

Under strict embargo until 00.01am on Monday 16<sup>th</sup> June

## **Digital technology**

- Proposed changes to the immigration rules will ensure that technology companies have access to a global skills pool. The changes will give technology firms the right to bring in migrants on "exceptional talent" visas providing firms access to highly skilled labour to facilitate growth.
- At present, there are almost 34,000 businesses within the sector. This is expected to increase to over 45,000 by 2024, equivalent to growth of 2.7% per annum.
- The forecasts suggest London's digital technology sector is set to enjoy further expansion over the decade ahead. Digital technology is estimated to expand by 46,000 net jobs by 2024. Growth will be aided by London's reputation as a global technology hub and the ability of companies based in the capital to tap into the insatiable demand for new technologies from growing emerging markets.



• GVA within digital technology is forecast to grow on average by 5.1% per year between 2014 and 2024. This equates to an additional £12bn of economic activity (measured in constant 2010 prices). Such growth will be driven by gains expected in computing programming & consultancy.



London GVA: Digital technology





# **Digital technology**

The definition of Digital Technology used within this forecasting project is set out below:

### Digital technology

#### SIC07 code SIC07 Title

- 26.11 Manufacture of electronic components
- 26.12 Manufacture of loaded electronic boards
- 26.2 Manufacture of computers and peripheral equipment
- 26.4 Manufacture of consumer electronics
- 26.51/1 Manufacture of electronic instruments and appliances for measuring, testing, and navigation, except industrial process control equipment
- 26.51/2 Manufacture of electronic industrial process control equipment
  - 26.8 Manufacture of magnetic and optical media
  - 33.13 Repair of electronic and optical equipment
  - 58.21 Publishing of computer games
  - 58.29 Other software publishing
- 62.01/1 Ready-made interactive leisure and entertainment software development
- 62.01/2 Business and domestic software development
  - 62.02 Computer consultancy activities
  - 62.03 Computer facilities management activities
  - 62.09 Other information technology and computed service activities
  - 63.11 Data processing, hosting and related activities
  - 63.12 Web portals
  - 95.11 Repair of computers and peripheral equipment



# Oxford Economics' forecast methodology

## **Model overview**

This section provides technical information on the structure of Oxford Economics' Local Authority District Forecasting Model and details of the data sources and definitions of variables within the model. The model should be viewed as one piece of evidence in making policy decisions and tracking economic and demographic change. It is not intended to be used on its own to set employment targets for local authority areas. Such targets will need to take account of local opportunities, constraints and community aspirations. As with all models it is subject to margins of error which increase as the level of geographical detail becomes smaller, and relies heavily upon published data.

Models, though predominantly quantitative, also require a degree of local knowledge and past experience, or more generally forecasting art, to make plausible long term projections. To this end the Oxford Economics' model has been developed by a team of senior staff who have a long history in model building and forecasting at both local and regional levels.

The Local Authority District Forecasting Model sits within the Oxford suite of forecasting models. This structure ensures that global and national factors (such as developments in the Eurozone and UK Government fiscal policy) have an appropriate impact on the forecasts at a local authority level. This empirical framework (or set of 'controls') is critical in ensuring that the forecasts are much more than just an extrapolation of historical trends. Rather, the trends in our global, national and sectoral forecasts have an impact on the local area forecasts. For example, in the current economic climate of government austerity, this means most, if not all local areas in the UK will face challenges in the short-term, irrespective of how they have performed over the past 15 years.



### Hierarchal structure of Oxford Economics' suite of models



The Local Authority District Forecasting Model produces base forecasts, which can be compared with other published forecasts (though care should be taken over data definition issues), and as a guide to aid commentary or analysis of a local economy. These forecasts can in one sense be considered to provide baseline 'policy off' projections with which the actual outturn under policy initiatives could be compared. The base projections are 'unconstrained' in the sense that they make no allowance for constraints on development which may be greater than in the past.

Our local area forecasts essentially depend on three factors:

- National/regional outlooks all the forecasting models we operate are fully consistent with the broader global and national forecasts which are updated on a monthly basis;
- Historical trends in an area (which implicitly factor in supply side factors impinging on demand), augmented where appropriate by local knowledge and understanding of patterns of economic development built up over decades of expertise, and
- Fundamental economic relationships which interlink the various elements of the outlook.

## **Model structure**

The main internal relationships between variables are summarised in Figure 1.2. Each variable is related to others within the models. Key variables are also related to variables in the other Oxford Economics models.



### Main Relationships between variables in the Local Authority District Forecasting Model