

# Edinburgh Economic Analysis and Benchmark Report

**BAK Basel Economics**  
**Special report on behalf of**  
**Scottish Enterprise Edinburgh and Lothian**

**Executive Summary**

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# Imprint

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# Executive Summary

This paper summarises the key findings of the BAK Basel Economics Metro Edinburgh Economic Analysis and Benchmarking Report 2006. The report compares the performance of Metro Edinburgh<sup>1</sup> against a range of international and UK comparator regions. It describes the current economic context for Metro Edinburgh and goes on to benchmark the region against 19 other metro regions. The benchmarking includes overall economic performance, sectoral strengths and weaknesses as well as the attractiveness of the region as a business location. The report identifies the key challenges facing the region and suggests some strategic options for the future economic development of the metropolitan region.

## Edinburgh Economic Context - Driver Sectors

In analysing the industrial structure of a region, BAK Basel Economics groups sectors into 5 aggregates - the so-called drivers of growth. Using this typology, the report provides an analysis of Metro Edinburgh over the 1980 to 2004 period.

### The Drivers of Economic Growth:

BAK Basel Economics has developed a typology which aggregates detailed sectors data into 5 driver sectors with common properties. Amongst others, these properties include the level and growth of productivity. These are:

- (1) **New Economy** - IT (hardware, software, services), telecommunication, microelectronics
- (2) **Old Economy** - chemicals, transport equipment, medical engineering
- (3) **Urban Sector** - business & financial services, hotels and restaurants, personal services, real estate, transport, trade
- (4) **Traditional Sector** - construction, production of goods not elsewhere included
- (5) **Political Sector** - public administration, healthcare, education, the primary sector, utilities.

In 2004, Metro Edinburgh was significantly under-represented in the Urban Sector against the Average of Metropolitan Regions<sup>2</sup> and over-represented in the Political Sector (Figure 1). This was also the case in 1980.

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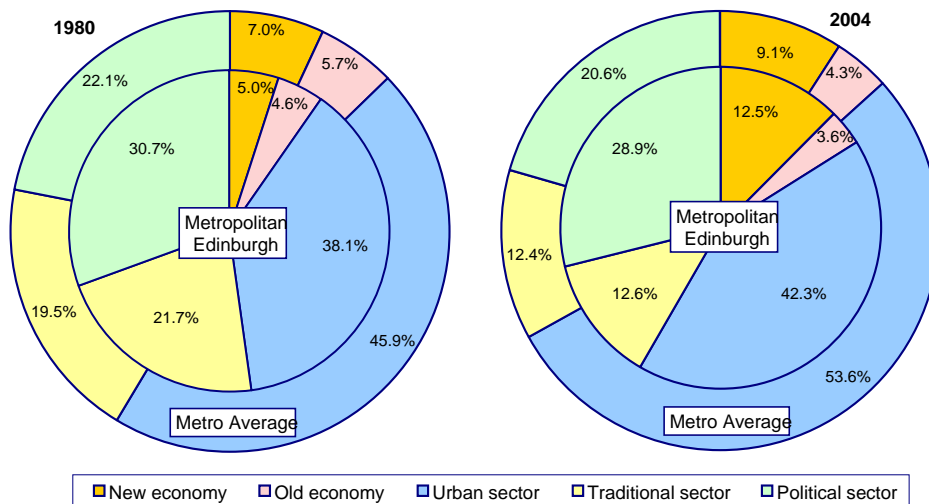
<sup>1</sup> Metro Edinburgh is defined following the concept of a functional urban region. A metropolitan region is defined as the area closely tied to the city in terms of commuting, commercial activities and use of retail and leisure facilities. Commuting patterns are usually the most important indicator used to define a metro region. Metro Edinburgh, according to the above stated definition, consists of Edinburgh City, Clackmannanshire and Fife, East Lothian and Midlothian, West Lothian, Scottish Borders and Falkirk.

<sup>2</sup> The average is calculated from 26 European and 2 US metropolitan regions with available data. It should be noted that it is not an average of the regions used in the benchmarking. The terms 'Metro Average', 'Average of Metropolitan Region', 'European Metro Average' and similar terms are used interchangeably and always refer to the same average.

These two sectors are the most important sectors in a metropolitan economy. Since 1980, the Urban Sector has increased its share of the economy. This trend is evident in Metro Edinburgh and across the Metro Average, but the increase in the Urban Sector was stronger in the Metro Average. Since 1980, the only other sector with an increasing share was the New Economy, with stronger growth in Metro Edinburgh than in the Metro Average. The Traditional Sector, the Political Sector and the Old Economy shares have declined in both Metro Edinburgh and across the Metropolitan Average. When comparing the two largest sectors in metropolitan economies, Metro Edinburgh is over-represented in a sector with a declining share (Political Sector) and under-represented in a sector gaining share (Urban Sector).

**Fig. 1: Shares of Driver Sectors in the Economy**

In percent, 1980 and 2004, current prices



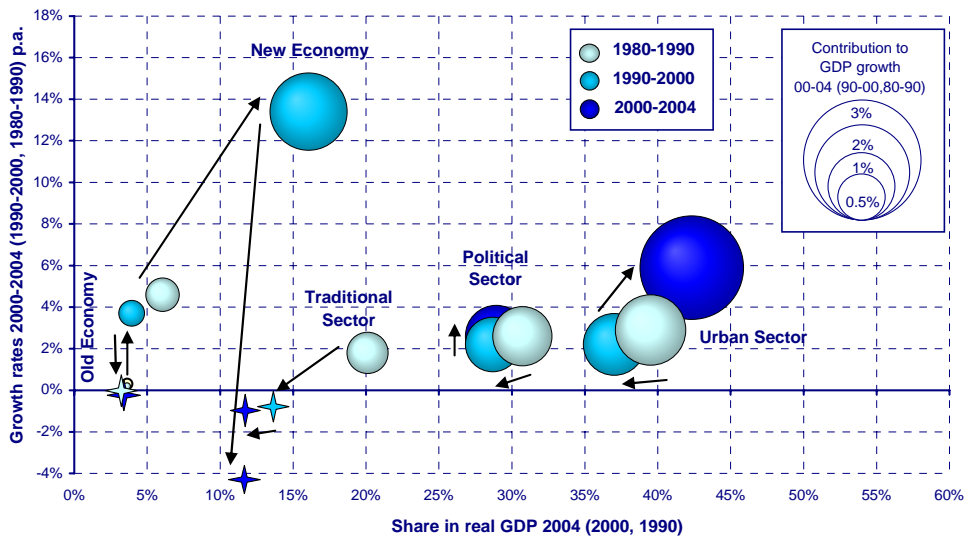
Source: BAK Basel Economics

The success of the New Economy has been a temporary phenomenon (Figure 2). The largest contribution to growth in Metro Edinburgh has come from the Urban Sector, particularly since 2000, whereas growth of the Urban Sector has slowed across the metro average since 2000. Much of the success of the Urban Sector since 2000 in Metro Edinburgh has been driven by the City of Edinburgh. The growth contribution of the Political Sector has been much smaller, although it has been larger in Metro Edinburgh compared with the Metro Average. This demonstrates the limited growth potential of the Political Sector. The Traditional Sector and the Old Economy have contributed very little to growth - a similar picture to the Metro Average.

In summary, Metro Edinburgh has a smaller Urban Sector than its comparators - a disadvantage given the key role this sector has had in driving growth in the majority of metropolitan regions. However, there are clear signs that Metro Edinburgh has been playing catch-up since 2000.

**Fig. 2: Growth Contribution of Driver Sectors: Metropolitan Edinburgh**

Based on real GDP 1980-2004, at USD, 1995 prices and 1997 PPP



Note: Interpretation of a growth contribution 'bubble' chart: The contribution of a sector to the growth of an economy depends on its weight within the total (share) and on its growth rates. A large contribution to economic growth can be due to a high share and moderate growth or a smaller share but more dynamic development. Charts like the one above do provide all this information. The x-axis holds information on the share of the region (in percent). For example, the Political Sector in Edinburgh made up close to 25 percent of the economy in 1990. The y-axis reflects the average annual growth (in percentage points). The Political Sector grew with more than 2 percent a year from 1980 to 1990. Together, this results in a contribution to Edinburgh's growth of roughly 0.5 percentage points annually, reflected by the size of the bubble in the graph. The growth contribution of a Driver Sector increases when moving from the lower left corner towards the right and/or upwards. Very small and negative contributions are marked with a star.

Source: BAK Basel Economics

## Through the Benchmark Lens - Key Findings

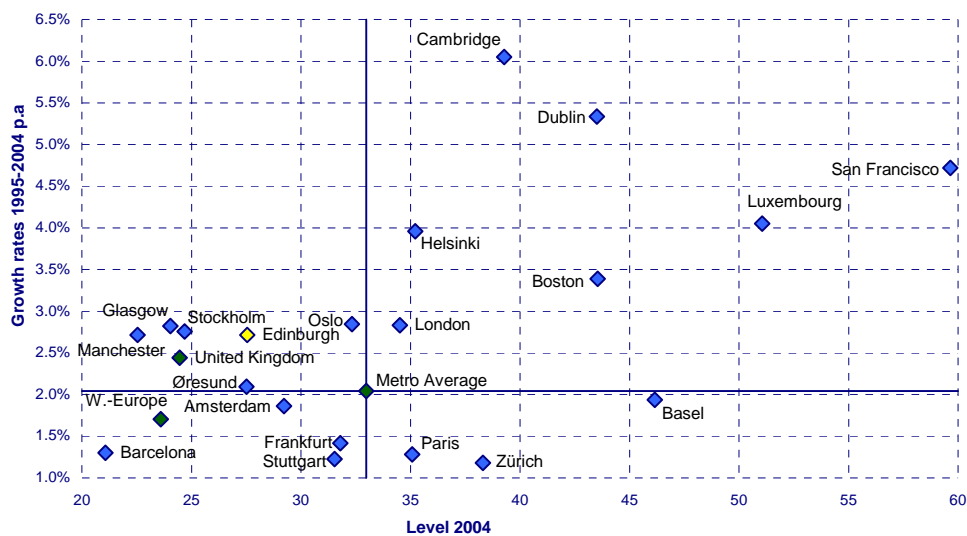
Metro Edinburgh has been benchmarked against 19 comparator metropolitan regions. They were selected to represent regions similar to Edinburgh - in size, industrial structure or economic situation. It is also an aspirational sample as it includes many 'best performers'. The key highlights of the benchmarking exercise are outlined below.

## GDP per Capita

Compared with other metropolitan regions, the GDP per capita in Metro Edinburgh is low. In 2004, Edinburgh ranked 15th out of 20 metro regions (Figure 3). Compared to the broader Metro Average Metro, Edinburgh's GDP per capita is 15 percent lower - but it is catching up.

**Fig. 3: Edinburgh and its Competitors: Real GDP per capita**

2004 in USD, average annual growth 1995-2004 (based on USD at 1995 prices and 1997 PPP)



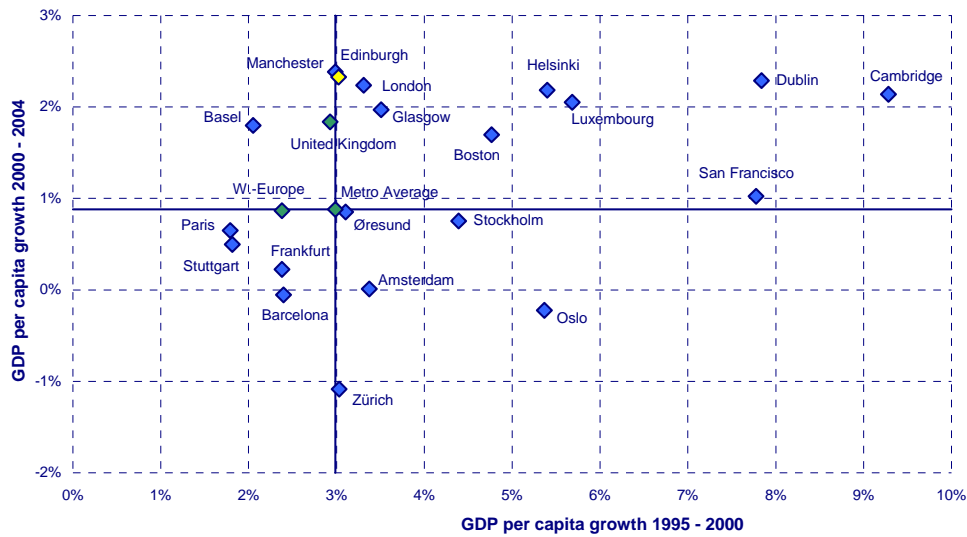
Note: All regions including Edinburgh are the metropolitan regions. Metro Average is not the sample average but built with 26 European and 2 US metro regions.

Source: BAK Basel Economics

In 1980, the GDP per capita in Metro Edinburgh was only 75 percent of the Metro Average. More recently, in the period 1995 to 2004, GDP growth was 0.7 percentage point higher annually in Metro Edinburgh than the Metro Average. Within the ambitious benchmarking sample, Metro Edinburgh is positioned in the middle of the chart (Figure 3). Interestingly, Metro Edinburgh's performance has been improving in recent years. Between 1995 and 2000, economic growth in Metro Edinburgh was ranked 14<sup>th</sup> out of the 20 comparator regions, but between 2000 and 2004 it was ranked 2<sup>nd</sup> (Figure 4).

**Fig. 3: Real GDP per Capita Growth 1995 to 2000 and 2000 to 2004**

Based on USD at 1995 prices and 1997 PPP



Note: All regions including Edinburgh are the metropolitan regions. Metro Average is not the sample average but built with 26 European and 2 US metro regions.

Source: BAK Basel Economics

## Employment

Much of the recent success of Metro Edinburgh has been based upon employment growth. From 1995 to 2004 employment grew by 1.4% annually. Looking at job growth against population growth, the achievement was remarkable given that Metro Edinburgh has one of the smallest population growth rates in the sample. Metro Edinburgh shows one of the strongest increases in the employment per capita figure in the sample.

## Productivity

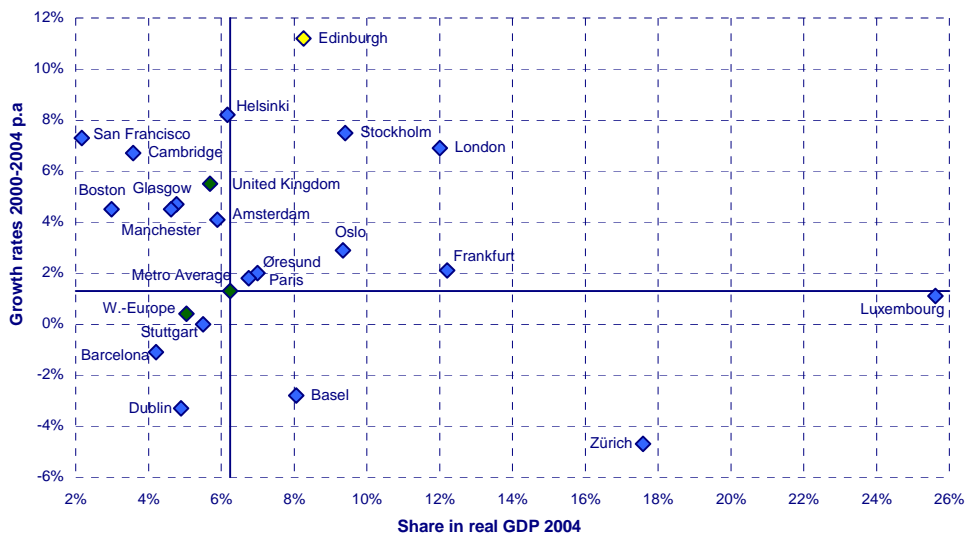
Between 1980 and 2004, Metro Edinburgh achieved above average productivity growth against the Metro Average. Despite this good performance, in 2004 the level of productivity in Metro Edinburgh was still significantly lower than the other metropolitan regions: Metro Edinburgh's productivity is currently less than 80 percent of the Metro Average's figure. In relation to the aspirational benchmark regions, most of the sample had higher growth rates over the last 10 years than Metro Edinburgh.

## Driver Sectors

As discussed previously, one of the most important drivers of metropolitan economies, the Urban Sector, is under-represented in Metro Edinburgh. This is due largely to an under-representation in real estate and transportation compared to the Metro Average.

**Fig. 4: Growth Contribution of Banking 2000 to 2004**

Based on USD at 1995 prices and 1997 PPP



Note: All regions including Edinburgh are the metropolitan regions. Metro Average is not the sample average but built with 26 European and 2 US metro regions.

Source: BAK Basel Economics

However, other sub-sectors have been performing well. Banking has made a significant contribution to recent economic growth. Figure 4 illustrates that between 2000 and 2004 the sector grew faster than in all the benchmarked regions, which include well-known and successful financial service locations like London, Zürich and Luxembourg.

The Political Sector is over-represented in Metro Edinburgh compared to the Benchmark regions. This is primarily due to the higher concentration of Education, Health and the Primary Sector in Metro Edinburgh compared to the Metro Average. Although this sector has grown more in Metro Edinburgh, it is questionable whether specialising in the Political Sector is an appropriate growth strategy for a metropolitan region. The Political Sector is not known to be especially productive and its growth potential seems limited.



## Quality of Location

The benchmarking exercise also looked at a range of factors which describe the quality of Metro Edinburgh as a place for doing business. Key findings included:

- The Metro Edinburgh universities score very well in academic research, but are relatively small in scale due to the regions size. Collaboration with other neighbouring institutions could help to give this scale.
- In terms of human capital, Metro Edinburgh's performance has been improving and in 2004 was in the top half of the benchmarked regions with respect to tertiary education. Combining secondary and tertiary education to measure qualified labour, Metro Edinburgh is amongst the best performers.
- Research and Development expenditures are low, less than expected considering the local skills base and the excellent university research in the region.
- Metro Edinburgh is positioned on the edge of Europe and consequently has below average international accessibility. Still, the gap is not dramatic.
- Metro Edinburgh has an advantage over many competing metropolitan regions, ie its location within the UK. Edinburgh enjoys the liberal labour and product markets of the UK. Furthermore, tax levels are moderate for companies and individuals. These comparative advantages need to be capitalised upon.

## Key Challenges

From this analysis, it is clear that Metro Edinburgh is facing some important challenges:

- Overall productivity levels, although clearly improving, should be the primary focus of economic policy. Productivity levels have a huge influence on the competitiveness of a region and the wellbeing of its inhabitants. To bring productivity up to the level of its international competitors is Edinburgh's number one challenge for the future.
- Metro Edinburgh possesses the resources for a successful knowledge-driven economy: High University quality and quantity; a high standard of human capital in the labour force; and is an attractive place. Metro Edinburgh should be getting more from these assets than it gets today. A key challenge for the future is to make more efficient use of these resources.

- Scale is an issue for Metro Edinburgh. Due to its size, Metro Edinburgh clearly competes in a second tier of metropolitan regions in Europe. In 2 key business areas, financial services and tourism, size plays an important role. Closer collaboration with surrounding regions, especially Glasgow, would add to the weight of these key sectors on a European or even world-wide scale. For Financial Services in particular, it is important to use the close inter-relationship between the City of Edinburgh and the City of London. This is an asset to build on given London's status as a global financial centre.

## Options for the Future

### **Sectoral Mix**

Many metropolitan regions in highly developed economies show a specific industrial emphasis. They can be characterised as high tech regions, business focused metropolis, or consumer/leisure cities. For many metropolitan regions, it is advisable to concentrate on one area they are especially strong in. For Metro Edinburgh, the conclusion is different: Its specific strengths allows for a more mixed strategy.

The Financial Sector, one of the most important components of a business city, is already strong and growing fast. The success of tourism shows that Metro Edinburgh also has strengths as a leisure or consumer city. Add to this the high level of human capital and the quality of research from its major institutions - there is also a sound basis for high tech industries. Whilst many of the hardware producing parts of the new economy are probably gone for good in Metro Edinburgh, Life Sciences offers particular opportunities. Edinburgh has world leading niches like Stem Cells research which look set to become much more important over time. The benchmarking exercise shows considerable potential for Life Sciences in Metro Edinburgh, but there needs to be further investigation to build an evidence base for strategic decisions. Some caution is also necessary as the size of the High Tech sector is comparatively small in Metro Edinburgh. Even if highly successful, it is therefore unlikely to be a major driver of Metro Edinburgh's growth for quite some time to come, as it needs time to built up weight in Metro Edinburgh's economy. In addition, the High Tech sector as a whole has been vulnerable to structural shifts over the period covered by this report - with electronics in particular taking a major hit in the late 1990s. Concentrating on high value activities, ie research and development and supporting close networks between companies and research institutions, should ensure a more sustainable growth.

A key advantage for Metro Edinburgh is that the requirements for these sectors in terms of attractiveness of place and quality of life and high skill levels are mutually reinforcing. Continued investment in place attractiveness of Metro Edinburgh should ultimately make an important contribution to the growth of the key sectors.

Metro Edinburgh needs a mixed strategy focused on its key strengths.

### **Building Capacity for Greater Innovation**

Innovation is undoubtedly a key issue for any developed economy to stay competitive in a globalised world. An innovation fostering environment has to be at the top of the economic policy agenda. An attractive, open and tolerant environment for incoming labour, especially highly educated labour, from the UK or from abroad can help local development tremendously.

A further important issue relating to innovation is the more effective use of the available knowledge resources. Strengthening the links between business and research institutes should help direct resources to the most innovative activities. Support for networking and setting incentives to innovate are measures regional agencies should utilise. Such a policy should comprise businesses, private and public research institutions, individual researchers and the higher education institutions. Other relevant policy areas include regulation and taxation, where incentives to innovate should be promoted.

The critical challenge is to build the capacity to drive productivity growth in the future. Growth will be limited unless this is done.

### **City Collaboration**

A common issue for the sectors mentioned above is scale. For different reasons, all of these sectors can profit from increasing their scale and critical mass. There are a number of key areas where collaboration with Glasgow in particular could bring major benefits:

- Co-operation, co-ordination and networking between the Higher Education Institutes and other research facilities could bring economies of scale and scope in knowledge creation and increase the economic impact of research.
- Co-ordinated marketing and shared large events could increase visibility for international tourism. Such collaboration could increase market share for Scotland as a whole.

- For business services, the issues are around creating a larger labour market through improved accessibility as well as the potential for a division of functions.
- The central issue of attractiveness as a place to live and work can also be supported by greater collaboration: by increasing the variety of environments offered, the housing opportunities and growing the available labour market.

Although competition between the two cities will and should continue where appropriate, Glasgow offers more opportunities than threats to Metro Edinburgh. Collaborative effort could generate the visibility and critical mass needed to withstand international competition and achieve greater success globally.

### **Flexible Labour and Product Markets**

Metro Edinburgh, as part of the UK, enjoys a liberal economic setting. The favourable regulatory and taxation environment supports innovation. This facilitates relatively quick and easy adaptation within the economy to new demands. Metro Edinburgh should be aware of these advantages, value them highly, and include them in any strategic assessment. At the same time, does the UK trend of devolving power and responsibility provide more leeway at regional level? If so, Metro Edinburgh could and should use these newly acquired freedoms.

## **CONCLUSIONS**

Metro Edinburgh benefits to some extent from UK advantages. This favourable position is not guaranteed for the future, eg as labour and product markets become more flexible elsewhere. It should be the goal to foster specific regional success in addition to using these UK advantages. A strong innovation push is required - the basic resources are available, but they have yet to be put to the most productive use.

Whilst the GDP as well as the productivity gap between Metro Edinburgh and its benchmark regions is stark, the most recent evidence shows that gap is reducing. The challenge now is not just to keep up with competitors in the future but, by delivering a step change, pursue a leading position. If this does not happen, there is danger of Metro Edinburgh losing ground particularly if some of its key location advantages diminish. Metro Edinburgh needs an ambitious goal - to become one of the leading city regions in Europe.