New Economy:
Greater Manchester Sector Specialisms

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New Economy conducts economic research on behalf of the Greater Manchester Combined Authority (GMCA). The organisation's main focuses are housing, cost benefit analysis, and economic modelling. While New Economy works principally for the Combined Authority, they have since worked to provide research for other national and international clients, both in the public and private sectors.

Objectives

My project was aimed at analysing sector specialisms in Greater Manchester. This was achieved by using a mixture of sources including Nomis and FAME in order to provide information to the New Economy team about which industries Greater Manchester particularly specialised in. I wanted to use a variety of statistical packages including Excel and Tableau to achieve this.

Method

In delivering this project, two things had to be identified: how I would define industries and how we would define a specialism. In the first case, I decided to use Standard Industrial Classification (SIC) codes. SIC codes classify business according to the type of activity they are engaged in and are ordered in a hierarchy where a higher digit SIC code represents a more specialised area of an industry.

Figure 1 Standard Industry Classification hierarchy (SIC)

With regards to defining a specialism in these industries, I decided to use location quotients (LQ). LQ are a useful way of looking at how concentrated a certain industry is within the region compared to the national concentration.

Location Quotients are calculated by comparing the industry's share of employment in Greater Manchester with its share of national employment. For example, if a sector accounts for 10% of all jobs in an area but only 5% of national jobs, the area's LQ for that sector is 2.0. This means it is 2 times more concentrated in that area than the national average and that industry is over represented in the area. Given that Greater Manchester has many industries with an LQ over 1.0, I decided to define a specialism as having a location quotient of 1.5 or over (i.e. 1.5 times more concentrated). Once this had been established, it was time to gather the relevant data. For this I used multiple sources included Nomis (provided by the ONS) and FAME (a database of businesses). To complete the calculations I used Excel which I found to be the most superior number crunching package. To present the findings I used Tableau and PowerPoint.
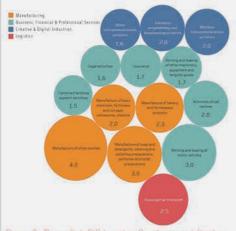

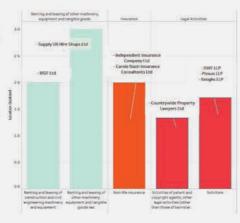Figure 2 Three digit SIC Location Quotient specialisation. Source: BRES, 2015

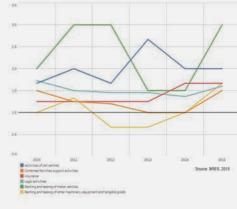Figure 3 Location Quotient change for Business, Financial, and Professional Services. Source: BRES, 2010-2015

Figure 4 Four digit SIC Location Quotient specialisation. Source: BRES, 2015

Conclusions

The findings showed that Greater Manchester is particularly specialised in Manufacturing and Business, Financial and Professional Services which make up 10 of the 14 specialised groups (those with an LQ over 1.5). (see Figure 2) Industry groups have varied over time in employment concentration; some have seen large gains while others have remained stable in the past five years. (see Figure 3) Classes within groups also vary in concentration, with the Legal services group containing Solicitors class (which outperforms the wider group) and the other legal activities class (which underperforms compared to the wider group). (see Figure 4) Intriguingly, Manchester has remained specialised in insurance and manufacturing which originally bolstered the city's industrial success.