**GREATER MANCHESTER SPATIAL FRAMEWORK** 

**TOPIC PAPER 4** 

ECONOMY

October 2010

## INTRODUCTION

Agglomeration economies describe the powerful forces which create dense clusters of people, businesses and public institutions within city-regions. In historical terms Greater Manchester was one of the industrial revolution's first examples of agglomeration economies at work. It was a rapidly formed urban area focused on textile manufacturing and supported by transport infrastructure like railways and ship canals, a large labour pool and a critical mass of inventors and entrepreneurs.

The Manchester Independent Economic Review (MIER) report "*The Case for Agglomeration Economies*" (London School of Economics 2009) provided significant insights into the nature of agglomeration economies in Greater Manchester and offered recommendations on how to improve their performance.

Its central finding was that agglomeration economies existed in Greater Manchester and arose from it being a large and diverse urban region. There was no evidence that the clustering of particular sectors, with one or two exceptions, was important for productivity. On the contrary, they contended that agglomeration economies available related to the benefits of being in a large and diverse urban environment. Firms' productivity, investment spillovers and innovation all depended on the rest of the supply chain, rather than on competitor firms in the same sector.

This paper sets out the current position on the prospects for the GM economy; outlines the case for a policy approach to 'drive' agglomeration; outlines the spatial implications of this for GM and concludes with a series of policy considerations for the GMSF.

## ECONOMIC CONTEXT

The city-region's economy of course does not operate in isolation from national and international economic trends. It is vital to have an understanding how economic growth will impact Greater Manchester. Although second quarter national accounts released in late August 2010 confirm that the U.K.'s economic recovery gained substantial momentum in June, the impressive pace of growth is not likely to be sustained in the second half of the year. This is due to several critical factors:

- The looming fiscal squeeze will test the current stimulus-induced recovery in domestic spending. The Coalition government plans to tighten public finances by around £113 billion over the next five years.
- The fiscal tightening combined with heightened uncertainty about the economic outlook will likely dampen both consumer and business confidence and limit the private sector's contribution to growth in the near term.
- Household spending will remain on the sidelines amid high levels of indebtedness and unemployment.
- The UK's financial and trade ties to Europe and America will hold back its own pace of growth.

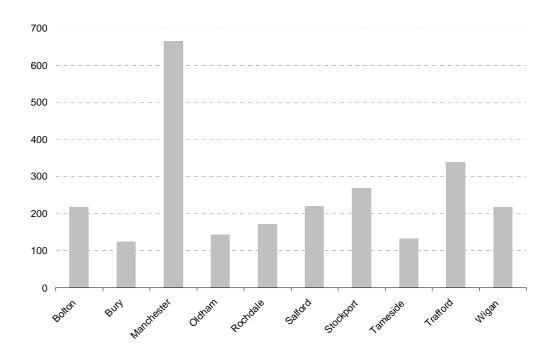
Not surprisingly, these macroeconomic trends will play themselves out in a GM context with projected growth showing a slow and somewhat uneven pattern of distribution across the conurbation. According to provisional GMFM forecasts:

- Over the next four years economic growth for GM (i.e., GVA) is expected to be in the range of 1.9 to 3.2 percent. Continuing recent trends the growth rates will be higher in the southern parts of the conurbation such as Manchester, Trafford and Salford where growth is expected to be in the range of 2 to 4 percent versus the northern part of GM (Rochdale, Bury, Bolton, Wigan etc.) and Tameside where growth will be more in the range of 1 to 2 percent.
- On a GM level, the impact of the recession will certainly be felt in total employment numbers. Net gains in employment are not expected until 2012, and even then it will be a meagre 0.7 percent. Again as with the GVA figures, job growth figures will be higher in the south of conurbation.
- Important as well from an economic and planning perspective are overall population growth figures. On a GM basis these figures will remain steady and largely unchanged from the past several years, that is, growth rates in the range of 0.5 to 0.7 per year or about 5% growth by 2020.
- Between 2010-14, the City of Manchester is expected to show the highest annual population growth rate at just over 1 per cent, followed by Salford and Oldham at roughly 0.6 and 0.5 per cent respectively. Population growth will be largely natural (i.e., births and ageing population) with migration playing a small part in growth.

The key question is how these trends will map themselves out in terms of growth sectors, types of employment opportunities generated, labour mobility patterns etc. Recent work undertaken as part of the Local Economic Assessment process sheds some light on these questions. For example:

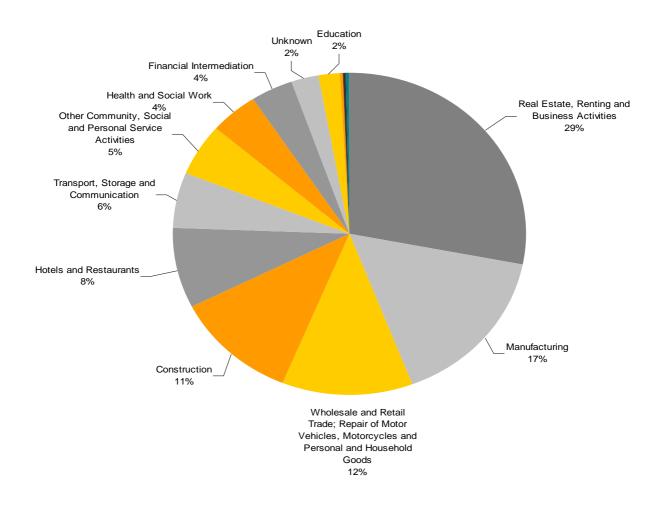
- The City of Manchester is the main importer of labour and the primary destination for all other GM districts though this connection is much weaker for Bolton and Wigan
- Trafford and the Cities of Manchester and Salford are the most connected districts, with labour flows with all other GM districts, though all districts have more flows to the rest of GM than to districts outside GM
- Financial and Professional Services is the largest sector in Greater Manchester, employing 16.6 per cent of the workforce. The Financial and Professional Services sector is expected to remain the largest employer, whilst employment in Manufacturing is expected to continue to fall.
- Key sectoral strengths and growth opportunities in Manchester include Low Carbon Energy, Advanced Manufacturing, Digital Media and Technology, and Health and Life Sciences.
- There is significant high-level employment in Manchester, based around managerial and senior official type occupations, though the city has proportionally more employees working in lower-skilled jobs.
- Critical to future economic vibrancy are the number of 'high growth firms' (high productivity and employment generators) and in this regard Manchester leads the way followed by Trafford and Stockport with the highest number of these firms.

 Interestingly, the sector breakdown of these firms is quite diverse. Nearly 30 % are in business services, but over a sixth, are in the manufacturing sector.



# Location of High-growth Businesses within Greater Manchester, 2009

Sectoral Composition of High Growth Firms: numbers of high growth firms as a percentage of all high growth firms, Greater Manchester



### What Drives Agglomeration Economies?

There is abundant evidence that manufacturing firms choose certain locations to reduce transport costs. Increasingly though, the urban role in reducing transport costs seems to be more important for service firms which now account for a greater percentage of economic activity. Numerous researchers have also argued that dense agglomerations provide labour market pooling, such that workers can more easily move from less productive to more productive firms.<sup>1</sup>

The largest body of data supports the view that cities and agglomeration economies succeed by spurring the transfer of information, which in turn stimulates innovation and productivity gains<sup>2</sup>. Not surprisingly, skilled industries are more likely to locate in agglomerated urban areas and significantly, in an ideas-driven economy, skills are a major predictor of urban success.<sup>3</sup>

A key variable influencing the diffusion of innovation and firm level productivity improvements is sheer scale and density. In short, bigger city regions, which are also denser, are characterised by higher levels of productivity and innovation.<sup>4</sup>

Another characteristic of high-performing agglomeration economies is the presence of top-flight Universities. Indeed, there is a robust link between educational institutions and certain types of high return entrepreneurship<sup>5</sup>. The national and international success of regions such as the Golden Triangle, where leading English research universities based in London, Oxford, and Cambridge are situated and Silicon Valley home to universities such as Stanford are testimony to this fact.

Lastly, as successful agglomeration economies are built upon their ability to attract large numbers of skilled workers and firms to their environs, cities must be able to generate the 'pull' factors which can achieve this. In addition, to urban features like housing and transport, quality of life considerations such as a clean environment; safe neighbourhoods; high levels of tolerance and diversity; cultural and recreational amenities such as parks, museums and good restaurants are according to a considerable body of economic literature important variables in helping explain the economic success of many cities.<sup>6</sup>

To summarise then, the key drivers of agglomeration include:

- Better and more cost-effective utilisation of common infrastructure (e.g., roads, utilities, public transport, universities)
- Availability/diversity of labour and consumer markets

<sup>&</sup>lt;sup>1</sup> Glaeser and Gottlieb 2009.

<sup>&</sup>lt;sup>2</sup> Glaeser 2009, Florida, Stolarick and Gates, 2008

<sup>&</sup>lt;sup>3</sup> Glaeser 2009

<sup>&</sup>lt;sup>4</sup> Ciccone and Hall, 1996, Combes, Duranton, Gobillon and Roux 2009, Knudsen, Florida, Stolarick and Gates, 2008.

<sup>&</sup>lt;sup>5</sup> Glaeser, Kerr 2010

<sup>&</sup>lt;sup>6</sup> Mellander and Florida 2007.

- Easier access for firms to their respective suppliers or customers
- Increasing opportunities for knowledge transfers and innovation
- Attractive quality of life

### What do we know about agglomeration economies in Greater Manchester?

- On the positive side, the MIER found, firms in Greater Manchester had higher productivity than firms in the Northwest and its skills gap is less than other northern cities.
- However, Greater Manchester was less productive than it should be and this is down to its skills base, housing, planning decisions and transport infrastructure.
- In terms of skills, one way to raise productivity was to tackle the skills base of current residents. The second was to try to attract skilled workers from elsewhere to Greater Manchester (but this raised the cost of living and didn't address existing unemployment and deprivation).
- With regards to transport, future travel demand would require investment in intra-Greater Manchester projects if the city-region was to improve its economic prospects in particular the productivity gap with London and the Southeast.
- According to the report, current planning decisions on housing types and location did not appear to be sufficiently responsive to demand. As well, national planning of mixed communities did not always fit with Greater Manchester's aspirations.
- Current Greater Manchester and Northwest plans for business locations appeared to favour the almost exclusive use of brownfield land *despite* the evidence that this may not serve the demands of firms. There is a significant disconnect between the demand for and supply of buildings by both location and type.
- On the demand side, Greater Manchester should encourage relocation of quasi-public sector jobs, a planning system which provides suitable and timely business premises, deal with infrastructure bottlenecks and address issues of project financing.
- Meanwhile, improving the supply side requires the city-region provide amenities favoured by the high skilled, address workers' housing and transport demands and not focus on supporting specific SMEs or particular sectors.
- Whilst acknowledging the economic dominance of London and the South East, the report stated that if the if the UK wished to optimise its economic growth, the success of Greater Manchester, which outside London is the most important growth pole, is vital.

These and other findings of the MIER were reflected in GMS strategic priorities focussed on developing and attracting highly skilled and talented people to GM,

enhancing our transport links, improving our housing market and expanding our economic base.

## How do Agglomeration Economies Map-Out Spatially in Greater Manchester?

Evidence of agglomeration economies in Greater Manchester is strongest in the following locations:

## **Regional Centre**

Employing about 160,000 people, the Regional Centre at the core of conurbation is amongst the most important in the UK. Within the Regional Centre itself, there are several areas which currently play an important role in the economy and are forecast to continue to grow strongly over the next 10-15 years:

- The Corridor Manchester: Stretching from St Peter's Square to Whitworth Park contains a world class HEI cluster, including the UK's largest University – Manchester University and is a locus for knowledge intensive activity.
- **Media City:** Critical infrastructure for creative and digital/new media
- **Sportcity :** An established location for internationally significant sports facilities
- Salford and Trafford Quays: Important as logistics hubs for the west of the conurbation, utilising waterways and links with the port of Liverpool and also centre for culture, sporting and entertainment (The Lowry, War Museum, Old Trafford).
- City-Centre Manchester: Lying within the Manchester Inner Ring Road, and encompassing a part of neighbouring Salford, the city centre acts as an important national and international location for financial and professional services, retail and culture.

### Manchester Airport

Manchester Airport is the only global gateway in the North of England. It currently connects over 22 million passengers with more destinations than any other UK airport. Manchester Airport is forecast to grow and has the existing infrastructure capacity to service more than double its current passenger numbers.

The Manchester Independent Economic Review (MIER) acknowledges the unique asset of Manchester Airport. It is the largest outside the South East and is not only important as a transport node but also as an economic generator in its own right.

# Trafford Park

Trafford Park is the largest industrial estate in Europe and one of the Northwest's most significant assets. It is located close to the Trafford Centre, an out of centre

regional shopping facility co-located with a range of regional sport and leisure facilities and office development.

## Town Centres

Greater Manchester is characterised by a compact urban form and a network of sub regional town centres which are an important element of the distinctiveness and identity of our different places. However, its town centres are struggling. During the recent period of economic growth all 8 experienced a decline in employment. Nevertheless, Town centres have the potential to support agglomeration economies, given their accessibility and existing infrastructure. In this regard, they are well placed to benefit from the concentration of activity there such as retail, leisure, government services and cultural amenities. Town centres could thus be the focus for high traffic generating uses and for appropriate new housing. However, careful consideration must be given to how they develop a unique offer that does not replicate nor undermine the viability of other town centres and key growth areas within Greater Manchester.

# POLICY CONSIDERATIONS FOR GMSF.

The MIER, other economic evidence on agglomeration economies and recent growth forecasts throw-up a number of issues and challenges in developing a spatial framework for Greater Manchester.

## Transport

As agglomeration economies are very much about scale and density, managing the potential downsides like congestion is essential. It is here where the planning system can mitigate these impacts through effective integration and coordination of new transport, housing and commercial development. For example, the planning framework should help facilitate the provision of transport capacity into the most successful agglomerations in Greater Manchester. This can be achieved by enabling the creation of efficient transport corridors which link these employment areas to where workers live and to the destinations of goods and services.

### New 'Spatial Fix'

A key issue is the changing nature of the economy over the past 30 years. The rise of financial and professional services and industries such as life sciences, ICT and digital new media requires a different pattern of growth or what economic geographers call the 'spatial fix'<sup>7</sup> This means fewer large scale industrial parks on the edge of town and more digitally connected dense mixed use developments where people can work from home or in live-work units. This new economic structure is borne out by employment figures from the city-region's most economically significant sectors:

**Financial and Professional Services** – 239, 500 **Life Sciences** – 199,000

<sup>&</sup>lt;sup>7</sup> Florida 2010

### Manufacturing – 184,700 ICT/Creative/Digital New Media – 142,300

### Source: MIER Reviewers' Report, 2009

Whilst not the mass employer of the past, it bears noting that manufacturing is still economically important within Greater Manchester and the Northwest as a whole, accounting for about 16% of GVA (ONS Regional Accounts, 2006). As such, existing clusters of manufacturing need to be protected and where possible allowed to expand in response to market forces.

# Density

Density is a virtue in economic terms. Firstly, it helps boost productivity and innovation and improves overall economic efficiency. It achieves the latter by encouraging the use of existing infrastructure, rather than new build, which increases infrastructure maintenance expenditures over the long-term. Research estimates that over 20 per cent of infrastructure capital costs could be saved by moving from lower density development to a more efficient and compact urban form, with the added bonus of having savings then reinvested more efficiently<sup>8</sup>. Additionally, more dense development has the benefit of reducing energy costs and improving environmental outcomes by reducing CO2 levels through decreased car travel, shortened travel distances and facilitating more cycling and walking.

## Quality of Life

Interestingly, the MIER and other literature clearly suggest such quality of life features are in themselves becoming a critical element of urban competitive advantage, especially in attracting highly skilled workers, entrepreneurs and firms to Greater Manchester. Whilst there is general agreement amongst economists on the existence of agglomeration economies and broadly the drivers which enable their growth, the literature is also clear on the limits of public policy (e.g., failures of sector and clusters policy, subsidies) in shaping in them. Consequently, based on available economic evidence, spatial planning which improves the quality of the public realm and amenities (cultural, recreational etc.) should be a key component of economic development.

# Enabling Growth

As the MIER illustrated a key strength of Greater Manchester's economy is its size and diversity of public and private assets like universities and innovative firms which help drive economic growth. Though recognising the importance of quality of life considerations, we must guard against unduly restricting the growth of these economic assets by imposing excessive costs on their operation. The imposition of such constraints, whether through the planning system or other means, can have very negative economic consequences<sup>9</sup>.

<sup>&</sup>lt;sup>8</sup> Government of Ontario, 2006

<sup>&</sup>lt;sup>9</sup> MIER 2009, Glaeser and Kerr 2010

As such, the Framework must be flexible and responsive to economic conditions which can change dramatically over a very short period time, as recent events demonstrate. It must also set out criteria within which the economic consequences of planning decisions are identified and weighed and the costs and benefits of particular courses of action assessed against each other.

#### Market demand for employment sites

It is also important to consider is how growth trends will impact upon demand for employment land within Greater Manchester. In order to better understand the market demand position in respect of employment land, consultants have been commissioned to consider the extent to which the current employment land supply meets demand and the areas where market demand is not currently met. A key finding emerging from this study is that there appears to be a fundamental discrepancy between the amount of employment land allocated and the amount anticipated to be taken up by development.

There is a need to re-evaluate the way in which sites are assessed. The Study recommends the establishment of:

- Tier 1 Sites which are "most capable of delivering transformational change via the capture of significant foreign and domestic inward investment".
- Tier 2 sites which are "capable of delivering sustained sub regional economic growth via the capture of indigenous demand and domestic (UK footloose) inward investment where requirements cannot be satisfied, for whatever reason, by those sites designated as Tier 1 priorities".

It also advocates the designation of **Priority Zones** which "whilst not offering a single large site, offer a strong track record of delivering self sustaining, commercial viable, real estate product and /or afford a critical mass of knowledge based infrastructure within a proven location.

The findings of this work will be available from 20<sup>th</sup> September and inform the drafting of GMSF.

It should also be noted that a further piece of work is being undertaken by consultant Ian McDonald to consider the policy implication of this evidence together with the conclusions of the GM Town Centres study. This will input into the next draft of this paper.

### **RECCOMMENDED POLICY FRAMEWORK**

The following are some broad principles and spatial considerations which can support sustainable economic growth and agglomeration economies:

#### Where to Grow

- The Regional Centre, Trafford Park and Manchester Airport represent the most economically significant growth areas within Greater Manchester. As such, major office, commercial, industrial or institutional development should be located in these areas
- Town centres could act as urban growth centres focused on high traffic generating uses and for appropriate new housing, but with careful consideration given as to how they develop a unique offer within a Greater Manchester context.
- Other key strategic locations may be identified for development subject to evaluation of relevant economic considerations.

## Considering Economic Impacts

- In making decisions about land uses, a range of economic evidence must be considered when assessing the most efficient and effective course of action, including:
  - Identifying and weighing the economic consequences (e.g., direct and indirect jobs created, GVA impacts, agglomeration benefits) of planning decisions, including the costs and benefits of particular options, which should then be assessed against each other
  - Taking into account price differentials between different land use classes, when deciding on the most productive use
- There should be an on-going assessment of the existing supply of land available for economic development- through employment land reviews and the extent to which it is meeting market demand
- Where possible, land use reviews impacting housing, employment, transportation and other infrastructure should be undertaken at the same time to ensure a full assessment of competing land uses
- Care must be taken to ensure the planning approval process does not impose unreasonable delays on commercial, residential and infrastructure developments of strategic importance to Greater Manchester.
- Planning policy should support the development of improved digital infrastructure which itself can strengthen agglomeration impact in those areas more peripheral to the Regional Centre.

# Enabling Sustainable Growth

- Protecting and preserving employment areas for current and future uses and ensuring the necessary infrastructure is provided to support current and forecasted employment needs.
- Facilitating a broad range of employment uses, limiting the designation of sites for single or restricted use classes, and promoting mixed-use developments in appropriate locations
- Considering the changing spatial working patterns that advances in information and communication technologies allow, such as live-work units or the use of residential properties for home working
- Directing a significant portion new growth to built-up areas of Greater Manchester through intensification in urban centres.
- Urban centres should be areas which act as focal points for:
  - For investment in institutional and region-wide public services

- o Commercial, recreational, cultural and entertainment uses
- Major transport infrastructure both intra and inter-city in nature and facilitating the movement of people and goods
- High density major employment centres that will attract nationally or internationally significant employment uses
- Facilitating improved transport linkages from residential areas to urban growth centres,

## **Building Quality Communities**

- Offering high quality public open spaces with site design and urban design standards that create attractive and vibrant places for people to live, work and play in.
- Providing a diverse and compatible mix of land uses, including residential and employment uses, to support vibrant neighbourhoods
- Planning for a range and mix of housing, taking into account market and affordable housing requirements

# REFERENCES

Ciccone, Antonio and Robert E. Hall. 1996. "Productivity and the Density of Economic Activity." American Economic Review, 86(1):54-70.

Combes, Pierre-Philippe, Gilles Duranton, Laurent Gobillon, and Sébastien Roux. 2009. "Estimating agglomeration economies with history, geology, and worker effects," in Edward L. Glaeser (ed.), The Economics of Agglomeration.

Florida, Richard, How the Crash will Reshape America, 2009, in The Atlantic

Glaeser, Edward. L, Gottlieb, Joshua D. 2009, The Wealth of Cities: Agglomeration Economies and Spatial Equilibrium in the United States. Working Paper

Glaeser, Edward. L, Kerr, William R., 2010, What Makes a City Entrepreneurial? Harvard Policy Briefs

GMFM provisional forecasts 2010

Knudsen, B., Florida, R., Gates, G., & Stolarick, K. 2003, "Beyond Spillovers: the Effects of Creative-Density on Innovation". working paper, H John Heinz III School of Public Policy and Management, Carnegie Mellon University, Pittsburgh, PA.

GM Local Economic Assessments Draft, 2010

Manchester Independent Economic Review, 2009: Reviewers Report, Agglomeration Report (London School of Economics)

Mellander, Charlotta & Florida, Richard, 2007. "The Creative Class or Human Capital? - explaining regional development in Sweden," Working Paper Series in Economics and Institutions of Innovation 79, Royal Institute of Technology, CESIS - Centre of Excellence for Science and Innovation Studies.

ONS Regional Accounts, Contributions to GVA by sector 1989-2006

Places to Grow – Better Choices, Brighter Future, 2006, Government of Ontario, Canada

Prothero, Richard, Barker Review of Land Use Planning, in *London's Economy Today Issue 46, June 2006*