



cutting through complexity

Tech Monitor

A most up-to-date source
of UK tech sector data and
analysis each quarter

Compiled for KPMG by Markit
May 2015

Tech Monitor/UK

/ flip page

Overview

04

Tech growth

06

Employment trends

10

Economic context

12

Tech outlook

14

Special feature: UK Tech Employment

16

Methodology notes

18

UK tech job creation hits record high, but growth slows in run up to the general election



Our first Tech Monitor UK survey of the year delivers a positive verdict on the performance of the sector, as exemplified by a record burst of tech job creation and still buoyant capex plans. However, there is evidence that renewed risk aversion within domestic and external markets has held back near-term growth momentum.

UK tech companies report that new business volumes rose at the slowest rate since mid-2013, which they mainly linked to uncertainty and delays with clients' decision making ahead of the general election. Although a number of firms noted successful expansions into external markets, overall it was still a stuttering start to 2015 as clouds lingered over the euro area amid concerns of an impending Greek sovereign debt default. Further afield, the US economy was in recovery mode, but an increased likelihood of tighter monetary policy in the world's largest economy continued to cast a shadow over global markets.

Weaker underlying UK business investment patterns have ensued, while tech companies also noted reduced appetite for major spending among public sector clients in the opening months of 2015. However, the tech sector was by no means alone in experiencing softer business conditions, with overall UK GDP growth slowing sharply in the first quarter and industrial production broadly stagnant.

In fact, a closer look at the Tech Monitor UK survey suggests that tech firms have been much more able to look through the short-term volatility, with long-term expansion plans and positive capex feeding through to the fastest increase in UK tech sector staff hiring since the survey began in 2003.

Moreover, almost eight times as many tech sector companies (55%) anticipate a rise in business activity over the next 12 months as those that forecast a decline (7%). Tech sector hiring plans appear similarly positive, with 41% of the survey panel anticipating an increase over the year ahead and only 9% expecting to make job cuts.

With the UK tech sector still enjoying a strong recovery phase, a positive funding environment and a burgeoning global reach, it appears that firms have a degree of resilience to softening domestic corporate and public sector spending patterns.

Adding to the resilient UK tech sector picture, positivity persisted in terms of capex plans at the start of

2015, with around twice as many of the survey panel (29%) forecasting a rise as those expecting a fall (14%).

Finally, the special feature in our first Tech Monitor UK survey of 2015 takes a step back from the recent cyclical swings of the sector and attempts to put the post-recession recovery into context. We estimate that the UK tech sector has experienced triple the rate of job creation (+22%) seen across the UK economy as a whole (+7%) since its post-recession low in 2010.

Measuring the absolute number of people employed across the UK tech sector is clearly sensitive to how widely or narrowly these variables are defined, but we estimate (on a relatively narrow measure) that the figure is now at least one million jobs.

The scale and dynamism of the UK tech sector makes it worthy of policy support and focus, particularly when it comes to investing in STEM based education that is so vital to meeting the demands of tomorrow's tech businesses.

OVERVIEW

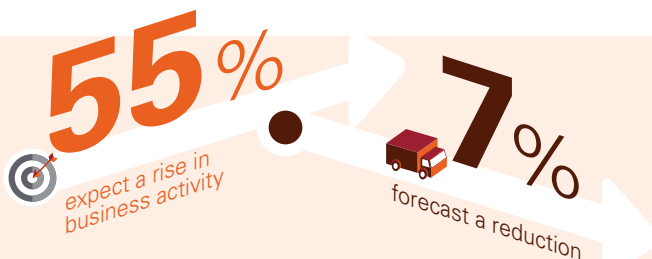
Key points from the Q1 2015 data:



Tech sector **growth weakened in Q1**, partly linked to delays with clients' decision making ahead of the general election



The latest rise in **new work received by tech sector firms** was the **slowest since mid-2013**



Almost eight times as many UK tech companies (55%) anticipate a rise in business activity over the next 12 months as those that forecast a fall (7%)

STAFF HIRING INCREASED
AT THE **SHARPEST PACE**
SINCE Q1 2003

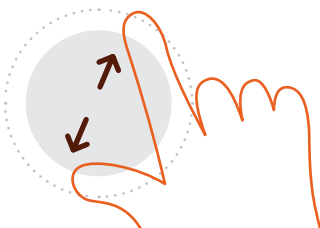


Tech sector **staff hiring increased in Q1 at the sharpest pace** since the survey began in 2003

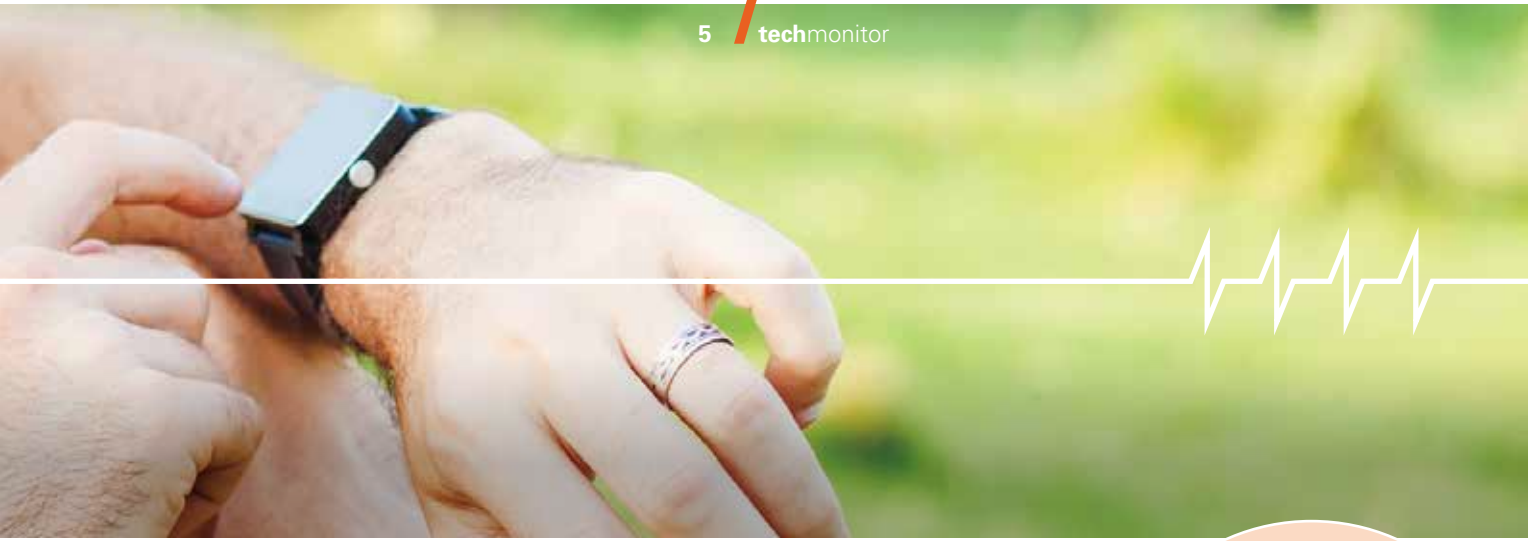


We estimate that the **UK tech sector directly accounts** for at least **one million jobs**

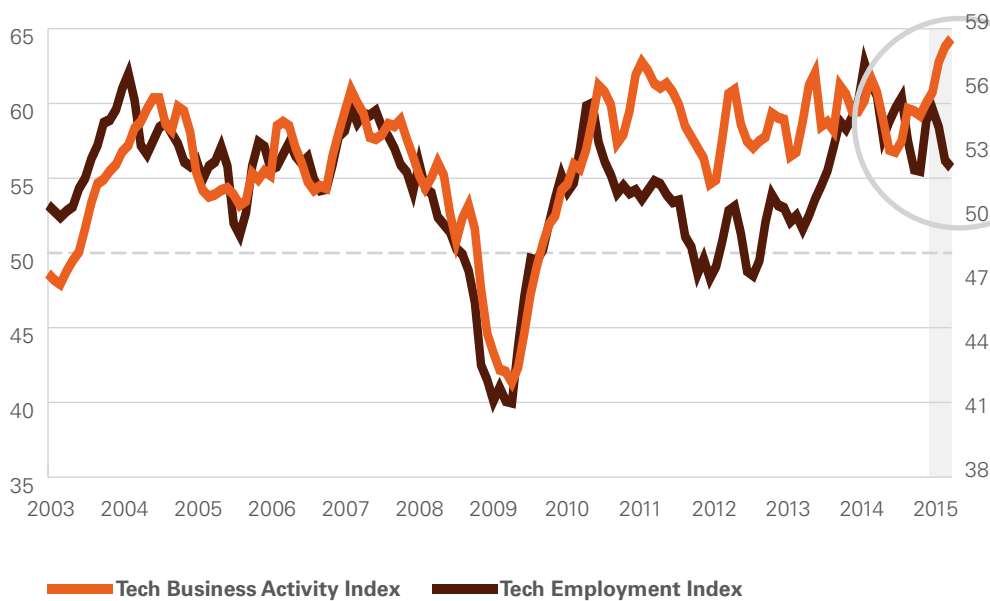
tech employment
has expanded by
almost **one-quarter**
since 2010



Tech sector **employment has expanded by almost one-quarter since 2010**, which is around three times the pace of the overall UK jobs market



Tech PMI Index, 50 = no change



Commenting on the latest Tech Monitor UK report, Tudor Aw, Technology Sector Head at KPMG said:

// This quarter's Tech Monitor results continue the theme of a robust and thriving UK tech sector, that outstrips the wider UK economy. Importantly, the sustained rise in tech business activity that we have seen in recent years has translated to reinvestment in capital expenditure and job hiring, again at a rate that has been much higher than other UK sectors. These results confirm the importance of the tech sector in helping drive growth and employment in the UK. Indeed, this issue's special feature on Tech Sector employment shows the significance of the sector in the 21st century where technology is all pervasive. Based on Markit's calculations, the UK tech sector has grown significantly, delivering three times the rate of job creation as the wider UK economy and now accounts for over 1 million jobs. It is an important message to political parties of all persuasion in the upcoming general election that the sector is worthy of support and focus, particularly when it comes to promoting the sector and investing in STEM based education that is so vital to meeting the demands of tomorrow's tech businesses. //

Tech growth: Tech firms spread wings to new markets as domestic demand slows

TECH GROWTH

Tech Monitor UK uses a specially selected panel of tech sector executives within the Markit UK *Purchasing Managers' Index® (PMI®)* surveys, to provide an up-to-date assessment of the sector's economic performance. Growth and jobs trends are benchmarked against Global PMI® series and other key economic indicators.

Main findings in Q1 2015*

The latest KPMG/Markit *Tech Monitor UK* survey highlights sustained rises in business activity and incoming new work across the tech sector during the opening quarter of 2015. That said, it was a something of a stuttering start to the year, as overall growth momentum eased since the previous quarter and remained weaker than the peaks seen earlier in 2014.

Reports from survey respondents suggested that delays to spending and investment decisions ahead of the general election, especially among public sector clients, had weighted on growth at the start of the year. Tech companies nonetheless cited improved demand from external markets, particularly the U.S.

The headline KPMG/Markit *Tech Monitor UK* Business Activity Index remained above the crucial 50.0 no-change value in Q1 2015, thereby marking two-and-a-half years of sustained growth across the UK tech sector.

However, at 55.7, the index dropped from 59.6 in Q4 to its second-lowest since mid-2013. The latest figure was

also well below the survey-record high seen in Q1 2014 (60.5).

Tech companies that reported an upturn in business activity generally pointed to improving underlying economic conditions, successful new product launches and increased marketing expenditure. More specifically, a number of panel members reported greater demand from within the biotech and retail industries. Alongside this, firms noted strong demand for cyber security products and increased sales related to cloud based solutions.

Tech sector demand patterns

Tech firms commented on a number of sub-categories enjoying strong sales growth in the first quarter of 2015, but the latest increase in overall new work was the slowest for almost two years. This was highlighted by a fall in the New Orders Index to 56.6, from 60.1 in Q4 2014. The latest reading was the lowest since mid-2013, although still comfortably above the long-run series average (53.8).

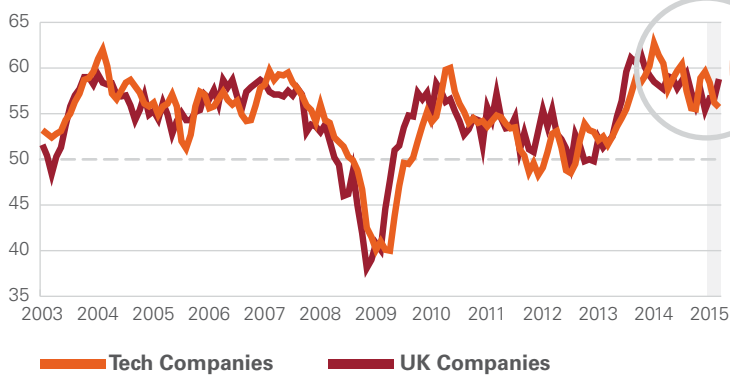
Weaker sales growth momentum was largely attributed to softer new business gains from domestic markets. UK tech companies noted

that some clients, especially those either in the public sector or with substantial exposure to government contracts, had delayed major spending decisions until after the general election. Helping offset this, survey respondents noted that recent expansions into overseas markets (especially the US and Western Europe) had supported overall new business volumes at the start of 2015. Moreover, increased consumer confidence was cited as a factor boosting new sales wins during the latest survey period.

A slowdown in new business growth across the tech sector contributed to a lack of new work to replace completed contracts for some survey respondents during the first quarter of 2015. As a result, the index measuring work-in-hand (but not yet completed) dropped to 46.0, from 51.0 at the end of 2014. The latest reading pointed to the fastest decline in work outstanding for just over three years.

Although the latest survey highlighted a decrease in the pipeline of work-in-hand at UK tech sector companies, this in part reflected strong staff recruitment trends during the first quarter of 2015.

Tech PMI Business Activity Index, 50 = no change



Source: Markit/KPMG.

*Index numbers vary between 0 and 100, with levels of 50 signalling no-change from the previous month. Readings above 50 signal an increase since the previous month, whilst postings below 50 indicate a decrease. The greater the divergence from 50, the greater the rate of change signalled by the reading.

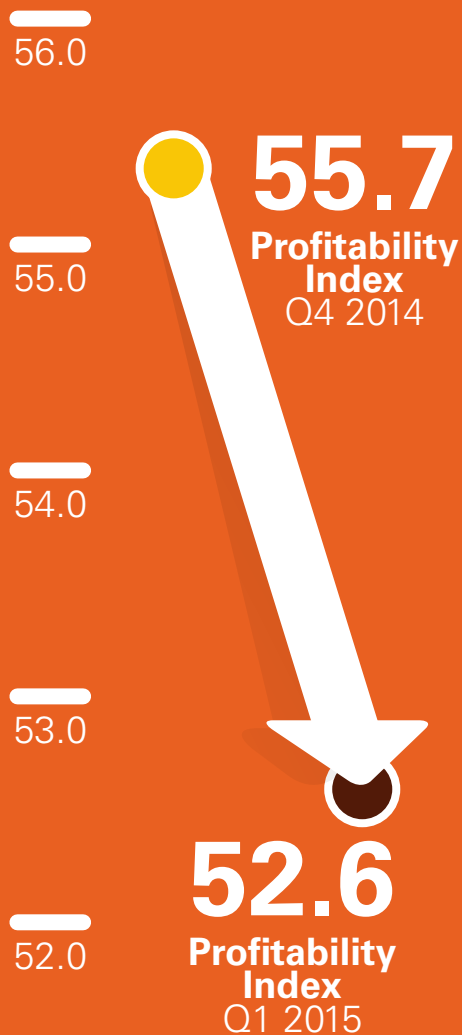
Methodology notes can be found on page 18.

Tech PMI New Orders Index, 50 = no change



Tech growth: Profitability rises again, despite reports of stronger salary pressures

TECH GROWTH



A number of firms commented on additional job hiring amid efforts to boost capacity and clear unfinished business at their units.

Cost pressures pick up from recent lows

UK tech companies indicated that overall cost inflation remained subdued in comparison to the long-run survey average. Anecdotal evidence pointed to weak underlying inflation trends, helped by reduced fuel and transportation prices. That said, overall input cost pressures picked up slightly from the five-year lows seen in 2014. Companies that reported a rise in their cost burdens mainly cited tighter labour market conditions and a corresponding rise in salary payments at their business units.

Meanwhile, survey data for the first quarter of 2015 pointed to sustained rises in prices charged by UK tech companies, although the rate of inflation remained only marginal.

Slower profitability growth at start of 2015

Profitability growth was maintained across the UK tech sector at the start of the year. At 52.6, the index eased from 55.7 in Q4, but still signalled a faster improvement in profitability than the historical survey average. A number of survey respondents attributed the latest upturn to successful investment spending, higher sales and more efficient business processes.

Source: Markit/KPMG.

*Index numbers vary between 0 and 100, with levels of 50 signalling no-change from the previous month. Readings above 50 signal an increase since the previous month, whilst postings below 50 indicate a decrease. The greater the divergence from 50, the greater the rate of change signalled by the reading.

Methodology notes can be found on page 18.

50.0 — 50 signalling no-change

Tech PMI Backlogs of Work Index, 50 = no change**Tech PMI Input Price Index, 50 = no change****Tech PMI Profitability Index, 50 = no change**

**Tudor Aw,
Technology Sector
Head at KPMG
commented:**

"While Tech business activity continued to enjoy sustained growth in the quarter, there has been a slowdown in momentum and this may be attributable to the uncertainties associated with the general election. Whether this slowdown is a one-off or due to something more systemic will need to be carefully monitored in the coming months."

Employment trends: Tech sector jobs growth hits survey-record high

EMPLOYMENT TRENDS

In this section of Tech Monitor UK we compare tech sector employment trends against equivalent indices from Markit's UK *Purchasing Managers' Index® (PMI®)* surveys, providing a timely barometer of tech hiring patterns in the context of overall UK private sector labour market developments

The main findings for Q1 2015* are:

Tech sector companies in the UK increased their staff numbers at a record pace during the opening quarter of 2015, according to the latest KPMG/Markit *Tech Monitor UK* survey data. The rate of job creation was also stronger than that seen across the UK as a whole, despite the UK-wide trend also improving over the first quarter.

This was highlighted by the index measuring tech sector employment posting at 57.8 at the end of Q1, up from 55.3 at the end of 2014, and its highest reading since the survey began in 2003.

According to anecdotal evidence, tech companies took on extra staff as part of planned company

expansions that were underpinned by improving business conditions.

A number of firms also mentioned that new product launches and forecasts of stronger client demand had led them to increase their staffing levels over the first quarter of the year.

As a result, the latest set of KPMG/Markit *Tech Monitor UK* data suggests that the tech sector remains a crucial driver of job creation across the UK private sector economy as a whole. Furthermore, our survey data shows that employment growth at technology companies has generally outperformed that seen across the UK private sector economy as a whole since the onset of the financial crisis in 2007/08.

The sharp expansion of tech workforce numbers supported a solid reduction in the level of work-in-hand at the start of 2015. This contrasted with a slight increase in outstanding business at the end of 2014, and suggests the latest rise in staffing levels has helped to ease capacity pressures at tech companies. Moreover, some firms noted that long-term optimism towards the business outlook had allowed them to look through the uncertainty arising from the forthcoming general election.

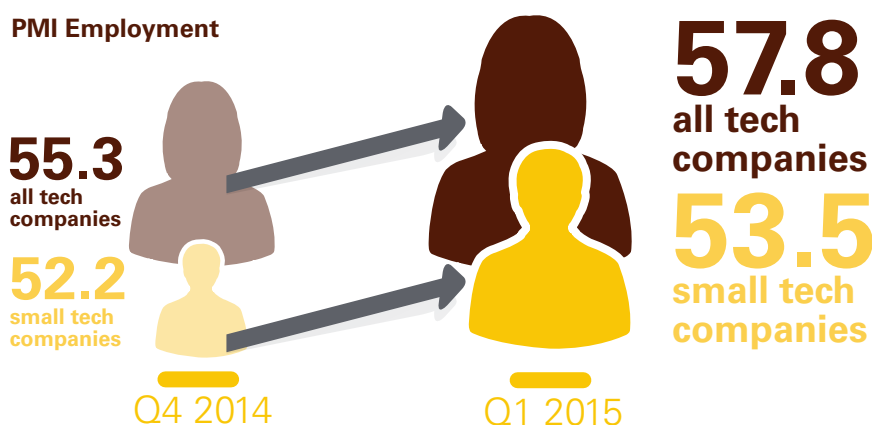
Tech sector job hiring trends; company size breakdown

The latest *Tech Monitor UK* data indicated that the rate of job creation at small tech companies (those that employ fewer than 50 people) quickened over the first quarter of 2015, but remained slower than the average for all tech firms.

The index measuring employment at small tech companies registered at 53.5 at the end of Q1, up from 52.2 in Q4, and above the long-run trend (50.8).

Employment growth at smaller tech firms was generally linked by survey respondents to rising workloads, successful innovation and company growth strategies.

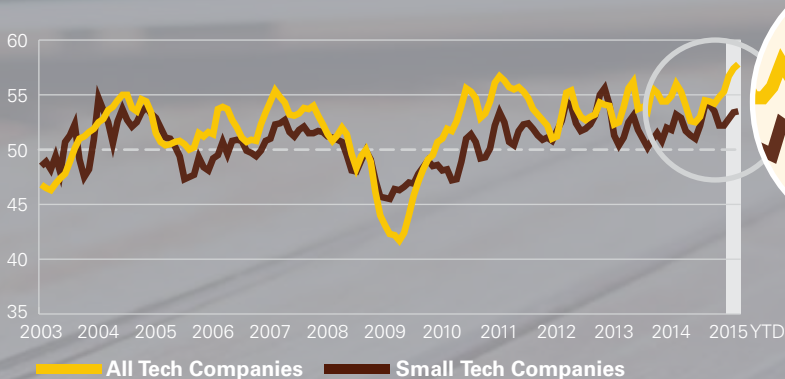
PMI Employment



PMI Employment Index, 50 = no change



PMI Employment Index, 50 = no change



**Tudor Aw,
Technology Sector
Head at KPMG
commented:**

"Offsetting the concern that momentum in Tech business activity may be slowing is the sharp increase in job hiring. With companies increasing their staff numbers at record pace and at the highest level since 2003, there is clearly optimism over the medium to long term outlook for the UK Tech Sector."

Source: Markit/KPMG.

*Index numbers vary between 0 and 100, with levels of 50 signalling no-change from the previous month. Readings above 50 signal an increase since the previous month, whilst postings below 50 indicate a decrease. The greater the divergence from 50, the greater the rate of change signalled by the reading.

Methodology notes can be found on page 18.

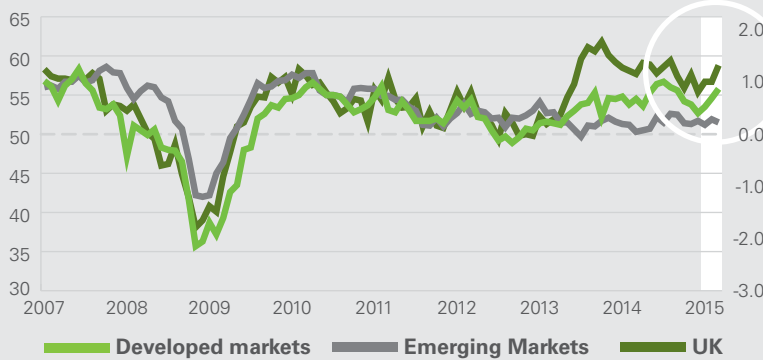
Economic context: Stronger UK economic growth forecast in 2015

ECONOMIC CONTEXT

This section examines recent economic developments and how they relate to UK tech sector business conditions.

Developed and emerging markets

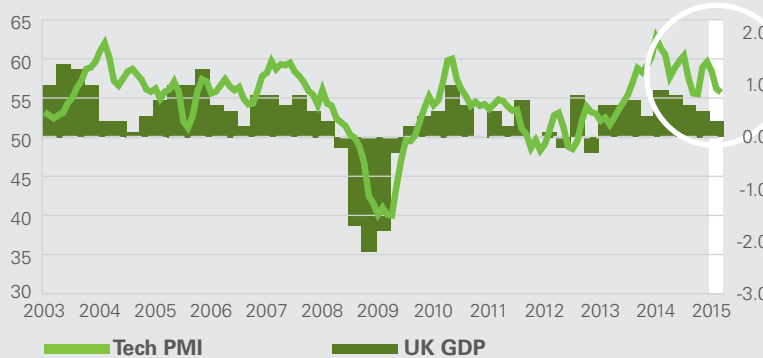
PMI Output Index (manufacturing and services), 50 = no change



UK tech business activity mapped against UK GDP

Tech PMI, 50 = no change

UK GDP, qoq % change



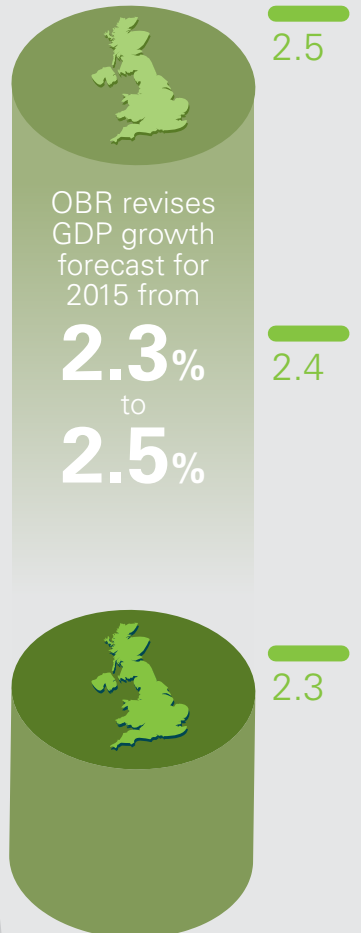
UK tech business activity mapped against the NASDAQ

Tech PMI, 50 = no change

NASDAQ yoy % change



The UK economy is set for another strong year



Sources:

PMI® data sourced from Markit, CIPS and HSBC.

UK GDP data sourced from the Office for National Statistics. At the time of writing, figures were available up to Q1 2015.

Stock market data sourced from Reuters EcoWin.

The main findings for Q1 2015 are:

The UK economy is set for another strong year of growth in 2015, with the IMF forecasting a 2.7% expansion of GDP this year, up from 2.6% in 2014. Growth forecasts published by the OBR are similarly strong, with the organisation having upwardly revised its GDP growth forecast for 2015 from 2.3% to 2.5%, with business investment expected to be a key contributor to growth. These projections place the UK as the second-fastest growing G7 nation this year, behind only the US.

Domestic economic conditions are improving in the UK as consumers and businesses alike continue to benefit from the recent fall in global oil prices, record-low interest rates, and the lowest level of unemployment for seven years.

Equity markets reach new peaks

The NASDAQ composite index, the benchmark for US technology stocks, rose by 2.4% on a quarterly basis in Q1, and was up nearly 17% on an annual basis. The solid increase in stock valuations suggests a further improvement in investor sentiment. This was highlighted when the index reached and even exceeded its dotcom peak of 5,000 during the opening quarter of this year and, despite edging down since, it remains close to this benchmark.

Furthermore, the FTSE 100 broke above 7,000 for the first time in its history during March.

Developed nations lead global growth

The latest JPMorgan/Markit Global PMI™ data indicated that growth momentum strengthened across the global economy in the first quarter of 2015. This was highlighted by the Composite Output Index posting at a six-month high of 54.8 at the end of Q1. The UK and the US remained the key drivers of global growth, while emerging markets registered relatively muted rates of expansion. This was in part due to slowing growth in China as it continues to rebalance its economy, while business activity in Russia continued to be dampened by ongoing sanctions.

In contrast, the implementation of QE measures in the eurozone at the start of 2015 is likely to help to improve business and consumer confidence and stimulate growth in the region, while the UK is also expected to benefit from improved demand in the currency union.

The UK economic recovery remains on a steady growth footing, driven by a solid performance of its service sector, with improving demand across the developed world expected to boost activity and investment in 2015.

Tudor Aw, Technology Sector Head at KPMG commented:

“The resilience of the UK Tech sector has been quite notable over the last 12 years where it has outstripped the wider UK economy. Importantly, it has delivered ‘lower lows and higher highs’ during periods of turbulence, along with faster recovery periods. Allied with its job creation record, it has presented a compelling case for focus and support from political parties. – something I would like to hear more of in their respective election manifestos.”

Tech outlook: Activity expectations improve but hiring and capex plans ease

TECH OUTLOOK

This section contains analysis of our survey data on UK tech firms' business expectations for 2015. Figures for future business activity are drawn from monthly PMI® surveys; those on employment and capex are based on Markit's tri-annual Global Business Outlook survey.

The main findings for Q1 2015* are:

UK tech firms reported a brighter outlook regarding business activity in Q1 2015. The net balance of companies anticipating activity growth over the coming 12 months reached +48.4% in Q1. The latest figure is up from +45.6% in the final quarter of 2014, although is still the second-lowest reading in the last two years.

Tech firms' confidence compares favourably with that seen across all UK industry sectors. The respective UK net balance in the first quarter is +45.9%, up from +43.2% in Q4. Tech companies have consistently reported stronger optimism than the UK average since data were first available in 2003, although the gap has narrowed since the turn of the year.

Improving UK economic conditions, new marketing activities, expansion into new overseas markets, business investments, organic growth strategies and promising pipelines of work were among the factors mentioned by panellists as underpinning their positive outlook for activity. However, some respondents indicated softer

conditions in certain export markets, notably southern Europe and Russia. Closer to home, fears of government cutbacks were also mentioned.

Softer expectations for employment and capex

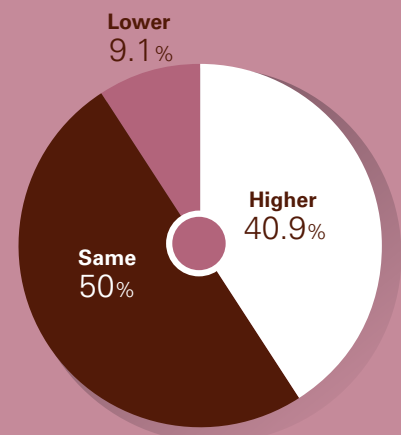
Although tech companies continue to anticipate rising staffing levels in the year ahead, the expected pace of jobs growth is the slowest since mid-2013. The latest Markit Global Business Outlook Survey, conducted in February 2015, indicated that +40.9% of tech companies planned to raise payroll numbers, against 9.1% that forecast a decline. The resulting net balance was +31.8%, down from +33.9% in the previous survey conducted in October 2014. Employment expectations in the tech sector are broadly in line with the average for all UK industry sectors (net balance +31.5%).

Predictions for capital expenditure growth in the tech sector have also been scaled back. At +14.3%, February's net balance is down from +22.4% last autumn and the lowest since October 2013. The latest figure is also slightly below the UK all-industry average of +15.8%.

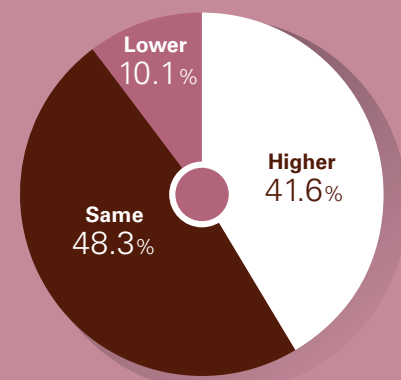
Markit Business Outlook Survey February 2015

"Do you expect employment at your business to be higher, the same or lower in 12 months' time than the current levels?"

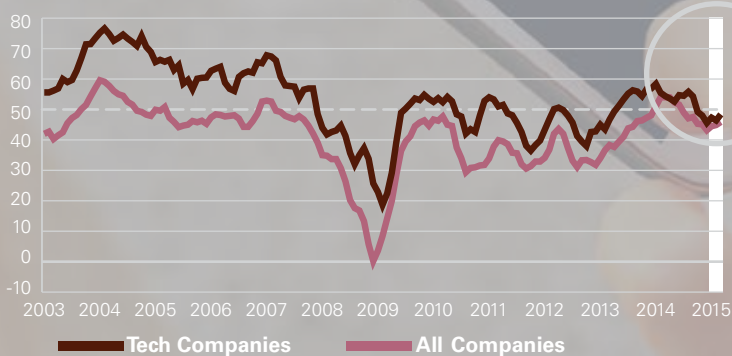
Tech companies employment expectations: net balance +31.8%



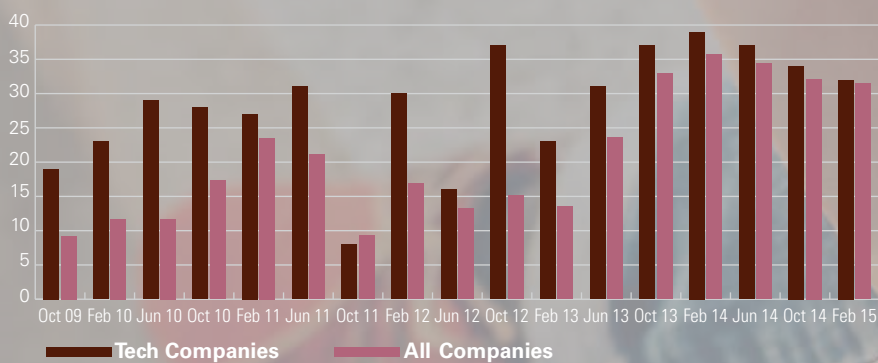
All companies employment expectations: net balance +31.5%



Business activity expectations (3 month avg), net balance %



Expectations for employment, net balance %



Tudor Aw, Technology Sector Head at KPMG commented:

"Encouragingly, our data suggests that not only have Tech Companies recovered strongly since the Financial crisis but they have also reinvested these profits into job hires and capital expenditure. Not surprisingly, the pace of this reinvestment is slowing given election uncertainties but is still in positive territory."

Source: Markit/KPMG.

* Methodology notes can be found on page 18.

Special feature: Tech sector employment up almost a quarter since 2010

SPECIAL FEATURE

In this section we look at the size of the UK tech sector in terms of number of jobs, and how this has changed in recent years. We calculate estimates based on our definition of 'technology sector' industry groups (see section 6), using data from the Office for National Statistics.

Key findings:

- UK tech sector has experienced triple the rate of job creation seen across the UK economy as a whole since the post-recession low in 2010
- We estimate that the UK tech sector directly accounts for at least one million jobs*
- Tech employment is estimated to have risen by around 35,000 over the first quarter of 2015

Sustained strong job creation in the UK tech sector during the past five years has driven up the overall number of tech jobs by some 22% from its post-recession low. Our calculations also suggest that the tech sector directly accounted for at least one million jobs* by the end of 2014, compared with 827,000 at the beginning of 2010.

This steep rebound in tech jobs follows a period of staffing cutbacks enacted in the wake of the global financial crisis. Moreover, the recovery in tech employment since early 2010 (+22%) has been around three times faster than the upturn seen across the UK economy as a whole (+7%).

The overall estimate for current tech jobs incorporates approximately 865,000 people directly employed by tech sector firms and a further 140,000 self-employed workers in tech industries.

Compared with the low point of 827,000 seen in the first quarter of 2010, the tech sector has added an additional 178,000 jobs in total. With the UK overall seeing a 2.18 million rise in employment over this period, the tech sector appears to have directly accounted for almost one-in-twelve new jobs during the recovery, according to our estimates.

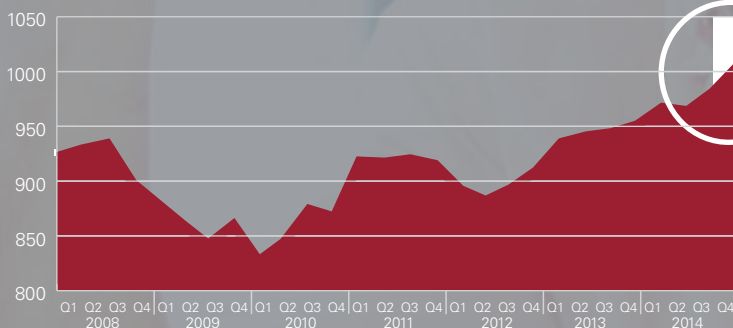
Employment across the wider economy has risen by 7% since the start of 2010, meaning that the tech sector has recorded a rate of job creation far in excess of the UK-wide trend. Most recently, the end of 2014 employment figure for the tech sector represents a rise of 5.6% on the previous year, considerably stronger than the 2.5% uplift in employment across the UK as a whole.

Mapping our estimate of annual changes in the number of tech jobs against the more timely Tech Monitor UK employment survey data suggests that growth accelerated through the first quarter of 2015.

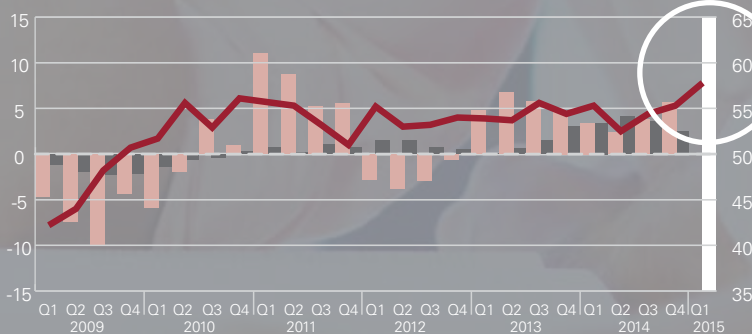
A simple linear comparison suggests that the annual rate of expansion in tech employment looks likely to have strengthened during Q1 2015, perhaps to an annual pace in the region of 7 to 8%. This would equate to a rise in the number of tech industry jobs of approximately 35,000 during the first three months of the year.

UK tech sector employment, 1,000s

(Markit estimate, based on ONS data)



Annual % change in employment



- Change in tech employment
- Change in all UK employment
- PMI

Sources: Markit/KPMG estimates, calculated from Office for National Statistics data.

*Our calculations of tech sector employment are based on employee and self-employed jobs by industry data published by the ONS, including only our narrowly-defined tech industry groups (Methodology notes can be found on page 18.).

Tudor Aw, Technology Sector Head at KPMG commented:

"The fact that the UK tech sector has triple the rate of job creation compared to the rest of the UK as a whole should be no surprise to anyone given the way technology underpins most businesses and is immersed in our daily lives. It does however, emphasise the importance of ensuring STEM (Science, Technology, Engineering and Mathematics) subjects are promoted and supported within our education system to meet future demand."

Tech Monitor UK: Methodology notes

METHODOLOGY NOTES

UK Tech Sector Purchasing Managers' Index® (PMI®) survey data

UK tech sector PMI data is derived from a representative sub-category of approximately 150 tech companies within Markit's regular PMI® surveys of UK manufacturers and service providers. Tech is defined in this report as technology software, technology services and manufacturing of technology equipment. All figures are seasonally adjusted and smoothed using a three-month moving average, to better highlight underlying trends in the data.

UK Tech Sector Business Outlook Survey data

Business activity expectations data are drawn from the monthly PMI® surveys question on companies' expectations for their activity/output over the next 12 months. Prior to July 2012, only service sector companies were asked this question.

Employment expectations data are based on responses from UK services and manufacturing firms participating in Markit's tri-annual Global Business Outlook survey, which is based on the same panel of companies as the PMI® surveys.

'Technology Sector' industry groups:

- Software publishing (SIC 582).
- Computer programming, consultancy and related activities (SIC 620).
- Data processing, hosting and related activities; web portals (SIC 631).
- Manufacture of computer, electronic and optical products (SIC 26).
- Manufacture of electrical equipment (SIC 27)



For more methodology details,
see the October 2013
Tech Monitor UK report.



➔ [Click here to download.](#)



Tudor Aw

Partner, Technology Sector Head at KPMG

Tel: +44 (0) 20 7694 1265

tudor.aw@kpmg.co.uk

 contact Tudor on [LinkedIn](#)

The intellectual property rights to the UK Tech Sector Purchasing Managers' Index® (PMI®) data provided herein are owned by or licensed to Markit Economics Limited. Any unauthorised use, including but not limited to copying, distributing, transmitting or otherwise of any data appearing is not permitted without Markit's prior consent. Markit shall not have any liability, duty or obligation for or relating to the content or information ("data") contained herein, any errors, inaccuracies, omissions or delays in the data, or for any actions taken in reliance thereon. In no event shall Markit be liable for any special, incidental, or consequential damages, arising out of the use of the data. Purchasing Managers' Index® and PMI® are either registered trademarks of Markit Economics Limited or licensed to Markit Economics Limited. Markit is a registered trademark of Markit Group Limited.

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2015 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

The KPMG name, logo and "cutting through complexity" are registered trademarks or trademarks of KPMG International. Oliver for KPMG | OM034106A | April 2015