

Rotterdam, the Netherlands' second city, has traditionally struggled to attract and maintain a talented workforce. Whereas Amsterdam and Utrecht, the 'North Wing' of the country's central Randstad agglomeration, are extremely popular places to live and work and enjoy very high shares of well-educated professionals, the 'South Wing' (including The Hague and Rotterdam, as well as suburban areas) has long had a more problematic image – particularly Rotterdam. In the past decade, the city has made the attraction of talented people into a core element of its policies, including investment in the built environment, cultural climate, residential neighbourhoods and amenities, and public services.[cciii] The UK consultancy

URBED, in a study for the Joseph Rowntree Foundation, has lauded the city's ambitious waterfront revitalisation programme as one of the best practice examples that UK cities should learn from, along with Göteborg, Sweden, and Lille-Roubaix in northern France.[cciv] In particular it praises the regeneration area's real and credible mix of uses, public transport investment and strong social benefits programme for nearby deprived areas.

But within the Netherlands, Rotterdam's urban policies are best known for another initiative: the Opzoomeren street-cleaning parties. These involve over a third of the city's streets in diverse programmes culminating in a yearly celebration of everyday citizen participation. The programme grew out of a protest by the inhabitants of Opzoomer Street against bad environmental management in the 1980s. Witnessing residents organise the cleaning and embellishment of their street themselves, and the community-building involved, the City Council decided to encourage such activities with subsidies and materials for small improvements and community parties. Over the years the programme has grown considerably in scale and in scope, and has become a core element of the city identity and shared values, recognised across social groups.[ccv]
The two programmes, waterfront redevelopment and various streetwork projects, should be seen as two sides of the same coin, aiming to change the city's internal and external image and encourage civic participation and build personal connections to the city and its people.

Assets

Copenhagen: people flow and pedestrianisation

Of all iconic urban public realm transformations, Copenhagen's is probably the most well known. From the 1960s onwards, the pedestrianisation of the city centre has been accompanied by a strategic policy to encourage cycling and public transport use.[ccvi] It involved not just re-designing individual squares and streets but re-imagining the entire movement framework of the city, thus altering people's perception of accessibility and convenience. According to a case study by the Institute for Sustainability and Technology Policy at Murdoch University, Australia, it has even led to a declining demand for detached housing on the edge of the city as it is judged too far away from the street life of the more central neighbourhoods.[ccvii] The key to Copenhagen's success is the authorities' understanding of people flow within the city. The council has been studying where and how people move around the city since the 1960s.

New York: Creating slow landscape with the High Line

In New York, an old unused railway viaduct in western Manhattan was slated for demolition in the last year of the Giuliani administration. After a challenge from residents and pressure groups, a court threw out the idea. The incoming mayor, Michael Bloomberg, threw his weight behind a project to create a park landscape on the 1.45-mile railroad viaduct. Now under construction, the High Line is projected to become a 'slow landscape' through the city, creating a string of non-commercial, nature-led spaces within the city that change according to the character of the surrounding areas.[ccviii] What makes this different from many public realm projects is the fact that the process has been in large part citizen-driven, and the fact that the project deliberately seeks to achieve a disruptive space, creating new experiences of the city and of urban movement, underpinned by a strong set of civic values – community fundraising has been essential to financing the project. The High Line is expected to lead to a change in perception of Manhattan's west side, long the lower-profile part of the island, and attract significant development and residential influx.[ccix]

Zaragoza: Digital city
As part of Zaragoza's 2008 EXPO project, the urbanist Manuel Castells and students from MIT designed a series of innovative spaces to become an interactive, inclusive, 'digitally infused' public realm at the edge of the old city. Public space interventions will be based around digital technologies that are user-led, responsive, and signify urban change and educational ambition, both to new population groups and long-time residents.[ccx] Elements include free public wireless access, information content available to mobile phones and PDA devices and digital community information screens. A strong emphasis is on bottom-up adaptable elements, such as programmable awnings that can provide shade and modify spaces along the edge of a building, as well as graphic skills training programmes connected to open-access 'digital graffiti' walls. The aim is to create new experiences, both spatially and socially, as well as to connect citizens to a programme of area change, which will see residential intensification and economic development.

8. Conclusions and taking action

This report set out to answer three main questions:

1. What affects where talented people choose to move for work?
2. How and why does 'place' matter to these decisions?
3. How can governments, public agencies and the private sector use this knowledge to make places more attractive to talent?

We have marshalled evidence from the existing literature and our own qualitative and quantitative primary research to answer these questions, with a specific focus on Scotland and its four main city regions. In this chapter, we restate the general conclusions about mobility we draw from this evidence, and offer a set of general principles for policy-makers that flow from them. We then draw together specific conclusions that emerged about the four city regions, and make a series of tailored recommendations for each.

The general conclusions restated

First, we argued that the mobility of talented people is determined by both 'motive' and 'opportunity'. We outlined a model, based on our research, in which mobility is a function of motivational factors (like personal and professional aspirations), structural enablers (like the possibility for an internal transfer), and crucially, of the way these two interact to create what we called 'mobility pathways'.

Second, we argued that place has an impact on both motivations and structural factors. Motivations related to place may rarely be the principal reason for relocating to a certain city, but they can certainly 'make or break' a decision to move there. One of our interviewees made the point more succinctly: 'the job alone isn't enough'.

Third, we examined in detail the particular aspects of place that give talented people most cause to choose one location over another. We found that dereliction and dirt, concern over safety, a lack of green space and 'suburbanism' turned talent off. By contrast, we found that places which offer a strong identity, cultural openness and diversity, and the potential, not only to 'plug and play' in the society, but to own it, shape it and experience its development, attracted talented people.

Fourth, while the particular combination or weight attached to motivational and structural factors is distinctive to each individual, we showed that some common patterns do emerge when you compare different stages in the life cycle. More specifically, our research concluded that people's career type affects their propensity for mobility, while their life stage affects not just their propensity for mobility, but also the relative importance of place in their decisions *and* often the aspects of place that have the greatest impact on mobility decision-making.

Eight principles for talent attraction policy

Given what we have learned about what affects the mobility of talented people, how should policy-makers respond? We start by outlining eight general principles for talent attraction policy, before focusing in detail on the specific issues facing the four city regions.

Our research underscored that talent attraction is a long-term, broad and often indirect process. This is potentially good news. It means that there is an array of resources and agencies that can be drawn on to help the Scottish city regions to improve their talent offer, including the government and its agencies, universities, local authorities, the arts and culture sector, schools, tourist bodies, industry and business, the media, and citizens. However, it also means that the process of mobilising and choreographing the talent attraction effort must be equally sophisticated and long term. We try to reflect that in the eight principles that follow.

1. Tailor talent attraction strategies by life stage

A clear lesson from our research is that talented people's life stage affects their levels of mobility and often what aspects of place they prioritise in decision-making. Strategies to attract talent should therefore be sensitive to these differences, and approaches tailored accordingly. Our research has highlighted a number of 'peaks' of mobility throughout the life stages – for example, post-university, parents with children of pre-school age, parents whose children have left home. Too often, the dominant images of city marketing are based on nightlife and waterside flats, which appeal to young, single professionals but not necessarily to other demographics. For example, while for some age groups, place aspects such as safety, parks or schools might just be part of basic quality of life issues, for a young family, exceptional performance on these issues could be a driving force to relocate to a place. If a city is calling out for senior, experienced managers for long-term employment, for instance, why focus on the flighty youth? Talent attraction strategies hence need to target a variety of moments of peak mobility. For example, Scottish cities could go further to emphasise child-friendliness for couples with young children by publicising information regarding education quality and opportunities for positive activities for children, in conjunction with concrete steps to improve the accessibility of the public realm to children. This kind of targeting could also help add to the demographic diversity of a place.

2. Invest in broad networks to build affinity and generate 'motives' for relocation

The days of brain gain versus brain drain are numbered: instead it is the perpetual circulation of talent that characterises international labour movements. These movements are neither random nor entirely rational. Instead they depend on 'sticky branches': channels of information, personal contacts, collaborative relations. Such branches can grow in many ways and have global reach. For example, academic and professional networks are a source of funding, ideas, trusted advice and opportunities, all of which can attract and bind talent to particular location. Positive experiences in university are critical influences and merit further research that is beyond the scope of this project (see Areas for further research).

Because these networks are not geographically bounded or necessarily controlled from one point, they can be elusive. However, engaging with them, learning about them and helping to develop them can help build initial 'touch points' for talent abroad to hear about Scottish cities, get to know opportunities and start to feel positive about a possible move there. In this process of building affinity, or 'warming up talent' towards a place, indirect networks and information channels are as important as direct, formalised sources of information.

It could be valuable for Scottish Enterprise to help support peer-to-peer support networks in specific industries. Or we might draw inspiration from online social networks like 'Plebsville', which allows those working in the creative industries to build professional relationships with their peers and gurus in different geographic locations, widening their mobility possibilities. University cooperation programmes and student exchanges, diaspora networks both of Scots abroad (eg Global Scot) and of migrants, city twinning, festivals (for example the Aberdeen International Youth Festival), sports events and cultural ambassadors abroad – all these can grow the sticky branches through which talent can be reached and 'warmed up' about the benefits of living in Scottish city regions.

3. When it comes to work, it's not just about increasing the general 'pull' of a place, it's about creating 'hooks': specific target industries need specific tactics

While it is crucial to build affinity to a place, this may not be enough to inspire people to move there. As the mobility pathways model shows, motivations are rarely effective without 'structural enablers' or tangible opportunities. This is particularly important to the mission of Scottish Enterprise to attract those working in 'priority industries'. Although our findings indicate a number of variations in the ways people in different careers relate to place, these are also mediated by such a wealth of personal and external factors that specific place-based policies relating to career type would be unwieldy. Although 'background motivation' or affinity to Scotland as a place is very important, it is knowledge about specific job opportunities and markets through industry websites, trade press, dedicated journals, internal transfer opportunities and even specialist 'cherry-picking' that seem most effective at providing these priority industry hooks. Few of our interviewees claimed knowledge of the Talent Scotland website before arriving in Scotland (although some found it a useful resource after arrival). This implies that although the website is good at presenting opportunities, it is less good at *projecting* them. Scottish public and private sector organisations should ensure they invest in identifying pivotal channels of industry information and projecting priority industry opportunities there.

4. People care what a place stands for, not just what it looks like, so make the values of a place tangible

Our findings show that talented people are pragmatic about financial rewards and career progression, but also care a great deal about values. Our research corroborates some of the core conclusions of Richard Florida's research,[ccxi] namely the importance of tolerance and cosmopolitan diversity to making a city attractive to talent. Talent is likely to be responsive to emphasising values on a symbolic and explicit level, but only if this is married to practical projects and programmes with tangible impact on the city. For example, the celebrations of cultural diversity and different religious festivals on Trafalgar Square in London are a highly visible manifestation of the Mayor of London's programmes on race equality and Black and Minority Ethnic participation. Taking into account the success of strong value-driven strategies such those of Chicago and Rotterdam, there seems to be a large number of ways to go about concretising 'values' in urban policies, from strategic environmental improvement to very local social cohesion initiatives. In the long term, consistent policies such as, for example, Copenhagen's comprehensive urban strategy, can help transform the urban culture, identity and physical quality of a city.

5. First impressions count, but talent attraction is a long-term process: take a broad view of 'the rules of attraction'

The ability of a place to attract talent is rarely determined by love at first sight, on stepping off the train or plane. Instead, it can be a gradual process – and there are many pitfalls along the way. The courtship needs to begin long before potential movers make a location decision. Equally, the 'after-care' received following a relocation can be important. Some migrants may need considerable assistance integrating into a new place, while others might need only some practical help and information. When someone starts work at a new company, the first thing they are given on Day 1 is an induction that tells them the basic things they need to know about their new environment and where to go for more specific information.

Talented people want to feel that wherever they move they will be welcomed into a community. Both the welcome and the community are important: on the one hand, they want to feel that there is already a certain community spirit; on the other hand, they want it to be something they can access, be included in and help shape. One simple step might be to partner with letting agents and estate agents to create a simple 'induction pack' for new or potential residents. This might include basic information about the area, such as contact details for local doctors or dentists, contact details for local sports clubs and community groups and vouchers for neighbourhood shops and restaurants. It might also include some more civic items, such as a form for registering on the electoral roll, and details of local political representatives.

6. Collaborate to attract

City regions, if they are to become competitive in the thrust to attract talented individuals, need to develop collaborative relations across four main dimensions:

1 *Within priority industries*: Devise long-term strategies that benefit the entire sector rather than one organisation's short-term needs. Many digital gaming entrepreneurs in Dundee, for example, praise the role of the local Scottish Enterprise representatives to broker, maintain and intensify networks in the Dundee digital media sector, aiding cross-fertilisation and growth. (It is important to note that any attempt to create a geographical 'hub' for a certain industry is likely to risk disenfranchising those outside the geography).

2 *Between the different local authorities and companies*: Within the administrative and functional city region (in terms of commuting, retail catchment areas), arrive at a coordinated approach to planning, infrastructure and economic development initiatives. Competition between local authorities is often the most wasteful strategy, yet it happens in the battle to attract firms, workers and rate payers. The ways in which talented individuals think and go about their daily lives are not bounded by local authority boundaries and we should not create policy restricted to these lines. A whole-region approach is needed to explore complementary assets and opportunities within the ROVA framework, and to highlight the different roles that local governance and the private sector can play to create a comprehensive regional place offer.

3 *Across the boundaries of city regions*: Within Scotland the need to cooperate is well understood. For example, the efforts of Glasgow and Edinburgh to integrate policy and strategy in some areas, such as economic planning, is notable. In relation to Dundee/Aberdeen collaboration, the Al Maktoum Institute is based in Dundee but awards its degrees via the University of Aberdeen, so there is potential for both to profit from the networks generated. As the title of this report suggests, it is easy to lapse into thinking about talent attraction only through the lens of competition. Promoting and nurturing their distinctive strengths will always be important, but city regions should not lose sight of the need to identify and invest in collaborative initiatives.

4 *Collaborating with citizens*: To be legitimate and sustainable, place-based strategies for talent attraction need to be developed in open conversations with citizens, exploring their unique needs, ideas and creativity. Cities ignore this

imperative at their peril, such as is evident in Barcelona where many urban flagship projects have lost credibility and relevance in the eyes of the public.

7. Integrate talent attraction into broader economic development strategies
Talent attraction policies at the level of the city region have to be embedded within overall urban and economic development strategies and priorities. Policies that impact indirectly on talent attraction must ensure that what's good for talent is also good for the city as a whole. Elitist or disconnected talent policy could be damaging because it lacks legitimacy, but it could also be less effective because it can draw on fewer resources. There are significant opportunities to achieve this: when policies aim to impact on child-friendliness, to diversify the night-time entertainment offer, or to generate structural environmental improvements, there are strong alliances to be made with a wide set of urban development agencies within the city. Such strategies will broaden the benefits of place improvements *and* make talent attraction policies more legitimate and credible.

8. There is no blueprint: in the end, the best policies are home grown
Talent attraction policies work best when they are tailored to specific people and sectors. What works in one place may not work if it is imported to another city that has a very different demographic and industry profile. As the ROVA results showed, all cities tend to have particular strengths and weaknesses, and a one-size-fits-all policy that fails to account for these differences is unlikely to succeed. And our interviewees explicitly told us that they did *not* like 'identikit' cities. Too often, in seeking to craft a 'unique' identity, cities mimic the approaches of other cities, often resulting in a reliance on blockbuster building design projects, waterfront developments and conference centres. But this is the wrong strategy, because not every city can be Barcelona – not least since even Barcelona is discovering the limits to its success formula.[ccxii] Instead of looking to copy what is different about other places, cities would do better to understand their distinctive assets, and how they can be capitalised on.

The four city regions
These principles are guidelines for talent attraction that could apply to city regions across the UK. But now let us focus on the four Scottish city regions, and the specific recommendations that flow from our findings.

Using the insights into mobility that we gleaned from our review of the literature and from our primary research, and building on the picture of Aberdeen, Dundee, Edinburgh and Glasgow that emerged from our qualitative and quantitative research, we identify key strengths, weaknesses, and areas for improvement for each city region. In doing so, we draw attention to the social as well as the physical dimensions of the public realm, since investing in both is crucial to increasing a place's attractiveness to talent.

Aberdeen

Among those connected to the energy industry, Aberdeen is a European leader. But outside these networks, and particularly outside the UK, Aberdeen enjoyed a low profile. This was borne out in the ROVA framework, where Reputation emerged as its main area of weakness.

The area was considered by far the most remote of the city regions in the UK and yet still functions as an international node. The international airport is clearly key to talent attraction in Aberdeen. Weaknesses associated with the urban realm focus on the city centre, where a low proportion of interviewees live compared with other cities in this study.

While being a global energy hub is vital to Aberdeen's profile, the city needs to adapt and diversify, grow life off the rigs, out of corporate boardrooms and onto the streets, public spaces and the city centre.

Redevelopment plans for the city, including a 'retail heart' around Bon Accord, a 'green heart' around St Nicholas and a 'civic heart' around Marischal should be an opportunity to begin to close the gap between the private wealth of the city and the low quality of its public realm. It will be important that these redevelopment plans are not focused just on physical redevelopment. While Aberdeen scored highly in terms of Values (as measured by trust, tolerance and community-spiritedness) in the ROVA model, the qualitative research revealed a schism between the international population and the local population: both populations are internally cohesive but research suggests there is limited interaction between the two. This schism can have a 'talent cost' in limiting the circulation of ideas and learning, and in forestalling the development of long-term attachments. There is a fine line between accepting that talent will remain mobile, and allowing a divided city to accelerate transitory settlement patterns. Activities, events, spaces and places to help bridge these two communities should be a priority.

The underdeveloped cultural, retail, evening offer combined with natural assets such as the beach and social assets such as high public safety mean that Aberdeen could approach this bridging challenge in innovative ways. The dominance of suburban life-styles, and dispersed commuter residential patterns mean that investing in city centre attractors may not be sufficient; secondary linked development nodes in the wider region could also be considered. Even if new housing were to be strongly focused on the city centre, it is important to ensure that suburban areas are not written off in terms of public value and investment in social infrastructure. For example, the Peacock Visual Arts Centre could play an innovative role in this respect, if it could simultaneously expand its activities within the centre *and* increase its presence in the wider urban area with temporary cultural interventions and on-location events.

At the same time a stronger regional coordination of housing and transport developments is needed to preserve the best qualities of surrounding towns and countryside and make the most of growth opportunities within the city, while accommodating the need for new business spaces and sustainable anti-congestion measures. One lever for such coordinated regional planning could be the Energetica project, which aims to create series of interrelated energy projects, which will ensure that Aberdeen City and Shire becomes a true global energy hub. If this project could both enhance Aberdeen's position in energy and renewables, and paint a compelling picture for an enhanced built environment this could become a double win for the city region.

In the tourism sector, there is a clear temptation to undertake large-scale developments – these will undoubtedly have an impact on the regional economy, but will not necessarily be closely linked to Aberdeen as a place. Large-scale developments may not make the most of creative entrepreneurial talent which may ultimately strengthen a more distinctive, high-value regional product. Such a product could for example be based on Night Culture, with winter solstice, summer solstice festivals, and focus on engaging networks such as the International Youth Festival and the Word Festival.

Priorities, actions, and recommendations for Aberdeen

Aberdeen's talent attraction efforts need to be strongly allied with efforts to improve the public realm of the city region in terms of creating a cultural, retail and leisure offer that better matches and serves its moneyed, entrepreneurial population. Particular measures should include:

1. Invest in the daytime and evening economy of the city centre

Extend the opening hours of shops, public buildings, libraries, galleries and museums to create reasons for people to come or stay in the city centre beyond 5pm. This could also help promote a broader mix of people and activities, bridging and softening the transition to what is at the moment a drink-dominated evening economy. To help promote diversity of the evening economy, Aberdeen should introduce a stipulation that any new entertainment/alcohol licence is not granted unless it adds to the diversity to the mix of establishments already on offer. Maximum floor space limits could also help reclaim the evening economy from volume drinking and help promote smaller independents.

DEMOS

2. Identify and support regional hubs for cultural and social activity

Within the distributed, suburban pattern of development in the Aberdeen city region supporting local centres will be important. This can be promoted in a range of ways. First, mapping emerging hubs, organisations and institutions that could provide a social or cultural base: for example schools, pubs, community centres, faith buildings and libraries. Second, Aberdeen's well-respected institutions, such as the Peacock Theatre, being supported to develop twinning and outreach work in the wider region, The SAGE Gateshead's excellent music outreach programme in the North East of England could be a good model to learn from. Third, Aberdeen could invite local clubs and societies to take over the city centre for a day, as a shop window for incomers into the activities and communities they have access to.

3. Use the enterprise ethic to socialise and animate Aberdeen's public realm

The research found a strong enterprise ethic within the city region as a whole, and, at least, anecdotal evidence of a latent demand for more working, networking and ideas generation space for Aberdeen's entrepreneurial population. There is a good case for further research to explore the needs and interests of this group, but capitalising on this ethic in ways that benefit the wider city region and better support creative individuals, could include:

- *Wifi café culture*: this could be supported by local industries, giving them a public presence in the city. In San Francisco and Palo Alto, California, local cafés have become alternative work stations and social hubs for talented workers, particularly those working in the arts, digital media and internet ventures. This has developed to such an extent that certain cafés have become synonymous with successful internet applications that were invented by the clientele. In Aberdeen, this might mean, for example, a local energy firm supporting a wifi network or café and events programme for entrepreneurs.
- *Give the public a stake in entrepreneurship*: Aberdeen could capitalise on local wealth and a growing enterprise culture by creating a scheme for collective venture or angel investment in local entrepreneurs. Each contributor gives only a small amount, but earns a stake, and a potential return in a local start-up. It is low-risk venture capital that is as much a community-building exercise as an investment one. Aberdeen could transpose learning from the international development space like KIVA (www.kiva.org).

4. Branding: nature & work = adventure & exploration

The research found that the natural environment is a strong asset for Scotland as a whole and should be capitalised on. Nonetheless, Aberdeen's raw, coastal location was a particular asset for incomers. Branding that brings together the adventure and exploration of the natural environment and career progression could play well with talent audiences and help counter any misgiving about the lack of 'urban' living in much of the region. In our research Aberdeen suffered most in impressions of isolation and 'extremity'. Aberdeen should find ways to capitalise on this as a tourism asset rather than dismiss it as a barrier to talent attraction. To a certain extent this is already being addressed in Aberdeen's 'natural pioneers' branding programme, but there was no awareness of this among our sample of interviewees – perhaps suggesting that the programme would benefit from a more mainstream publicity campaign. It may be beneficial to analyse the impact of branding programmes at attracting target groups to date.

5. Building Aberdeen's reputation:
Aberdeen must capitalise on the strength of its international reputation as an oil hub and exploit the existing pathways to diversify its message since outside this industry its reputation is limited. It could draw on offshore innovation, exploration and enterprise and broaden this, particularly in the Aberdeen urban core. One option might be to draw ideas from the Zaragoza: Digital city scheme profiled in chapter 7. Engagement with the local indigenous and international populations together on determining what are likely to be the most effective strategic messages could be a valuable exercise, both for policy and community building.

Dundee

Dundee is increasingly regarded as an industry hotspot by life scientists and computer game developers, and the strength of these networks is an important asset for the city. But beyond these sectors, Dundee suffers from a relatively low profile outside Scotland and a persistently poor image within Scotland. Awareness of Dundee's 'excellence' in the knowledge-intensive and creative sectors is not yet spilling over into those working in other fields. In some ways, this reflects a broader theme. Dundee seems to enjoy a certain 'underdog' status, which can be both a hindrance and a help when it comes to talent attraction. For example, the city's cultural offer lacks strength in numbers, but the Dundee Centre for Contemporary Arts has been a major talent-attraction asset, and shows that small-scale culture can have a big impact.

The problem is that feeling like an underdog can lead to pessimism as much as optimism. Our interviews showed that newcomers often develop a bond for the city – and, as a result, feel positive about the city and its development, and frustrated by the swiftness of outsiders to criticise it.

The research also revealed a somewhat divided community, which feels that change is happening, but not necessarily in an inclusive manner.

Since the persistently negative word-of-mouth about Dundee within Scotland lets the city down, it would pay to reflect on this regional image problem, and on what underpins it. A high-profile campaign aimed at a Scottish audience is likely to meet with scepticism; the city needs everyday ambassadors who are convinced that their entire city is changing for the better. Hence, Dundee needs to show how recent and future policies are benefiting not just the 'local heroes' but people across social divides. A city's self-confidence is a collective good, generated by the experiences of its inhabitants. These would be boosted if the process of change became more inclusive. Investing in neighbourhoods and in public spaces that truly feel *of* the city rather than merely *in* it, could help generate such a transformation.

It will not be easy to connect the cosmopolitanism of Dundee City's universities and digital media sectors to some segments of the population. Yet truly mixed communities are what the city should strive for, removing the stigma that now haunts certain parts of the city, and collectively re-imagining the city's mental map so that the north–south divide will become less engrained. Developing new kinds of civic and community events might be one way of making this happen, by showing that the public realm of the entire city – the waterfront, the city's neighbourhoods – is welcoming to all.

Simultaneously, it is important to show that Dundee's physical transformation is quality-driven. Frank Gehry's Maggie's Centre for cancer patients shows the power of high-quality civic projects, but other recent development does not always follow suit. In a city where the land and housing market is not as overheated as elsewhere, there should be scope for creative reuse of existing, vacant spaces and for innovative housing that distinguishes itself – for example, car-free developments, child-friendly home zones and developments that fit the small-town feel, yet of high architectural and environmental standards.

Although the ROVA model showed that Dundee compares unfavourably with some other city regions in its physical assets, interviews suggested that it met the minimum requirements for shopping, culture and transport links. Dundee has also successfully created new assets such as DCA and the pedestrianised town centre. Now it is time to move from individual sites to networks, integrating the city physically with a public realm that favours pedestrians and cyclists. The oversized ring road, in that respect, is a missed opportunity: it will be a challenge to improve the adjacent railway entry to the city so that it becomes a civic, rather than a transport route.

Another priority point is the city's nightlife. Many people find there is much to improve, but as Dundee is at the beginning of this process, there is ample opportunity to undertake imaginative, participative projects that go beyond the generica of drinking culture and clone towns. The diversification of the night-time offer should be publicly – and community – led. In the city with Scotland's best climate, a culture of small-scale street parties and night festivals could change the way the city sees itself, and how newcomers perceive its atmosphere.

The city's relatively low score on the Opportunities dimension of the ROVA model points to the need for a more diverse economic base. The manufacture of renewable energy technology might be one such opportunity. Equally, the opportunities of the sister-city status with Dubai could be beneficial, now that the United Arab Emirates and other parts of the Islamic world are stepping up ambitions in scientific research.[ccxiii] The local role of Scottish Enterprise is much valued in Dundee's strong priority industries, and needs to double its efforts to seize such new opportunities. The city region as a whole has a strong tourism offer with Perthshire and St Andrews, and this could become a more integral part of Dundee city region's brand.

Priorities, actions and recommendations for Dundee

Like Aberdeen, but for different reasons, Dundee's talent attraction and retention efforts need to be closely allied with mainstream policies to improve the reality and perceptions of place. The critical issue is the negative image of the city held and perpetrated by Scots and to some extent Dundonians themselves. This jars with the perceptions of talented people and prompts self-doubt about decisions to move to and stay in the city.

1. Diversify and extend the play economy

Dundee has a set of strong local assets and institutions including the DCA and Dundee Rep, but these tend to be isolated and constitute the minimum place offer talented people expect.

- Extend the opening hours of shops, public buildings, libraries, galleries and museums. This and other ideas could be developed through a public realm improvement district, like business improvement districts, but bringing in a wider set of cultural, civic, business and voluntary sector agencies.
- Work with the DCA, the Rep and other strong institutions to 'turn themselves inside out' with public event programmes that help animate Dundee's public realm – especially bringing life to areas which our research found that people do not perceive to be working well – for example the recent waterfront development.
- Pilot night festivals to experiment, build capacity and a community of interest around diversifying and extending the play economy. 'La Nuit Blanche' in Paris and 'la Notte Bianca' in Rome, 'Night of Arts' in Helsinki and 'Kulturnatten' in Copenhagen, 'The Long Night of Museums' in Berlin and 'La Noche de los Museos' in Madrid and Buenos Aires are all now successful night festivals. The all-night opening of museums, galleries, bookshops, cinemas, theatres, cultural institutions, shops and other attractions, lighting of buildings and all-night events have proven highly successful in building interest and support for a more diverse night-time economy on a sustained basis.

2. Identify and nurture pride and distinctiveness

Dundee should explore the potential for programmes that find common ground between the interests of local people and talent. In particular, build on the research findings around life stage and mobility pathways, which highlighted the need to take a more nuanced approach to what matters to talent – for example, child care and education to talent with young families. The research found that such common ground projects could include a focus on:

- The environment … Dundee as the greenest city in Scotland
- Child friendliness … Dundee as the best place to bring up a child in Scotland

Such ambitions need to be matched with tangible and easily communicated manifestations on the ground – whether this is iconic playgrounds in high-profile places or council offices supplied by off-grid renewables. This would have the potential to connect well with both internal and external audiences.

3. Campus–city partnerships

The city region should explore ways to broaden and deepen its relationship between migrant students at its universities. This can help create touch points and hooks with talent that may not convert into immediate post-graduation retention, but warm links that can be capitalised on later. One way to do this would be through developing compacts between the universities, the local authorities and regional businesses, which more closely hook the life of the region and life of the universities together. Practical measures could include:

- welcome and seasonal parties
- transport and leisure passes
- student volunteer programmes
- internships while students are at universities

4. Branding and reputation

The proposals relating to pride and distinctiveness could be a positive focus for branding and marketing. The research also indicates a low level of association between Dundee and regional assets such as St Andrews, suggesting a certain amount of work to do on the narrative of Dundee as a city region. Since the research identified a distinctive strength in the keen support of migrant talent, keen to build reputation of Dundee as a 'hidden diamond', the example of Milwaukee's 'Fuel Milwaukee' scheme in chapter 7 could have useful learning points. This successfully capitalised on talent already attracted to the city, supporting the growth of social networks and positive peer-to-peer messages about the opportunities available.

DEMOS

Edinburgh

Edinburgh's key strengths centred on a high and positive profile related to tourism, cultural festivals and Edinburgh University. Edinburgh emerges as the strongest performer in terms of its talent offer among the Scottish city regions and indeed in the ROVA sample of cities as a whole. However, the clear message from the research is that while Edinburgh performs strongly, it cannot take its position for granted.

That is partly because some of Edinburgh's greatest strengths can also be weaknesses. As a capital city and a tourist hub, Edinburgh is often described as the second destination city outside London. That Edinburgh is a capital city gives it status and desirability in the careers market, and makes it a relatively high-status addition to any CV. Its maturity as a tourist destination means that it has created personal and enduring links with people – many of the talented migrants we interviewed reported fond memories of having visited the city in the past.

However, this positive reputation creates high expectations both for careers and liveability that are sometimes left unmet. For example, there is a considerable pull to a highly competitive tourism industry, but sometimes people feel constrained by a glass ceiling created by a 'talent bottleneck' at the mid-career level. The city's burgeoning financial services sector does not yet, in the view of our interviewees, offer the range of opportunities that would allow people to build their whole careers there in the way that they could in London or Frankfurt.

In terms of liveability, the city is perceived by many residents to be run for tourists rather than for locals. The overall picture is therefore of a city that finds it easier to attract talent but harder to retain it. It may be plug and play, but it's not plug and stay. This gap in reputation and experience, if left, could create serious problems, particularly given the power and the role of word-of-mouth advice in peer-to-peer talent networks in influencing location decisions.

Edinburgh performed well on Values in the ROVA model. However, this headline performance hides a more complicated picture. A number of interviewees reported that they found it hard to integrate with local people. Edinburgh is not an unfriendly place, but it is one in which people find it difficult to build strong roots and ties. Part of the reason is that the intensity of tourism, especially during the Festival, can sometimes alienate and squeeze out space for local residents. Events and activities that might help bridge and link locals and migrants are instead perceived to be dominated by visitors and tourists. Our evidence suggests that people perceive Edinburgh city centre as more of a tourist destination than a home, and that Edinburgh would be more successful at retaining talent if it was a city they could feel part of, and on which they could make their mark, rather than somewhere they were just passing through. Investment in the city centre and neighbourhoods aimed at increasing their utility and ownership for residents will be important. One strategy might be more effective communication with residents to persuade them that events and places are not just for visitors.

Some of these issues have begun to be recognised by the city in its redevelopment plans for the city centre, such as the masterplan for Princes Street. Princes Street is currently a disappointment to many residents, and the plan aims to enliven the area with a greater mix of uses in the daytime and evening targeted at workers, residents and tourists alike. How Princes Street is managed, programmed and marketed will be critical to ensuring residents feel 'invited in' and feel a sense of ownership over the place. These could be relatively simple steps, for example, extending the opening hours of shops, galleries and museums beyond the standard 9–5 so that workers can use them in the evening.

It will also be important to build up areas outside the city centre and create bridging spaces between new and established residents. To some extent this is already happening in Leith and Granton and, with careful investment in the social infrastructure, the Edinburgh waterfront development has the same potential.

As noted above, building on the collaborative work undertaken so far between Glasgow and Edinburgh would help both city regions draw on a wider set of assets and opportunities to better meet the longer-term needs and aspirations of talent.

Alongside inter-regional collaboration, the research also highlighted the need for greater coordination within the Edinburgh city region, which was among the least cohesive in terms of collaboration among different partners.

Priorities, actions and recommendations for Edinburgh

Edinburgh's priority in terms of talent attraction and retention is minding the gap between its promise and the reality – both in terms of the liveability of the city and the depth of its labour market.

1. Rebalance the city centre

The city centre at the moment is perceived to function primarily for tourists not residents. The city should develop ways to rebalance this, which could include initiatives like:

- More markets and local events on city centre streets and public spaces. Such events would be partly symbolic and about reclaiming iconic strips of land – but also practical – so food and household goods rather than tourist trinkets are on sale. This initiative would be able to build on the success of, for example, the Castle Terrace Farmers' Market.
- Extend gallery, museum and council and government building opening hours to make them more accessible for workers.

- Encourage retail diversity in the city centre. We should see significant improvements through the new masterplan. Equally, building on how other cities in the UK have used their planning and licensing powers to bring greater diversity to their evening economies, Edinburgh could introduce a diversity rule for new shops and outlets in the city centre – ie shops should add to the diversity of what is on offer rather than more tartan and shortbread outlets.

2. Find common cause between tourist Edinburgh and Edinburgh as a home

Tension between the two Edinburghs is a potentially damaging trend. The city region should explore how talent policies could contribute (and benefit) from efforts to synergise. For example:

- *Investment tourism*: As our offices 'travel with us' in portable PDAs and through WiFi access, the boundaries between business and pleasure are becoming more blurred than ever before. Whisky tours and rounds of golf have been valuable assets to Scottish companies wooing clients and investors for a century or more. But they have only been an added bonus to the main event of business. How might it be possible to turn this relationship on its head and capitalise on tourism flows (including business tourism and conference attendance) for greater long-term investment in Scotland? One option might be to work with local firms, organisations and universities to develop priority industry-specific tour packages that could be tagged on to holidays, allowing business people to sample the investment opportunities of the local area. Could there be a market in *ad*-venture capitalism?
- Work with schools, colleges, priority industries and the creative community to develop a set of alternative souvenirs. These can create touch points and carry a more diverse set of messages about 'the real Edinburgh' home with the tourists.

3. Edinburgh–Glasgow collaboration

Deepening collaboration on a reciprocal basis on the broad talent policy and practice agenda is as vital for Edinburgh as it is for Glasgow.

4. Develop and support alternative centres

Even with rebalancing the city centre, there will be a limit to how much Edinburgh's compact city centre can support its large tourist population and at the same time meet the needs and aspirations of its home population. However, the research identified the popularity of Leith in terms of delivering what residents want from where they live. Organisations within the city region should work together to identify and support emerging and potential neighbourhoods that can provide a similar function to Leith and find ways to fast-track their development, ensuring that, as Leith, they retain what makes them unique. Other areas that are either beginning to play this role already or have potential to do so include Borders, parts of Lothian and the Edinburgh waterfront area of Granton.

5. Latent talent spotting

The research found anecdotal evidence that due to its status as a premier tourist destination, Edinburgh hosts a lot of international young people working in jobs far below their level of skills and qualification. For example – the biochemist working in a bar, the town planner in a call centre. Scottish Enterprise, working with the priority industries should further research the size and quality of this latent talent pool and explore how the city region can tap into them more effectively. For example developing a range of practical interventions such as targeted advertising campaigns, or temporary one-stop-shops for career information in tourist locations. Whereas most skilled migrants to Scottish cities have their jobs secured before arrival, in Edinburgh anecdotal evidence suggests a higher proportion of people are speculatively arriving to look for jobs. Edinburgh should not let this resource go untapped.

6. Props for integration

The weak integration between migrant talent and the local population encourages transience, limiting sharing of knowledge and therefore innovation. Research by Demos and by others indicates that exchange and integration between different groups happens best indirectly when people are brought together by other interests or practical purposes. Edinburgh should consider auditing the range and quality of the current 'touch points' between local and migrant people and explore the scope for increasing and strengthening them, including through, for example:

- schools and other public service points
- professional networks and clubs
- neighbourhood networks and clubs
- cultural and public spaces

Glasgow

Glasgow stood out during the research as a city with widely divergent reputations, perceived on the one hand as creative, bohemian and dynamic, and on the other as tough, poor, dirty and suffering from sectarianism. These contradictions reflect the city's identity as a 'city on the rise', something that is both a strength and a weakness. The gritty, challenging city of thriving subcultures was a considerable draw for some groups, especially younger people and those in the creative industries. But our research also indicated that its residual bad reputation among other groups, notably those in our southern England sample, was an obstacle to attracting talent. This tension was also reflected in the Reputation dimension of the

ROVA model, where Glasgow performs well on cultural offer and nightlife but its lower mindshare score reflects a variable image.

Key strengths included the city's diversity, its transport links and its parks and green spaces. A number of interviewees perceived the thickness of the labour market as an asset across priority industries.

The research shows that Glasgow has the furthest to go in terms of the 'basics' of the urban realm, like crime, grime and dereliction. The interviews highlight that greater improvements need to be felt at the local and neighbourhood level, and less in terms of iconic set pieces. In terms of the type of urban development talent cares about, there is a sense that Glasgow has the requisite number of flagships, the task now is about raising the quality of the rest of the fleet.

Nonetheless, as the largest and most diverse city in Scotland, there is still scope for Glasgow to tell a better story about what it already has. Many of those interviewed compared the city with London in terms of the diversity of the cultural offer, urban environment and its neighbourhoods. Better life-stage-targeted communication about the different neighbourhoods (from boho neighbourhoods to leafier family-oriented enclaves) could help fill out the reality and attractions between the dominant media images of urban cool and urban decay.

In terms of Values, Glasgow performed comparatively well on tolerance. Its middle ranking in terms of community spirit could indicate a less cohesive but potentially more open culture. Moreover, as Scotland's most diverse city, this tolerance is 'tested' more than in more homogenous places. The city has well-established Irish, Pakistani and Chinese populations and growing eastern European communities. There are a modest number of publicly known 'local heroes' from these groups. More could be done to identify, support and celebrate such talent. Evidence, for example, from Silicon Valley in the US has shown the reach of such examples among migrant talent groups.[ccxiv]

On a global scale of competition between cities, there is a strong case for Glasgow and Edinburgh to collaborate and 'pool' their talent offer to some extent. A combination of proximity, distinct but complementary identities and (together) a larger and more diverse market for jobs makes a compelling package. This might be particularly important for more experienced talent, who seek more senior positions and are likely to have long-term partners, doubling the career issues that play a role in the decision to move. Once a highly skilled migrant is installed in either city, the ease of access to the other is evident. But this is less obvious for someone with no prior knowledge of Scotland. Glasgow would benefit from Edinburgh's global reputation, while Edinburgh would benefit from the additional association with Glasgow's large labour market. The strength of the idea of a 'financial central belt' is already well established, but this could be extended to other priority industries.

Priorities, actions and recommendations for Glasgow

Glasgow has been one of the star cities of the urban renaissance. Its key issue for both talent and place-making policy is to broaden, deepen and mature its offer. As Scotland's largest and most diverse city, it is well positioned to do this, but will need to collaborate with Edinburgh in a number of critical areas.

1. Get creative with grime

Glasgow still falls down on some of the basics – cleanliness. Its reputation for grime and grittiness has not always been negative – they are urban qualities that people – including talent – often bundle with creativity and places that are on the rise. However, Glasgow can no longer claim to be the new kid on the block and so these associations are becoming less helpful. One option would be to go down the strict sanitation and zero tolerance road, but this could risk losing some of the distinctive qualities of the city. An alternative could be engaging Glasgow's creative community to help solve some its grime problems. For example, the local authority could work with the celebrated Glasgow School of Art to design a new civic kit of litter bins. These kinds of mini-design icons could be playful and practical, and have a viral potential to spread well through the media and international design and urban networks.

2. Glasgow–Edinburgh collaboration

The two cities complement one another's assets well: for example, Glasgow for subculture – Edinburgh for high culture; Glasgow for clubs – Edinburgh for pubs. There is a need to develop this for the strategic benefit of talent attraction and retention, primarily creating a thicker labour market in key industries such as financial services and life sciences. It is important that the two cities are pitched as equals, rather than the occasional tendency the research identified to bill Glasgow as the back office.

3. Anchor institutions

There are a number of strong institutions, which have served Glasgow well in terms of place-making and talent attraction, including the Lighthouse, the CCA and the Glasgow School of Art. There is also a bank of strong institutions that are perhaps lesser known to international talent audiences, including the Tramway Theatre (a centre for contemporary visual and performing arts and soon to be the new headquarters of the revived Scottish Ballet). The wide range of anchor institutions further include the Glasgow Print Studio, the Transmission Gallery (where several Turner Prize nominees are based), City Halls/Fruitmarket in the Merchant City (base of the BBC Scotland Symphony Orchestra and the Scottish Music Information Centre), the Glasgow Royal Concert Hall (base for the Royal Scottish National Orchestra and the Royal Scottish Academy of Music and Drama, including its Opera School), the Theatre Royal (Scottish Opera base), the King's

Theatre, the Tron Theatre and the Citizens Theatre. To this can be added the significant cultural role of the university sector, including Strathclyde University's Ramshorn Theatre, Glasgow University's Hunterian Museum (Scotland's oldest) and the Hunterian Art Gallery (with the largest collection of work by Whistler outside Washington DC). In common with other resurgent cities, the leading anchor institutions have tended to come from the cultural sector. There is a need for Glasgow to now broaden out, link up and better profile a wider set of anchor institutions – including, for example, schools, hospitals, parks, businesses – and together with the cultural anchors encourage them to audit, explore and integrate talent issues into their work programmes. Nurturing, promoting and networking these anchor institutions could generate value in terms of adding density and depth to the range of active players on the talent agenda. For example, proactively opening board and trustee positions among anchor institutions to migrant talent could help foster strong ties and a way to deliver prestige, particularly to senior people.

4. Branding

Glasgow has turned around its tourism industry, and its victory in the competition to host the 2014 Commonwealth Games will inevitably boost its profile further. But the city should be wary of the 'depth' of its brand and the meaning among residents. Glasgow has much more to offer as a city than 'Scotland with style' and plenty of substance to fill out the dominant media images of urban cool and urban decay – for example, decent parks, family neighbourhoods, and a comparatively diverse population. It will be important to do more in-depth research on the life-stage mobility spikes identified in this project and explore how they match with the different life-stage assets Glasgow offers.

Areas for further research

The scope of this project was extremely broad in reach, covering a large number of places, industries and issues. It has uncovered new perspectives and new evidence on the reality of talent attraction and place-making, as well as touching on some areas beyond its brief. As such, the report identifies a number of areas where further research could be valuable. The suggestions outlined below are not animated by a search for novelty, but selected on the basis of their potential to provide practical knowledge to help Scottish Enterprise and its partners improve the talent offer of its city regions.

Mobility pathways and life stage

The research revealed that levels of mobility vary for different life stages, with a corresponding set of place assets tending to be more or less important. This is a potentially valuable finding. Further research could help city regions help identify any life-stage gaps in terms of the talent they are attracting, help city regions to better match and market their place assets to talent at different life stages, and help to better coordinate talent policy with mainstream city development and planning policy.

Mobility pathways and priority industries

This research uncovered interesting differences in average levels of mobility or expectations of mobility for those working in different priority industries. The findings were more conclusive for some industries than others, and further research into mobility in the energy and food industries would be beneficial, particularly since we must be careful to make general conclusions when we are aware of the huge range of mitigating factors in mobility decision-making. The research showed that we must be even more cautious in making generalisations about the aspects of place that are most important in mobility decision-making for people working in particular industries. Further research in this area would have to be approached very carefully.

Higher and further education

The influence of higher education and university institutions in talent attraction is manifold:

- creating structural motives for talent attraction through provision of scholarships
- building strong and long-lasting bonds to a place through university experiences that are likely to motivate future mobility decision-making
- influencing mobility pathways through international university ties and exchanges
- developing the reputation of a place through research excellence and the work of star scientists
- providing a hub for the community-building and integration activities of university institutions in the wider community

It was beyond the scope of this report to explore these issues in detail, but the breadth of issues raised provides fertile territory for future research. A particularly useful angle would be to investigate which universities are carrying out these roles most effectively and how their methods and tactics can be disseminated more widely to scale up the effectiveness of universities in talent attraction and retention.

Talent wastage

Underemployment or ‘talent wastage’ is a key issue, particularly within the tourism industry, although the current evidence is largely anecdotal. Scottish Enterprise, working with the priority industries, could further research the size and quality of this latent talent pool and explore how the city regions – in particular Edinburgh –

can tap into it more effectively, including developing a range of practical interventions to address the main barriers to employment in appropriate-value jobs (for example inadequate English-language proficiency, incompatible qualifications systems, cultural barriers etc).

ROVA

We designed ROVA as a practical tool to benchmark city regions, and identify priority issues for talent-attraction policy in different places. The dimensions (Reputation, Opportunity, Values, Assets) and indicators we used were carefully chosen as a result of the preceding qualitative stage of the research. There is clear scope to explore the use of other indicators in this tool, and if comparative data could be sourced, to quantify comparisons internationally. Hopefully ROVA will provide the basis for useful discussions in each city region, first, regarding how attractiveness to talent can be measured – still a very new field of research, and second, the validity of benchmarking processes.

Migration and innovation

Building on recent pioneering work on the links between migration and innovation could be an interesting subject for further exploration, and one that could contribute to the economic competitiveness strategies of regions. It could identify the ways in which migration enhances the innovative capacity of places through skills infusions and the 'difference dividend' (the impact of diversity on problem-solving and innovation)[ccxv] in Scotland, and explore in which ways different regions throughout the world had capitalised most effectively on incoming talent for innovation. After becoming attractive to talent, how can places become 'absorptive' of talent?

Appendix 1. Important challenges in the ROVA methodology

Challenge 1. Defining the boundaries of the city regions

As Hutchins and Parkinson note in their paper *Competitive Scottish Cities*, defining the appropriate boundaries of a city is often problematic. There is often a mismatch between the administrative boundaries that are used for the purposes of data collection and the actual functional boundaries of a city region:

> *'Under-bounding' occurs when the administrative [boundary] of a city does not correspond with its real economic reach or influence. Others are 'over-bounded', incorporating large areas of rural or semi-rural land along with the urban area. The cut off point for city boundaries can have a significant impact on their performance socio-economic indicators.*[ccxvi]

This is problematic when using crime data, for example, since these are likely to be very different in the more peripheral areas of a city region than in its urban centre.

For practical purposes, the first key issue is to determine which local authorities are included in which city regions (see table 16). In the case of the Scottish city regions, we draw on the results of the City Region Boundary Study conducted by Derek Halden Consultancy for the Scottish Executive[ccxvii] but the final definitions were provided by an Experian study for Scottish Enterprise. In the case of the English and Welsh city regions, we use the definitions provided by the regions themselves.[ccxviii] In most cases, this is relatively straightforward, although the cases of Fife (which cuts across the Dundee and Edinburgh city regions), Warrington (which cuts across the Liverpool and Manchester city regions) and Barnsley (which cuts across the Leeds and Sheffield city regions) present slight problems.[ccxix]

The second key issue is to test the sensitivity of our results to different definitions of the boundaries: would we get dramatically different results if we focused only on the urban core rather than the wider city region? The results of this testing are presented in chapter 6 where we discuss ROVA.

Table 16. The city regions and their constitutive local authorities

Aberdeen	Aberdeen; Aberdeenshire
Dundee	Angus; City of Dundee; Perth and Kinross; Fife
Edinburgh	East Lothian; City of Edinburgh; Falkirk; Midlothian; Scottish Borders; West Lothian; Fife; Stirling; Clackmannanshire
Glasgow	North Lanarkshire; South Lanarkshire; East Dunbartonshire; West Dunbartonshire; Renfrewshire; East Renfrewshire; City of Glasgow; North Ayrshire; East Ayrshire; South Ayrshire; Inverclyde
Birmingham	Birmingham; Coventry; Dudley; Sandwell; Solihull; Telford; Walsall; Wolverhampton
Bristol	Bath and North East Somerset; Bristol; North Somerset; Gloucestershire
Leeds	Barnsley; Bradford; Calderdale; Craven; Harrogate; Kirklees; Leeds; Harrogate; Selby; Wakefield; York
Liverpool	Chester; Ellesmere Port and Neston; Halton; Knowsley; Liverpool; Sefton; St Helens; Warrington; Wirral
Manchester	Bolton; Bury; Congleton; High Peak; Macclesfield; Manchester; Oldham; Rochdale; Salford; Stockport; Tameside; Trafford; Vale Royal; Warrington; Wigan
Newcastle/Gateshead (Tyne and Wear)	Newcastle; Gateshead; Sunderland; North Tyneside; South Tyneside
Sheffield	Barnsley; Bassetlaw; Bolsover; Chesterfield; Derbyshire Dales; Doncaster; North East Derbyshire; Rotherham; Sheffield

Challenge 2. Small sample sizes in the survey data

We use data from the Scottish Social Attitudes Survey and the British Social Attitudes Survey. These are annual, nationally representative surveys of about 1,500 Scottish adults and about 3,500 British adults, respectively.

For our purposes, we are interested in exploring differences in social values just among people across the city regions of Scotland and England. The data allow us to identify the local authority in which respondents live, and we use this to create sub-samples for each of our city regions. The difficulty is that by disaggregating the national sample in this way, we end up in some cases with very small sample sizes. We can overcome this problem partially by pooling the data from the 2002–05 surveys in order to create bigger samples for each city region. The disadvantages of doing this are:

- There is a risk of double counting (if someone was surveyed in consecutive years) – although this would be unlikely given random sampling.

- Even if the wording of the question is the same from one survey to the next, it is in effect a different question because it is being asked at a different point in time – although since we are mainly interested in perceptions and values, it would be surprising if these were to change dramatically within the space of three years.

These drawbacks notwithstanding, we believe that pooling is the best way to generate some insights into differences in values and perception. Even with pooling, however, we are still left with fairly small samples in some cases. This means that there is likely to be a wide margin of error around the results, and extra care should therefore be taken in interpreting them.

Challenge 3. Validity of indicators

Any attempt to use statistics to capture a process as complex as talent attraction is inherently imperfect, and there are particular challenges raised by the need to find data that are available at the right geographical level and for all of the city regions in our sample. Inevitably, that means that some of our indicators are looser proxies for the underlying factor that we are trying to tap than we would like. The results should therefore be interpreted with caution, and in the context of the broader picture that emerges from our qualitative research. By being transparent about our approach, we hope that it will be straightforward for others to identify alternative sets of indicators that they think would have greater validity and incorporate these into the framework.

Appendix 2. Note on qualitative research methodology

In order to explore the breadth of this sample a mixed methodology was used:

In addition to a significant number of interviews with industry experts and Scottish Enterprise staff, as part of the qualitative research we undertook the following:

1 Depth interviews with talented incomers (× 36)
   - In-migrant talent from the rest of UK, Europe and wider world spread across the four city regions
   - Three target industries per city region identified by Scottish Enterprise staff (in no order of importance)

City region	1	2	3
Aberdeen	Food and drink[a]	Energy[a]	Tourism
Dundee	Life sciences	Electronic markets/ Digital media	Tourism
Edinburgh	Life sciences	Financial services	Tourism
Glasgow	Life sciences	Financial services	Electronic markets/ Digital media

[a]Since we were asked to focus on food and drink and energy in only one city region, this significantly reduces the proportion of interviewees in these industries.

   - Target of nine depth interviews per region (total 12 respondents):
      - Three × 'couple' paired-depth interviews to provide insight into relationship dynamics
      - Six × 'single' in-depth interviews for detailed understanding of individual motivations

2 Focus groups with in-migrant talent (× 4)
   - 90-minute focus group (6–8 respondents per group)
   - In-migrants, the vast majority working in priority industries, mixed ages
   - One per city region

3 Focus groups with potential talent (× 4)
   - 120-minute discussion group sessions (6–8 respondents per group)
   - Recruited in the South East
   - Three groups split by Life/Career Stage: (a) 25–30 singles, (b) 30–40 couples, and (c) 40–50 with children
   - one group of international in-migrant talent currently living in the South East

4 Focus group with ‘lost talent’ (Scots who had left Scotland) (× 1)

- 120-minute discussion group session (8 respondents of mixed age and industry)
- Recruited in the South East

Notes

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[xvi] J-B Meyer, D Kaplan and J Charum, 'Scientific nomadism and the new geopolitics of knowledge', *Revue Internationale des Sciences Sociales* 168 (2001).
[xvii] L Ackers, 'Moving people and knowledge: scientific mobility in the European Union', *International Migration* 43, no 5 (2005).

[xviii] A Berset and O Crevoisier, 'Circulation of competencies and dynamics of regional production systems', *International Journal on Multicultural Societies* 8, no 1 (2006), see www.unesco.org/shs/ijms/vol8/issue1/art4 (accessed 23 Jan 2008).
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[xxi] R Florida, *The Rise of the Creative Class* (New York: Basic Books, 2002).
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[clxxv] In each case, the city region with the best (maximum) score will receive a 1 and that with the worst (minimum) score a 0, and the others will fall in between, with their score reflecting their distance from this maximum or minimum.
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