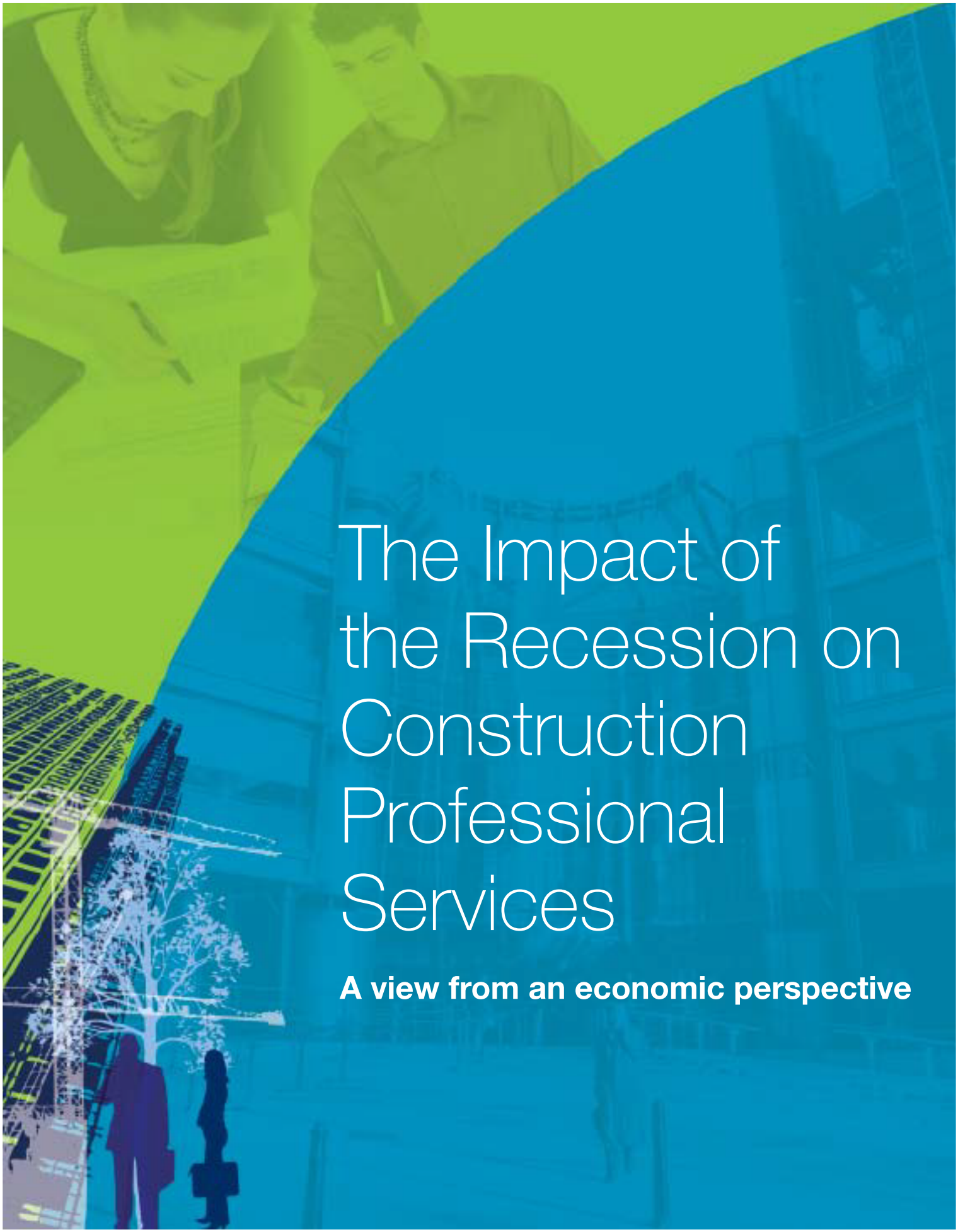


The Impact of the Recession on Construction Professional Services

A view from an economic perspective

constructionskills

Construction Industry Council

Contents

Executive summary

The economic background

Gross Domestic Product (GDP) is estimated to have declined by 4.7% last year, making 2009 the worst year for the economy since the Second World War. Expansionary fiscal policies have limited the damage but, in conjunction with bank bail-outs, have involved huge amounts of government funds. Reduced revenues and the cost of automatic stabilisers have added to pressure on public finances. Deficit-reduction measures will constrain growth in the medium term.

Consumer spending, down 4% since the recession began, started to stabilise in the second half of 2009. Retail sales volumes have remained resilient, boosted by clothing and non-store retailing, and household goods sales have strengthened recently in line with a slightly stronger housing market. However, higher savings and unemployment will continue to limit spending growth.

The recession has taken its toll on the labour market. The employment rate fell to 72.4% in the period September to November 2009, the lowest since winter 1996-97 and down 0.1% on the previous quarter. The International Labour Organisation (ILO) rate is expected to peak at 8.7% this year, with 2.8m out of work, returning jobless numbers to the level last seen in the early 1990s. Long-term jobs growth is expected to be subdued. Demand will also be less robust than in the past 10 years as the potential for economic growth is significantly less than in the recent past.

We expect interest rates to remain at their current level until around mid-2010. The quantitative easing programme is unlikely to be extended beyond the current £200bn.

Figure 1: Key UK Macroeconomic Indicators

			annual percentage change		
	Actual	Estimate	Forecast		
	2008	2009	2010	2011	2012
GDP (at constant 2005 market prices)	0.6	-4.7	1.1	2.0	1.8
Household Consumption	0.9	-3.0	0.5	1.8	2.1
Government Consumption	2.5	1.9	1.2	-1.5	-2.0
Gross Fixed Investment	-3.3	-14.1	-2.0	1.5	3.3
Bank Rate (average for year)	4.7	0.6	0.9	2.8	4.1
CPI (annual)	3.6	2.1	2.0	2.1	2.4

Note: CPI = Consumer Price Inflation (it does not include mortgage repayments).
Source: Experian.

Construction in the current economic environment

Total construction output fared poorly in 2009, with the fall in new work output steeper than that of repair and maintenance. This is not surprising considering that new orders fell by one-fifth in the 12 months to September 2009, when compared with a year earlier. Following a double-digit decline in total output in 2009, a smaller contraction is projected for 2010. The industry should return to growth in both 2011 and 2012, albeit the rate of increase will be moderate. On our current forecasts, construction output will not return to 2007 levels until 2018 in real terms.

Our view of the short term-prospects for the industry seems to be backed up by survey-generated data from professional institutions. The Royal Institute of British Architects' (RIBA) Future Trends survey for November 2009 shows a positive workload balance, and architects tend to be a leading indicator of work in the pipeline. However, they were still slightly pessimistic about employment prospects over the short term. Association of Consultancy and Engineering (ACE) members are moderately optimistic about employment prospects in 2010, but it is not until 2011 that the majority of firms will be looking to take new staff on.

The private housing sector has seen a severe decline during the recession. House price uncertainties and stricter mortgage lending has led to a dampening in demand as buyers opt to take the 'wait and see' approach. This has had a knock-on effect on public housing due to its dependency on the private side to deliver units through Section 106 agreements. The situation has been further exacerbated by Registered Social Landlords (RSL) finding it difficult to access funding through conventional means thus further dampening building activity. Output for the housing sector as a whole is expected to improve with a 7% increase in 2010, following two consecutive years of significant declines. The rate of growth is expected to quicken in 2011 to give a 10% year-on-year rise as economic conditions continue to pickup, before the

pace of increase falls back slightly to give an 8% rise in 2012. The slowdown between the two years is expected to come as a result of cuts in government spending and the ending of the current (2008-11) Affordable Housing Programme (AHP).

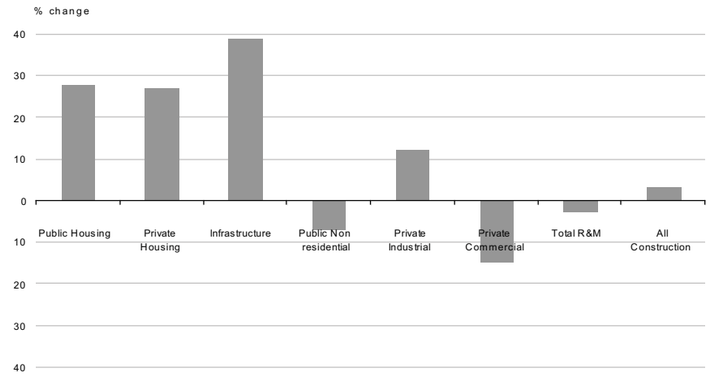
Unsurprisingly, the industrial and commercial sectors have performed poorly over the past year. Declining consumer spending (as a result of rising unemployment and falling house prices) have partly been responsible for falling manufacturing output, while ongoing lending constraints and the lacklustre performance of the export markets have not helped matters. This has led to manufacturers scaling back on investment in new facilities. Output for industrial construction is expected to stagnate this year, before growing at a moderate pace is each of the following two years as manufacturing sees an upturn. The downturn has also impacted new commercial construction. Private investors have mothballed, or reduced the scale of large retail, offices and entertainment projects, not a surprising result in the face of falling capital values and lower rental yields. Output for the sector is projected to continue contracting, albeit at a slowing rate, in 2010 and 2011, before starting to recover in 2012.

The one area of growth across the whole period to 2012 is likely to be infrastructure, driven by transport projects such as Thameslink, M25 widening, expansion of the Manchester Metrolink, and M74 completion in Scotland, which are all on site. Infrastructure output is expected to grow robustly this year as work on the mentioned projects, as well as on Crossrail scheme, begins to accelerate. However, the increases in output should weaken thereafter on a year-on-year basis to 2012 as fewer projects come online to replace those that have been completed.

The public non-residential sector also grew robustly in 2009 in output terms, with the Building Schools for the Future (BSF) programme and construction of the Olympics scheme being the main drivers. There is a very sharp public/private divide in the non-residential sectors, with government largely sticking to its promise to keep public expenditure up in the short term to mitigate the effects of the recession. Thus, output should continue growing this year, albeit at a slower rate than seen in 2008 and 2009. However contractions are expected in 2011 and 2012 as spending on public investment programmes tails off.

For the repair and maintenance (R&M) market as a whole, output is expected to continue shrinking in each of the years to 2011 as households and corporates delay major R&M works, with the exception of that which is essential. However output should see small growth in 2012 as households begin to feel more secure about their personal circumstances, as corporates start to see rising asset values and improving profit margins, and as activity reaches a peak in the water and sewerage sector under the 2010-2015 Asset Management Programme.

Figure 2: Growth in Construction Output by Sector (2010-2012)



The implications for construction professionals

There is little doubt that the recession already has had a very significant impact on construction professionals' employment and is likely to continue to do so for some time to come. The claimant count for professionals with construction-specific skills reached its lowest point in October 2007 and since then, it has risen by well over 400% to November 2009.

The increase in claimant count, in percentage terms, was the greatest for architects, quantity surveyors and managers in construction and the lowest for electrical engineers, mechanical engineers and town planners. However, the claimant count for each occupation as a percentage of the total number working in that profession showed that mechanical engineers had seen the highest level of unemployment to November 2009, followed by architects, quantity surveyors and civil engineers.

It should be remembered that not all construction professionals work in construction. According to the labour force survey (LFS), of the professional occupations chosen within the context of this report, only 64% work of the total workforce was employed within the ConstructionSkills footprint of SIC 45 and 74.2 in 2008. The manufacturing, real estate and public administration sectors in particular employ significant numbers of construction professionals, although their prospects will tend to be linked, at least indirectly, with that of the construction industry.

The falls in employment picked up in official data are backed up by institutes' surveys. The RIBA Future Trends Survey indicated that the staffing levels in April 2009 had dropped to 83% of their level a year ago. Meanwhile, the Association for Consultancy and Engineering's (ACE) 2009 State of Business report revealed that 68.2% of member firms saw their staffing levels decrease.

Looking forward and trying to assess the implications for construction professionals of trends in the various construction sectors, we have used the results of the 2005/06 Construction Professional Services (CPS) survey, and construction output forecasts, to project trends using the prevalence of a firm in a specific sector and the outlook for the different sectors. The level of 'engagement' of a firm by activity type in the different construction sectors can be seen below.

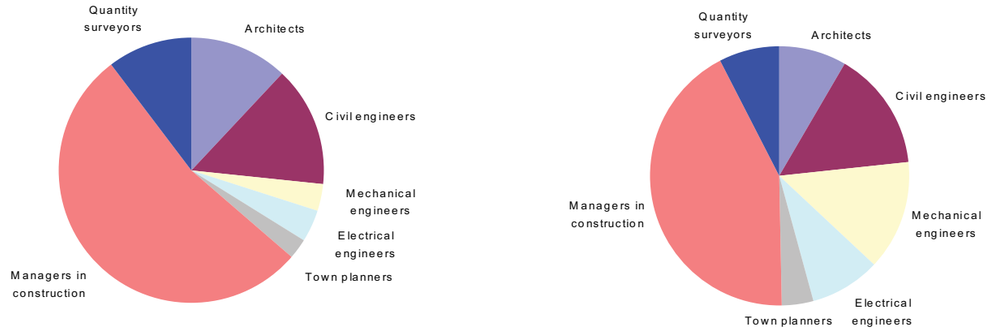
Figure 3: Professional 'engagement' by major sector

		Architecture	Building services engineering	Civil and Structural Engineering	Management Consultancy (not project related)	Multi-disciplinary	Planning	Project Management	Quantity Surveying	Surveying	Other
RESIDENTIAL	Private	50	23	35	15	36	64	51	31	48	41
	Public	22	16	16	33	20	30	10	27	24	25
BUILDING	Private	38	56	43	40	41	24	72	46	41	41
	Public	33	44	22	50	26	33	53	34	26	39
INFRASTRUCTURE	Private	14	31	28	n/a	16	26	40	13	32	26
	Public	23	8	38	n/a	31	20	42	22	28	32

Note: the higher the score, the higher the engagement
Source: Construction Professional Services Size and Structure Survey, 2005/06, CIC.

Architecture firms can be seen to be highly active in the private residential sector, thus showing the profession's dependency on the sector in terms of fee income. However, it must be kept in mind that during the time of the 2005/06 CPS survey, the private residential sector was growing strongly and that professionals can move between sectors if necessary. However, architects with a housing specialism may find it difficult to break into other markets where practices with relevant specialisms are likely to be present and thus it would not be unreasonable to suggest that in a housing downturn practices with a housing specialism are likely to suffer. But the good news is that the worst of the recession in the housing market is now over and some modest return to growth is expected this year, not least driven by the funding provided by the Kickstart programme to unlock currently mothballed mixed-tenure sites. The bad news is that over the longer term we may start to see a significant shift to off-site methods of construction, particularly if government housing targets are to be met and this could lead to a high level of standardisation in design.

Figure 4: Percentage share of occupations within the ConstructionSkills Footprint (left) and the economy as a whole (right) in 2008



In the case of building engineering firms, the likelihood is that the spread of their activity across many construction sectors, as well as their diversification across other sectors of the economy, will help them to better weather the effects of the recession. The mechanical engineers occupation is an example of this (as illustrated in figure 4), where it accounts for a much larger proportion of the total professional workforce in context of the economy as a whole. Broadly the same is true for multi-disciplinary firms in that they have the ability to turn their hand to a multitude of tasks across sectors. This category of firm can be seen to have a high level of engagement in the private building and public infrastructure markets. The former market can be said to be made up of the private industrial and commercial sectors, both of which have experienced significant declines in output over the past year, thus limiting the firms' fee incomes earned in that sector. In contrast, the infrastructure sector is estimated to have grown strongly due to a number of high-value transport projects coming online. Thus it would be expected that multi-disciplinary firms would gear their workforce towards the infrastructure sector in order to compensate for falls in activity elsewhere. However, it must be kept in mind that this is unlikely to be easy on the basis of increased competition of from other firms looking to apply a similar strategy.

Project management and quantity surveying firms were also seen to have a high level of engagement in the private building sector. However, project managers and quantity surveyors are likely to be exposed to a lesser extent due to a spread of activity across the different sectors. It must also be remembered that unlike architects who are most active during the early phases of the project lifecycle, these two professions are involved over the lifetime of a project.

Figure 5: Professionals within the whole economy:

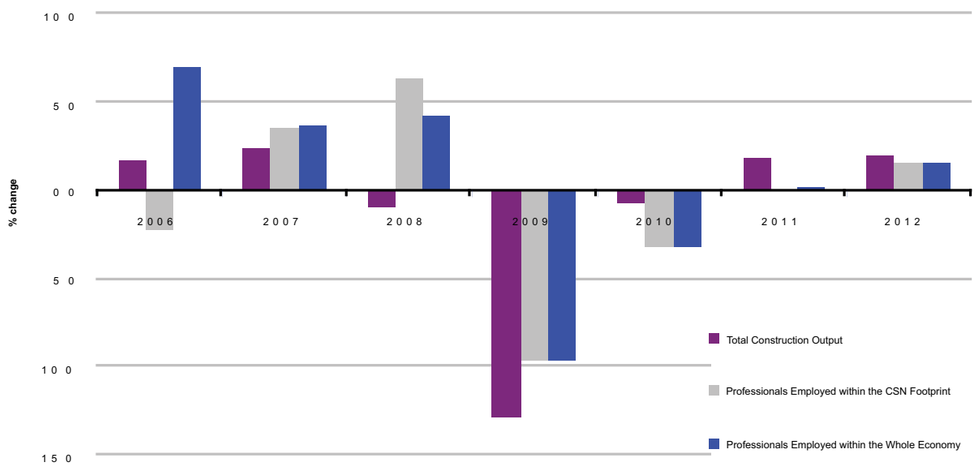
Occupation		2007	2008	2009	2010	2011	2012
Architects 2431		54,426	49,840	44,076	41,946	41,418	41,634
	annual % change		-8.4	-11.6	-4.8	-1.3	1.0
Civil engineers 2121		79,030	90,904	82,006	79,094	79,251	81,016
	annual % change		15.0	-9.8	-3.6	0.2	2.2
Mechanical engineers 2122		82,349	81,472	73,793	71,911	72,452	73,601
	annual % change		-1.1	-9.4	-2.6	0.8	1.9
Electrical engineers 2123		53,522	53,541	48,495	47,258	47,613	48,500
	annual % change		0.0	-9.4	-2.5	0.8	1.9
Town planners 2432		22,650	23,814	21,569	21,019	21,177	21,572
	annual % change		5.1	-9.4	-2.6	0.8	1.9
Managers in construction 1122		251,301	258,970	232,398	223,826	223,355	226,314
	annual % change		3.1	-10.3	-3.7	-0.2	1.3
Quantity surveyors 2433		35,904	44,884	43,112	43,353	44,227	45,036
	annual % change		25.0	-3.9	0.6	2.0	1.8

Source: Labour Force Survey, Experian, Construction Skills Network.

The Construction Skills Network employment forecasts suggest that the quantity surveying profession will be the only one to see an increase in employment this year. By 2011, however, growth in employment is expected to return to most construction professions, as the house building recovery strengthens and the infrastructure sector continues to boom. However, even by 2012, total employment of professionals with construction-specific skills across the whole economy is only expected to be 89% of what it was in 2008, and it may not be until towards the end of the next decade that it returns to its 2008 peak.

Constrained public investment going forward may entail a move away from new work to R&M as a 'make do and mend' scenario, thus lessening input from professionals (the 2005/06 CPS survey indicated that only 6% of practices' fee incomes were generated in the R&M sector). The potential move to more off-site manufacturing in the housing sector, as mentioned above, could have a negative affect on the level of input required from construction professionals. On the upside, the likely move towards greater energy efficiency and sustainability in the future is likely to place new demands on both construction industry professionals and construction managers.

Figure 6: Comparing output and employment (across the economy and within the ConstructionSkills Footprint)



Implications for Graduates and Newly Qualified Professionals

Construction graduates are expected to suffer heavily as a result of the downturn, with Building magazine's survey of newly qualified indicative of this. The inflated numbers entering the job market are partly put down to the government increasing university places in the earlier part of the decade and the extended lag period for construction graduates to finish university education. The improved image of the industry is also likely to have played a part.

Building magazine's survey of 604 construction graduates showed that 61% did not have permanent, salaried employment. This had led to 27% looking at opportunities outside of construction, although only 1.5% were looking to leave the industry altogether. Furthermore, anecdotal evidence suggests that graduates and newly qualified professionals who have tried and failed to find employment in construction are returning to university in order to undertake further study (e.g. MBA, Masters, PhD) in order to improve prospects upon qualification. Thus there is an expectation of outflows of construction graduates in the short to medium term as employment opportunities remain limited, although it remains to be seen how much of the residual other industries are able to absorb.

It is expected that graduates who have studied courses such as architecture will be relatively more reluctant to leave the industry due to the time and money invested in reaching chartered status (since the length of time to qualify takes around seven years).

Recession Mitigation by Professional Institutes

Professional construction institutes have put in place various measures in order to assist their members during the recession. One of the most widely applied was the introduction of concessionary membership rates for the unemployed, with the Institute of Highway Incorporated Engineers (IHIE), the Royal Town Planning Institute (RTPI) and the Institute of Chartered Architectural Technologists (ICAT) all taking this route.

Many institutes also provided help and advice on regaining employment on their websites, although the Royal Institute of British Architects (RIBA) went a step further by hosting seminars in different locations in the UK. Others (such as the IHIE) offered education bursaries in order to help unemployed members gain further skills, while the Royal Institute of Chartered Surveyors (RICS) made funding available to those members who needed support following redundancy. Finally, the Association for Consultancy and Engineering (ACE) have lobbied the government to reduce barriers to entry into professions in order to meet future demand, thus mitigating future shortages.

Introduction

1.1 The project

The project was commissioned by the Construction Industry Council (CIC), through its sector skills council, ConstructionSkills, to look at providing an understanding of how the current recession was impacting on the UK professional services sector.

Broadly the CIC wished to understand the impact of the recession on the UK Professional Services sector, including:

1. How employers have responded to current changes in the economy; and

2. to what extent employers are planning for future growth

Key areas of interest were:

- The impact of the recession on the size and nature of the workforce, and how this is expected to change in the future (e.g. if smaller now than 12 months ago, by what scale, and which occupations have been cut; have there been other occupations that have increased; has there been a shift to more part time working, more use of contract working etc; what changes are expected for the next 12 months/2-3 years).

- The steps taken to meet the recession, and the impact and perceived effectiveness of the measures being taken by the professional institutions and views on what actions should be taken. We understand that CIC has put together a spreadsheet of what is currently available from the institutions websites and clearly we would need details on specific actions that have been taken by CIC and others.

- Any changes (brought about by the recession, but also more generally) in the skills needed by the firm (and sought when recruiting), and their views regarding future skills. We should also investigate what they believe are the key skills for each key occupation, and which skills they find in short supply among their workforce and those in the labour market when they try and recruit.

- The extent to which the recession has impacted on recruitment overall, but more specifically of graduates / interns and those just qualifying.

- The current volume of Built Environment graduates, including how many are seeking/ have found employment in the sector, and how many are likely to come through higher education in the medium-term. This might also provide an indication of areas of over-supply.

1.2 The Approach

The research was split into two discrete packages. Experian was commissioned to analyse the trends in official data relating to the construction sector and in particular to construction professionals, and combine this with the outputs of the Construction Skills Network employment model to produce a view of the effects of the recession to date and the prospects for construction professionals as the economy starts to move into recovery mode. In addition, Experian was asked to collate responses supplied by professional institutions as to how they were assisting their members in 'recession mitigation'. Finally a brief examination of the longer-term influences on the nature of construction professionals' work was undertaken, drawing on previously published material.

In tandem with the Experian research, IFF Research was commissioned to undertake a survey of construction professionals to obtain responses from professional practices as to the effects of the recession on their business and how the downturn was impacting on employment, recruitment and training. IFF undertook 30 in-depth interviews with 30 professional practices in August and September 2009 and the results of these interviews informed a larger telephone survey of 301 firms undertaken in October 2009. The full results of the survey are available in a separate report.

2 The Economic Environment

2.1 Overview

Figure 1: Key UK Macroeconomic Indicators

	Actual	Estimate	annual percentage change Forecast		
	2008	2009	2010	2011	2012
GDP (at constant 2005 market prices)	0.6	-4.7	1.1	2.0	1.8
Household Consumption	0.9	-3.0	0.5	1.8	2.1
Government Consumption	2.5	1.9	1.2	-1.5	-2.0
Gross Fixed Investment	-3.3	-14.1	-2.0	1.5	3.3
Bank Rate (average for year)	4.7	0.6	0.9	2.8	4.1
CPI (annual)	3.6	2.1	2.0	2.1	2.4

Note: CPI = Consumer Price Inflation (it does not include mortgage repayments).
Source: Experian.

Encouraging signs that the UK recession would end in the third quarter of 2009 were dashed with the publication of official data showing that output had fallen by 0.3%. The latest figure takes the real GDP fall over the past year to 5.8%. The decline remains broad-based with exports not yet recovering strongly from the global slump and domestic demand hit by rising unemployment and a continuing decline in investment.

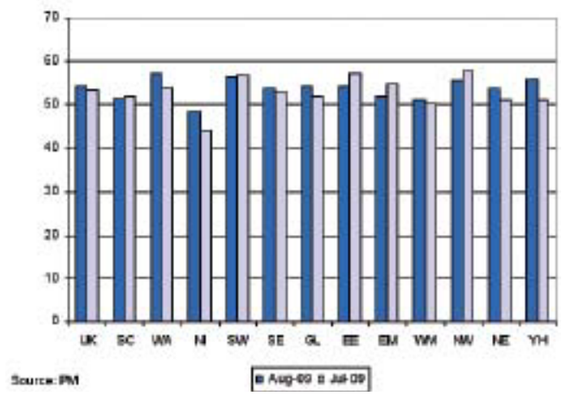
There were some encouraging signs in the final quarter of 2009, with notable positive factors being the key services PMI improving further; retail sales receiving a boost in anticipation of VAT returning to 17.5% at the end of 2009; and manufacturing benefiting from the pound's weakness in conjunction with growth in the eurozone. However, consumers remain constrained in the face of high unemployment, weak wage growth and high levels of indebtedness. Official policy, involving fiscal stimulus, low interest rates and the continuing programme of quantitative easing (a further £25bn agreed in November), is supporting some subdued activity. As a result of these mixed trends, we forecast marginal growth in GDP in the final quarter of 2009 and only a muted recovery further out.

Our central scenario is for fragile growth in GDP during the first half of 2010, followed by a gradual pick up in activity in the second half of the year as household spending and fixed investment pick up, coupled with better export prospects as shipments benefit from the weak pound and stronger overseas markets. While the economic revival is forecast to gather pace in 2011, medium-term prospects are for annual average growth of 2%, well below its long-term average. In 2012, the pace of increase should fall back slightly to 1.9% year-on-year. The public sector borrowing requirement has soared to £170bn-£180bn both for the current and the next fiscal year. In last year's budget net debt was expected to be 39% of GDP; this proportion rose to 58% in August and is likely to approach 90% in 2013. Restoring public finances will need an increase in the tax burden and a cut in spending when the recovery gets under way. This will inevitably seriously constrain the UK's prospects and poses the greatest risk to medium-term growth.

2.2 Business Confidence

Business expectations inform firms' decisions on hiring, production and investment which, in turn, determine changes in the real economy. Business confidence is typically gauged using survey data. Information on new orders, hiring and investment decisions are particularly useful in understanding economic health and predicting short-term changes to the business side of the economy.

Figure 2: PMI Business Activity Index



While the latest business surveys for the regions show that activity and sentiment have improved, such evidence should be viewed with caution in times of recession. The surprise upturn in manufacturing was driven by the end to de-stocking. The end to this process, without a compensating recovery in demand, suggests that manufacturing output will fall back once again. The latest industrial production data and UK GDP data for the third quarter of 2009 support this view. Although services will return to growth in 2010, financial & business services will post a stronger recovery than consumer services which will be held back by a weak labour market and high levels of indebtedness.

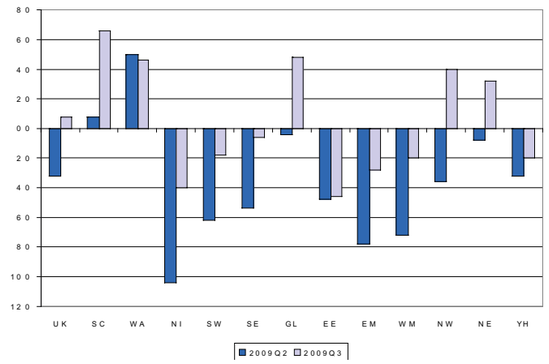
The Purchasing Manager's Index of business activity has been in expansionary territory for six consecutive months with the latest reading for October one of the most robust in the last 2 years. While these signs are heartening and can be construed as indicating that the UK is headed towards a recovery, survey indicators need to be viewed with caution within the context of an economy emerging from recession. The recession has led to a sharp contraction in output which is currently at very low levels compared to recent history. Monthly improvements could simply mean that even though activity may be recording marginal improvements, it is at historically depressed levels rather than at the heights it reached pre-crisis. Nonetheless, there is no denying that activity is picking up across all regions (only Northern Ireland remains below the critical 50-mark) with a corresponding rise in the number of new orders. In contrast, the latest BCC quarterly economic survey reveals that the balance of manufacturing firms reporting an increase in export orders was -4% in 2009q3 (compared to -8% in q2) and employment expectations also remain negative in most regions. These numbers confirm that, despite the positive PMI records, the sectoral outlook is far from certain.

2.3 Consumer Confidence

Household consumption is a key driver of economic growth. Consumer confidence is a leading indicator in that a fall in consumer spending is preceded by a weakening in sentiment. Since consumer confidence is, in theory, a qualitative measure, it is quantified by an index of sentiment primarily based on survey information.

Although consumer confidence has shown much improvement across all regions, it still remains at weak levels. This is hardly surprising given that - despite some positive economic announcements - labour market conditions remain weak and the outlook is far from certain. In addition, the reversal of the VAT reduction in January 2010 along with the prospect of inevitable tax rises in the near future is weighing on sentiment. According to the Gesellschaft für Konsumforschung (GfK) survey of consumer confidence, the balance of households expecting an improvement in economic conditions over the next 12 months has picked up compared to the previous quarter. However, the balance

Figure 3: Consumer Sentiment Index



of consumers planning to make major purchases has fallen back slightly since. Although retail sales have held up fairly well, this was largely the result of discounting rather than growth in underlying demand. This suggests that while confidence has improved in line with positive news from the housing market, spending is likely to remain depressed amid rising unemployment and anaemic growth in disposable incomes. At the same time, borrowing activity remains restricted and cautious consumers have been focused on saving. This has resulted in a marked rise in the UK savings ratio from below 2% to over 5% in recent months. Net mortgage lending (new lending less repayments) in the UK was negative in July 2009, the first net repayment since the series began in 1993. The flow of net consumer credit in the UK was also negative in July, consistent with the decline in household spending in the past year. These developments suggest that households across the country are beginning to address the debt burden which has built up in recent years which will inevitably dampen spending in the medium term.

Although depressed income growth, rising unemployment and tight credit will continue to offset positive factors - notably low interest rates, fiscal stimulus measures and falling inflation - we expect the decline in household spending to level off in the final quarter of 2009. Thereafter, the combination of low interest rates, a normalisation of financial conditions and a more stable housing market should underpin a gradual recovery. However the pick up will only gather momentum after unemployment peaks in mid-2010. Further out, spending growth will remain weaker than in the last decade as a result of more subdued income and employment growth, a weaker housing market, the heavy servicing burden of existing debt, and the growing need for retirement savings.

Regions to the south will see a relatively quicker recovery in consumer services as these have lower unemployment rates, a faster-growing mix of industries, higher levels of wealth and lower levels of indebtedness (once mortgages are removed from the equation).

2.4 Housing Market

Closely related to business and consumer confidence is activity in property markets. House prices, mortgage approvals, stocks of homes on books, and new buyer enquiries are all informative as leading indicators. Similarly, the construction of new offices and vacancy rates give an indication of how businesses will perform in the next few quarters. In particular, the housing market often acts as an early indicator of the underlying health of the economy – it is usually the first area to experience the chill winds of recession and in consequence the green shoots of recovery.

The UK housing market is continuing on the path of stabilisation and is, ostensibly, showing signs of recovery. According to Nationwide, UK house prices rose in 2009q3 and this growth was reflected, to a greater or lesser extent, in all regions. The national average house price now stands at about £160,000.

Despite remaining in negative territory, annual house-price inflation is now no longer in double digits in any region. The latest survey and anecdotal evidence suggests that the worst of the downturn is over and the possibility of large falls in house prices and buyer confidence is remote. However, although this is the most likely the case, there are still reasons to exercise caution before pronouncing the end of the downturn as the recent house price increases are underpinned by complicated and fragile market conditions. On the demand side, there is no denying that the market has turned a corner. Yet the indicators being heralded as 'green shoots' face major headwinds that could potentially limit the extent of any recovery. The first of these is the number of buyer enquiries which has risen rapidly in recent months. According to the latest Royal Institution of Chartered Surveyors (RICS) survey, the balance of surveyors in England and Wales reporting a rise in buyer enquiries is now positive at 36%. The same survey suggests that a 28% balance of surveyors expect home sales to rise (compared to a 6% balance a year earlier) and only 25% expect prices to increase (compared with -69% a year earlier). Thus, while there are expectations of increased activity in the housing market sales, there is as yet little belief that this will translate into a sustained rally in house prices.

Recent consumer surveys confirm this view. Nationwide's latest survey shows that about 60% of UK consumers expect house prices to stabilise around their current level over the next six months and only about 15% anticipate further falls. The survey also highlights that optimism in the northern regions and midlands is more muted than the UK average, tempered by increases in these regions' unemployment rate and sustained weakness in their key sectors.

A second indicator to have seen an improvement is the number of mortgage approvals. The overall number of approvals in the UK has been rising and crossed 52,000 in July and August 2009. While this is above the previous six-month average of 45,000, it still remains depressed compared to historic levels. To put the current number into context, the number of approvals touched 112,000 per month over 2006-07, more than twice the current level.

Much has also been made of the fact that housing is now more affordable than it has been in recent years. Mortgage payments as a percentage of take-home pay (for first-time buyers) in all regions have fallen to levels last seen at the end of 2003 while the house-price-to-earnings ratio (for first-time buyers) is a little higher than it was in the previous quarter. While increased affordability has indeed given some impetus to demand, there remain some underlying weaknesses that prevent this renewed interest from translating into a robust housing market recovery. Most notably, weak labour market conditions - in the form of rising unemployment and weak average wage growth - threaten to rein in buyer activity across the region. In addition, the impending withdrawal of the stamp duty holiday at the end of this year will inevitably hit households already struggling in this stringent lending environment. The removal of the stamp duty holiday will affect consumers buying properties between £125,000 and £175,000. The regions to the north, where the average house price lies within this band, stand to be particularly affected by this move.

Also, even though interest rates are currently at an all-time low, when they do begin to rise they will have a negative impact on housing affordability. Buyers will factor in these inevitable future rises when taking the decision to enter the market. And finally, the fact that the UK savings ratio has risen to 5.6% in the second quarter of 2009 from 2.3% a year earlier indicates that households are now choosing to reduce their debt burden rather than invest in assets which limits the scope for rapid house price increases in the medium term.

Thus, while housing demand may have increased, there remain many constraints that will keep its growth subdued in the next few years. Even so, house prices have recently managed to eek out a month or two of growth. But this is largely underpinned by developments in the supply side of the market. The RICS sales to stock ratio, a measure of market slack and a leading indicator of house prices, edged down in September 2009 but is, on the whole, much higher than the early part of 2009 while the number of new instructions to sell has fallen back. This reflects a general shortage of properties for sale, a consequence of a large number of homeowners choosing to put their properties up for rent until conditions in the market improve. It is this greatly reduced supply rather than the lacklustre growth in demand that has underpinned the recent house price increases. As conditions stabilise and more properties are put on the market - or, indeed, weak economic conditions force homeowners to sell - the influx of new properties will exert downward pressure on house prices and could potentially reverse the recent recovery in prices.

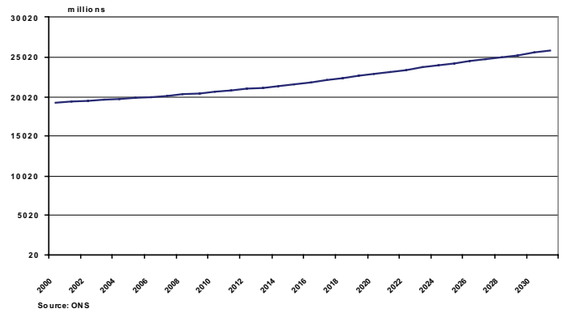
Any potential recovery in house prices will further be dampened by tighter credit conditions and increased risk in financial markets. According to Financial Services Authority (FSA) data, the number of UK mortgages with high loan to value (LTV) ratios (above 90%) or high income multiples (over 3.5 for single income mortgages) has dropped dramatically reflecting increased caution on the part of lenders. The limited supply of mortgages is also a result of tighter wholesale conditions and fewer lenders in the market. Mortgage lending conditions are expected to remain stringent in line with tighter FSA regulations which will keep house-price inflation in check.

Thus, all indications are that the current price increases are unlikely to be sustained as they are based on a low level of market transactions and therefore do not reflect the true underlying demand or supply conditions. Our baseline forecast is for a broadly flat profile in the first half of 2010 after which modest growth is expected to resume. However, it is clear that this central scenario is subject to great downside risks that could keep house prices depressed in the region for some time yet, despite a gradual stabilisation in economic conditions.

2.4.1 Household Projections

In the long term, demand for housing is expected to continue to outstrip supply. Revised forecasts of household growth from the ONS project an increase of 3.16 million in 2020 when compared to 2008. Even if the government were to hit its target of 3 million new houses in the 15 years to 2020, now an unlikely scenario, this would still fall considerably short of projected household formation

2.5 The Labour Market



With the recession lingering and key sectors still under pressure, job losses are continuing and these will persist for some time yet. Although quarterly double-digit increases are no longer expected as conditions stabilise, unemployment numbers are expected to rise in all the UK regions for most of 2010.

The latest claimant count data for the UK and the regions shows that the number of claimants has fallen back slightly to 1,582,555 in October from 1,626,800 in September. However, rather than being indicative of an improvement in labour market conditions, the latest claimant count data more likely suggests that participation rates are declining. To be recorded on the claimant register, job seekers need to be actively searching for work. With job shedding continuing in all sectors, workers may drop out of the labour market owing to lack of opportunities which explains the co-existence of the seemingly contradictory trends of falling employment but a fall back in the (claimant) unemployed.

Falling participation rates are of much greater concern as workers who stay out of work for extended periods, lose useful skills which hinders their employability. When they do return to work, it is with lower levels of productivity. Anecdotal and quantitative evidence both reveal that unemployment rates are rising rapidly in the younger demographic groups (between 16-24 years) which particularly exposes this group to the threat of longer-term unemployment.

Unemployment rates remain highest in the North East and West Midlands, the two regions that have been the most severely hit in this recession. Unemployment rates in Northern Ireland and the North West also exceed the UK average. Official unemployment numbers often mask the 'real' level of unemployment. Many workers have been forced to work reduced hours or take work 'holidays' which reduce the 'hours of employment'. This, however, is not captured in the 'numbers of unemployed' suggesting that the real level of activity is perhaps even less than reflected in the hard numbers. The number of notified vacancies (to Jobcentre Plus) fell sharply in September and showed only marginal growth in October confirming that job generation is virtually non-existent and that a recovery in the labour market is some way away yet.

2.6 Prospects for the main economic sectors

The table below shows the forecast for different sectors in the economy. Although the construction sector is not included within them (discussed in the later part of the report), the interconnectedness of the economy as a whole has an indirect effect on the demand for construction services. Therefore the state of the rest of the economy constitutes an important element of our construction output forecasts.

Figure 5: UK Output Summary (£bn, 2005 prices):

		Actual	Estimate		Forecast		
		2007	2008	2009	2010	2011	2012
Manufacturing Total		151.3	147.0	131.5	132.8	135.9	138.1
	annual % change	0.6	-2.9	-10.5	1.0	2.3	1.6
Services Total		829.6	841.4	810.1	818.0	836.0	855.3
	annual % change	3.8	1.4	-3.7	1.0	2.2	2.3
Financial & Business Services		301.5	310.2	293.9	297.5	307.8	319.7
	annual % change	7.0	2.9	-5.2	1.2	3.5	3.9
Other (Mainly Public) Services		268.9	272.4	270.4	271.8	273.2	274.5
	annual % change	1.0	1.3	-0.7	0.5	0.5	0.5
Gross Value Added		1180.2	1187.2	1133.1	1147.1	1172.4	1194.7
	annual % change	2.6	0.6	-4.6	1.2	2.2	1.9
Total Employment (millions)		31.6	31.8	30.9	30.5	30.6	30.9
	annual % change	0.8	0.0	-2.1	-1.3	0.2	1.1

In 2008 output in the manufacturing sector totalled £147bn (2005 prices), accounting for approximately 12.4% of the UK Gross Value Added (GVA). The size of the sector as a proportion of total UK GVA has been declining for some time now and in the past 20 years the decline has steepened. In the ten years to 1990, the sector experienced a 1.7% fall in its share of GVA, in the decade to 2000 it saw a 3% fall, and between 2000 and 2008 it has already lost a further 2.9%. It is forecast that the sector will continue to shrink over the four years to 2012. Following an estimated decline in 2009 of 10.5%, the sector should return to growth this year, albeit weakly, before growing at a slightly stronger pace of 2.3% in 2011. The final year of the forecast is predicted to see the rate of increase fall back to 1.6%. The steep fall in output in 2009 is expected to reduce the share of manufacturing as a proportion of GVA to 11.6%, less than the 12.4% figure seen in 2008. However, due to the rate of growth of GVA being roughly in line with that of manufacturing output, the sector's share as a proportion of total GVA is likely to be unaffected in 2010 and 2011.

At £841bn, services as a whole (broadly made up of 'distribution, hotels and catering', 'transport and communications', 'financial and business services' and 'other services') accounted for 71% of total UK GVA in 2008. In contrast to the manufacturing sector, the value of output in services has broadly been growing, as a share of UK GVA, since the mid-1980s. Over the ten years to 2000, the sector's share rose by 4.5% to 65.7%, while in the eight years to 2008 it has already increased by a further 5.2%. The rate of growth for services in 2008 slowed to 1.4%, from 3.8% in the preceding year, and is expected to have contracted sharply in 2009 by 3.7%. Following small growth this year, the sector is expected to see an increasing rate of growth in each of the two years to 2012.

The financial and business services sector was the largest component of UK GVA in 2008 as the value of output reached £310bn. The sector has experienced robust growth year-on-year since the start of this decade, with the exception of 2002 when the increase was more moderate. In 2008, financial and business services accounted for 26% of total UK GVA, up from 20.8% in 2000, 16.1% in 1990 and 14.2% in 1980. In 2008, the sector grew by just 2.9%, a slowdown from the 7% increase in 2007. The crisis in the banking sector is estimated to have lead to a steep contraction in output in the sector of 5.3% in 2009, however, slow growth of 1.2% should return this year. The rate of growth is expected to increase in both 2011 and 2012.

The distribution, hotels and catering sector was the only part of the services sector to see a decline in 2008 as it reached £172bn. Although the size of the sector as a proportion of the UK GVA has grown slightly from 13.7% in 2000 to 14.5% in 2008, it has broadly remained unchanged for the past couple of decades. Although output in the sector is estimated to have declined by 4.6% in 2009, growth of 1.5% is forecast to return this year. In 2011 the sector is projected to grow by 2.2%, before a slightly stronger increase in 2012 of 2.3% takes the share of the sector as a proportion of UK GVA to 14.5%.

At £87bn, the transport and communications sector was the smallest sector in services in 2008. Nonetheless, the size of the sector as a proportion of total UK GVA has slowly been climbing, from 4.6% in 1990 to 7.3% in 2008. Following growth in output of 1.7% in 2008, the sector is expected to have seen the largest decline in services as a whole last year of 5.9%. However, it should return to modest growth in 2010, before a stronger increase of 2.9% takes place in 2011.

Finally, the 'other services' sector, made up of mainly the public side, was the second largest sector in services overall in the UK at £272bn in 2008. The sector has largely been shrinking as a proportion of UK GVA, from 29.9% in 1980 to 22.9% in 2008. Although the rate of growth for 'other services' has been weak in recent years (at around 1%), the sector has been increasing year-on-year since the early 1980's. The decline of 0.7% in 2009, is expected to be followed by annualised growth of around 0.5% in each of the three years to 2012.

2.7 A view from the devolved nations

2.7.1 England

Figure 6: England Macroeconomic Summary (£bn, 2005 prices)

		Actual		Estimate	Forecast		
		2007	2008	2009	2010	2011	2012
Manufacturing Total		127.3	123.0	110.2	111.3	113.8	115.6
	annual % change	0.4	-3.4	-10.4	1.0	2.2	1.6
Services Total		716.7	726.3	699.2	707.6	724.3	741.8
	annual % change	3.9	1.3	-3.7	1.2	2.3	2.4
Financial & Business Services		268.1	275.4	261.2	265.3	274.7	285.5
	annual % change	7.0	2.7	-5.2	1.5	3.5	3.9
Other (Mainly Public) Services		223.2	226.3	225.0	226.5	227.8	229.0
	annual % change	1.1	1.4	-0.6	0.6	0.6	0.5
Gross Value Added		955.5	1002.6	957.1	971.0	993.9	1014.3
	annual % change	2.8	0.7	-4.5	1.5	2.4	2.0
Total Employment (millions)		26.6	26.6	26.0	25.8	25.9	26.3
	annual % change	0.8	0.0	-2.0	-0.9	0.5	1.3

As was the case with the UK as a whole, GVA growth for England slowed dramatically in 2008. However the increase of 0.7% was slightly better for the nation than the UK, which saw a rise of 0.6%. Unsurprisingly, the increase in GVA was significantly weaker than the rates seen during the early years of the decade.

Despite the banking crisis, the financial and business services sector continued to be the strongest sector in England in 2008 as it grew by 2.7%. Nonetheless, this was a considerable slowdown from the over 5% increases seen in each of the previous five years. Of the major services sectors, distribution, hotels and catering was the only one to see a decline in 2008.

Total employment, as well as full time equivalent employment, growth in England stagnated in 2008. Those employed in the manufacturing sector continued to see declines, while the level of those self-employed also saw a small fall-off. Those working in the non-manufacturing sector saw a rise of 100,936 in total employment in 2008 from a year earlier.

In 2009, GVA for England is estimated to have declined by 4.5%, a lesser fall than that seen for the UK as a whole of 4.6%. Double-digit contractions in the manufacturing and construction sectors are expected to have contributed significantly to the poor economic outturn for last year.

Unsurprisingly, financial and business services, the largest sector in England, is also expected to have seen a fall in its GVA of around 5.2% for the same year.

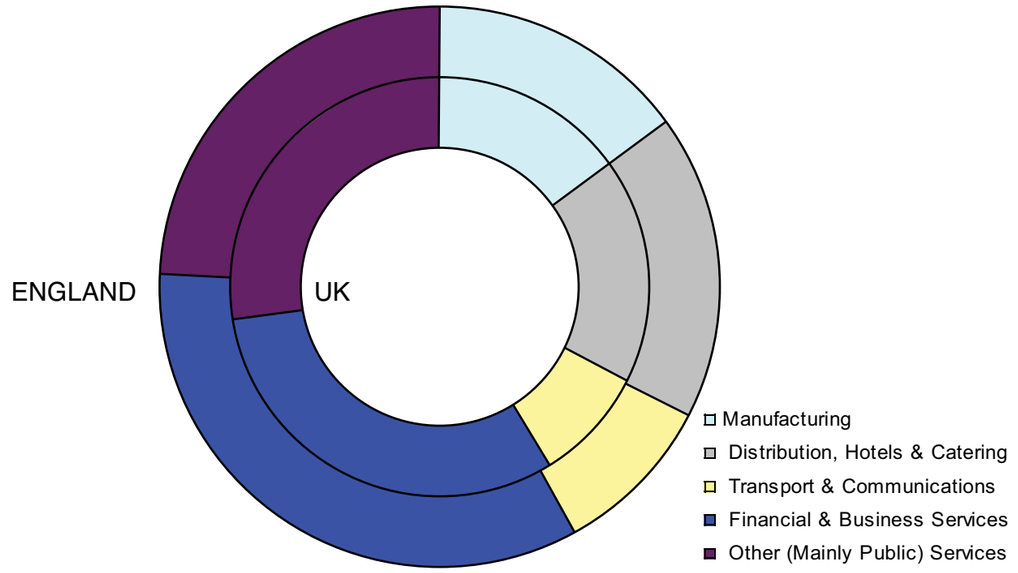
Other (mainly public) services is forecast to have experienced the smallest contraction of the major sectors in 2009. It is the second largest in England and accounts for almost 24% of the total English GVA.

In 2010 GVA in England is predicted to bounce back more strongly than that of the UK as a whole, before increasing in 2011 and 2012 by 2.4% and 2%, respectively, above the UK averages.

Transport and communications and 'other' services are forecast to be the only sectors to see growth of below 1% in 2010, while the remaining major sectors should see an increase above that mark, but below the 2% level. In 2011, the financial and business services sector is expected to be the strongest performing with a rise of almost 3.6%, while transport and communications is expected to follow in second place with an increase of nearly 3%.

Finally in 2012, the financial and business services sector should continue to have the highest rate of growth, with an expected outturn of 3.9%. In contrast, 'other' services is predicted to have the slowest pace of increase of around 0.5%.

Figure 7: Comparison of Main Sectors in terms of Size - England v UK



2.7.2 Scotland

Figure 8: Scotland Macroeconomic Summary (£bn, 2005 prices)

		Actual		Estimate	Forecast		
		2007	2008	2009	2010	2011	2012
Manufacturing Total		12.4	12.3	11.0	11.1	11.3	11.5
	annual % change	1.1	-0.9	-10.8	0.6	2.4	1.5
Services Total		66.1	67.9	65.7	65.4	66.5	67.7
	annual % change	3.1	2.7	-3.2	-0.5	1.6	1.8
Financial & Business Services		22.4	23.4	22.2	21.8	22.4	23.2
	annual % change	5.6	4.8	-5.3	-2.0	2.9	3.4
Other (Mainly Public) Services		24.0	24.1	23.9	24.0	24.1	24.1
	annual % change	-0.2	0.5	-1.0	0.5	0.4	0.1
Gross Value Added		93.9	94.2	90.0	90.3	92.1	93.6
	annual % change	2.2	0.4	-4.5	0.3	2.0	1.6
Total Employment (millions)		2.7	2.7	2.6	2.5	2.5	2.5
	annual % change	1.3	0.4	-2.7	-3.7	-1.1	0.5

In 2008, GVA in Scotland is estimated to have grown by just 0.4%, less than the UK average increase of 0.6% and significantly weaker than the rates seen during the early part of the decade.

For the same year, the transport & communications sector continued to experience reasonable output growth as the Scottish Government pushed forward its transport investment plans, but elsewhere increases in activity were at best modest and at worst, went into reverse.

Total employment growth in Scotland slowed to 0.4% in 2008. Rises in staffing levels in the financial & business services and transport & communications sectors just about offset strong declines elsewhere in the economy.

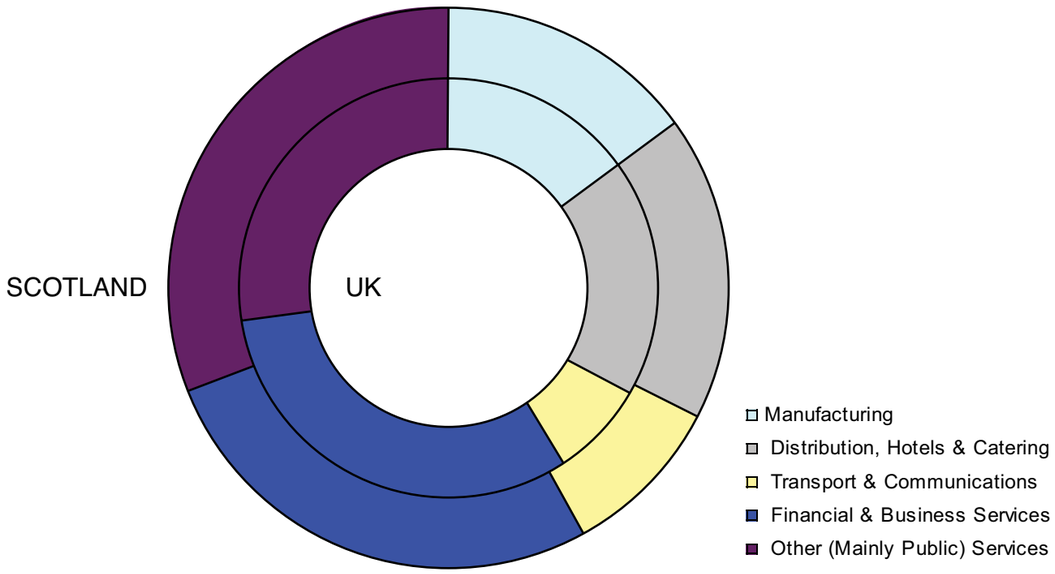
In terms of the total number of employees in employment, the manufacturing sector saw its workforce decline by 2.5% in 2008. In contrast, the number of employees working outside of manufacturing saw a marginal increase in headcount of 0.3% over the same period.

In 2009, Scottish GVA is estimated to have contracted by 4.5%, with the declines in the manufacturing and construction sectors contributing significantly to the downturn. However, hotels and catering was the worst performer with a year-on-year decline of 30.8%. In contrast, the retailing and other distribution sectors grew significantly in GVA terms by 68.6% and 48.6%, respectively, the first increase for the former since 2002 and the latter since 1998.

GVA in Scotland is projected to bounce back fairly weakly in 2010, before seeing a slightly stronger increase of 2% in 2011. However, the rate of growth should fall back to 1.6% in 2012. The rises in each of the three forecast years are likely to be below the UK average.

The transport and communications and financial and business services sectors are expected to be the only ones in the nation likely to continue contracting from the previous year in 2010, although both should return to growth in 2011. Finally, all of the major sectors in the Scottish economy are predicted to see growth, albeit below trend, in each of the final two years of the forecast.

Figure 9: Comparison of Main Sectors in terms of Size - Scotland v UK



2.7.3 Wales

Figure 10: Wales Macroeconomic Summary (£bn, 2005 prices)

		Actual 2007	2008	Estimate 2009	Forecast 2010	2011	2012
Manufacturing Total		7.4	7.5	6.5	6.7	6.9	7.1
	annual % change	2.9	1.3	-12.6	2.4	3.6	2.6
Services Total		27.6	28.4	27.3	27.3	27.6	27.9
	annual % change	2.6	1.8	-3.5	-0.2	1.0	1.4
Financial & Business Services		7.1	7.3	6.7	6.7	6.9	7.1
	annual % change	6.2	2.1	-7.2	-0.4	2.5	3.7
Other (Mainly Public) Services		12.3	12.6	12.5	12.5	12.5	12.5
	annual % change	2.1	2.5	-0.9	0.0	0.2	0.2
Gross Value Added		41.4	42.1	39.9	40.1	40.7	41.3
	annual % change	1.9	1.6	-5.1	0.5	1.5	1.4
Total Employment (millions)		1.4	1.4	1.3	1.3	1.3	1.3
	annual % change	0.6	-1.7	-2.8	-3.0	-1.6	0.2

In 2008, GVA in Wales reached £42bn (in 2005 prices), 1.6% higher than in 2007. This was above the UK growth rate of 0.6% for the same year.

Other (mainly public) services, dominates the market in Wales. In 2008, GVA for the sector rose to £12.6bn, just under 29.9% of total GVA, which represented an increase of 2.5% on 2007's figure of £12.3bn. Surprisingly, the manufacturing sector in the principality also saw growth, of 1.3% to £7.5bn. This was in contrast to the UK as a whole which experienced an annual decline of 2.9%.

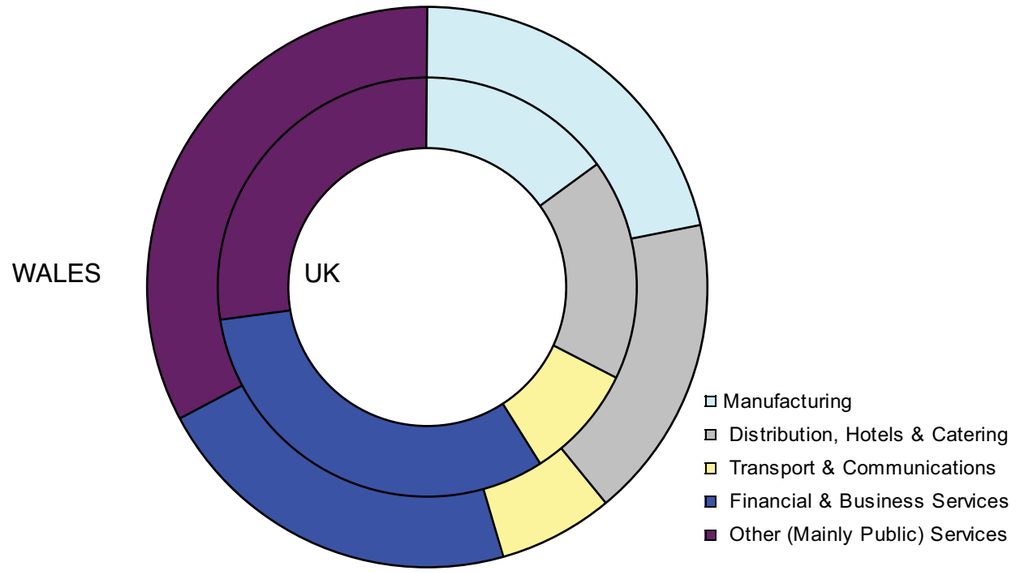
Although total employment for the UK as a whole remained unchanged in 2008 from the previous year's level, Wales experienced a decline of 1.7%.

GVA is forecast to fall in 2009 with all sectors seeing a decline. However, growth should return in 2010, with annual increases predicted for each of years to 2012. Over this three-year period, GVA by 2012 is predicted to be down by almost 1.9% on the 2008 total.

Although the manufacturing sector is expected to see rises in each of the three years to 2012 to £7.1bn, this figure is predicted to be 4.9% down on the 2008 level. This is expected to take the sector's share as a proportion of total GVA to 17.2%, down from 19.8% seen at the beginning of the decade.

In 2012, the transport and communications sector is expected to be the only major sector to rise above its 2008 level, while 'other' services, financial and business services and distribution, hotels and catering are likely to remain depressed.

Figure 11: Comparison of Main Sectors in terms of Size - Wales v UK



2.7.4 Northern Ireland

Figure 12: Northern Ireland Macroeconomic Summary (£bn, 2005 prices)

		Actual 2007	2008	Estimate 2009	Forecast 2010	2011	2012
Manufacturing Total		4.2	4.2	3.8	3.8	3.8	3.9
	annual % change	2.6	0.5	-9.1	-1.3	1.6	1.7
Services Total		17.4	17.4	16.6	16.6	16.7	16.9
	annual % change	3.2	0.1	-4.5	-0.3	0.8	1.0
Financial & Business Services		3.9	4.1	3.8	3.8	3.9	4.0
	annual % change	10.7	3.1	-7.2	-0.3	2.8	2.8
Other (Mainly Public) Services		7.8	7.8	7.8	7.8	7.8	7.8
	annual % change	-0.2	0.3	-0.9	0.2	0.3	0.0
Gross Value Added		25.8	25.8	25.7	25.7	26.1	26.4
	annual % change	2.2	0.0	-4.3	0.3	1.4	1.1
Total Employment (millions)		0.9	0.9	0.8	0.8	0.8	0.8
	annual % change	0.6	0.5	-1.4	-0.8	0.2	0.7

In 2008, GVA in Northern Ireland was estimated at £26.8bn (in 2005 prices), unchanged from the previous year's level. In comparison, the UK experienced a 0.6% increase over the same period.

As with Wales, other (mainly public) services, dominates the market in Northern Ireland. In 2008, GVA for the sector grew by 0.3% to £7.8bn (in 2005 prices), accounting for almost 29.3% of total GVA. Of the major sectors, the strongest growth was seen in financial and business services of 3.1%, however, the rate of increase had slowed dramatically having seen four consecutive years of double-digit increases to 2007. Surprisingly, the manufacturing sector grew marginally for the same year.

In 2008, the transport and communications sector contracted by 4% to £1.3bn, while the distribution, hotels and catering sector declined by a slightly smaller margin of almost 1.9% to £4.2bn.

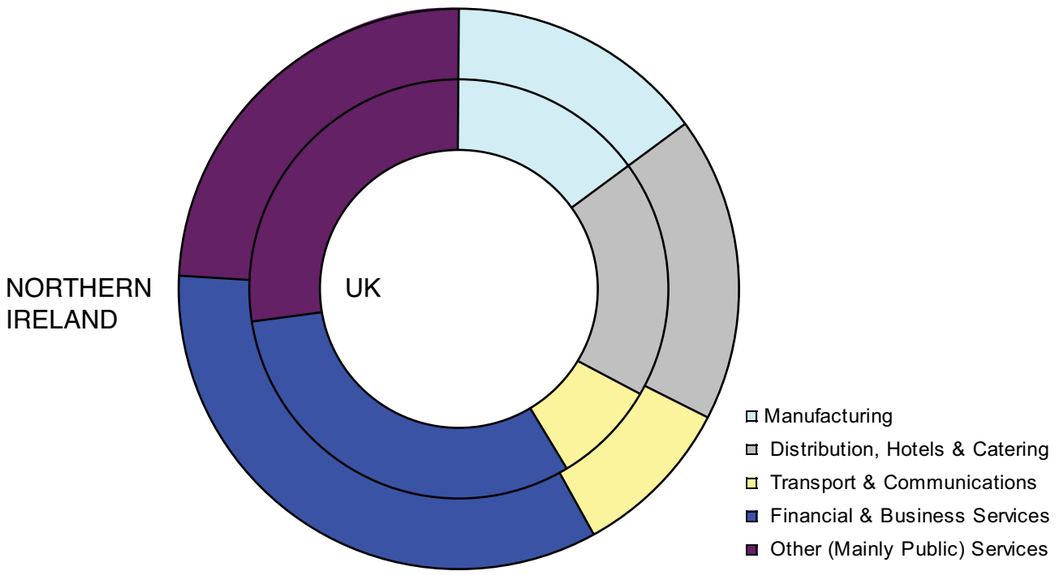
Total employment grew slightly in the province in 2008, while the UK as a whole experienced a year of stagnation. It is estimated to have declined by 1.4% in 2009 and should fall by 0.8% this year, before returning to growth in 2011 and growing at a slightly faster rate in 2012.

In 2009, GVA is estimated to have fallen in the province with all sectors seeing a decline. Growth is set to return in 2010, although this is likely to be marginal, before a stronger increase of 1.4% takes place in 2011 and 1.1% in 2012. GVA by 2012 is predicted to be down by around 1.5% on the 2008 total, mainly as a result of the steep decline estimated for 2009.

In 2009, the manufacturing sector in Northern Ireland is expected to experience its first decline since 2002, contracting by 9.1% year-on-year to reach £3.8bn. This is projected to take output for the sector to its lowest point since 2003. Following another decline in 2010, of 1.3%, manufacturing should return to growth with an increase of 1.6% and 1.7% in 2011 and 2012.

Although all of the major sectors are predicted to see declines in 2009, the steepest falls are likely to come in the transport and communication and distribution, hotels and catering sectors. The former is estimated to have declined by almost 9.9% last year, while the latter is predicted to have contracted by a slightly lesser 7.3%. However by the end of the forecast period, all of the major sectors should see a return to growth.

Figure 13: Comparison of Main Sectors in terms of Size - Northern Ireland v UK



2.8 Summary

Figure 14: Devolved nation GVA Growth Rates

	2007	2008	2009	2010	2011	2012
England	2.8	0.7	-4.5	1.5	2.4	2.0
Scotland	2.2	0.4	-4.5	0.3	2.0	1.6
Wales	1.9	1.6	-5.1	0.5	1.5	1.4
Northern Ireland	2.2	0.0	-4.3	0.3	1.4	1.1
UK	2.6	0.6	-4.6	1.2	2.2	1.9

In GVA terms, Northern Ireland was the only one not to see any year-on-year growth in 2008. In contrast, Wales saw the highest rate of growth of the devolved nations, increasing by 1.6% on the 2007 level, while England and Scotland saw relatively subdued rises of 0.7% and 0.4%, respectively.

In 2009, Wales is estimated to have seen the largest contraction in its GVA with a decline of 5.1%, much steeper than the UK average fall of 4.6%. The year-on-year decreases for England and Scotland are likely to be in-line with each other, contracting by 4.5%, while Northern Ireland's decline should be slightly lesser at 4.3%. All three of the latter devolved nations are estimated to have seen below UK average falls.

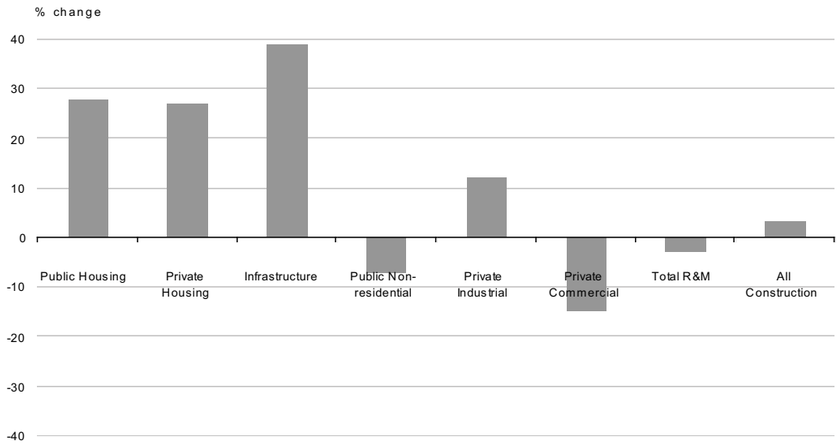
All of the devolved nations are predicted to see growth in GVA this year to give a UK average figure of 1.2%. The level of growth for Northern Ireland and Scotland is likely to be of the same magnitude, increasing by 0.3% on the preceding year's level, while England is projected to be the best performer with an increase in GVA of 1.5%.

In 2011, the Welsh and Northern Ireland economies are expected to lag behind the UK average figure of 2.2%, with rises of 1.5% and 1.4%, respectively. Meanwhile, England is likely to continue to lead the growth level with a year-on-year increase of 2.4%.

However, all four of the devolved nations should see deceleration in their rates of increase in the final year of the forecast. England is predicted to see a slowdown to 2% when compared to the 2011 outturn, Scotland to 1.6%, Wales to 1.4% and Northern Ireland to 1.1%.

3 The prospects for construction

3.1 Overview



Total construction output is estimated to have fared poorly in 2009, with the fall in new work output steeper than that of repair and maintenance. This is not surprising considering that new orders fell by one-fifth in the 12 months to September 2009, when compared with a year earlier. Following a double-digit decline in total output in 2009, a small contraction is projected for 2010. However, growth should return in 2011, albeit weakly, and increase at the same rate in 2012.

It is unsurprising that public housing output has fallen away during this recession considering the movement towards stronger delivery links between the public and private sectors in recent years. Private developers have mothballed sites due to lack of demand and problems in raising finance thus restricting the delivery of social housing units through section 106 agreements. This has led to problems for the sector where output has been estimated to have declined by 8% in 2009. Following a strong bounce back this year, output should continue to grow in 2011, albeit at a slower rate. However, the future for the sector post-2011 is more uncertain. It is likely that the next AHP will have only the same level of funding as the 2008-11 one at best and therefore unless social housing providers can access increasing levels of private finance, output could start to decline.

In private housing, the uncertainty with house prices as well as harder to obtain mortgage finance is expected to lead to consumers adopting a 'wait and see' attitude in the short term. However with underlying demand for housing still in the system and leading indicators showing stabilisation in house prices, prospects for private housing are good. It is thus likely that private housing output will show moderate growth this year, although house prices could suffer a further decline as more supply comes onto the market. On the basis of our central forecast any possible decline in house prices will not be significant. Output growth is forecast to accelerate quite strongly in 2011 and continue growing at the same rate in 2012 as economic conditions and the housing market improve.

Over the forecast period, the infrastructure sector is projected to be the best performing as big transport projects such as Crossrail, Thameslink and M25 widening dominate the market over the next few years. In contrast, the public non-residential sector is likely to fare badly over 2010-2012. Output in the sector has been driven by the Building Schools for the Future projects and the Olympics scheme over the past year, and although work on these two programmes should continue to drive the sector in 2010, the rate of increase should slow considerably. Furthermore, although the current government has indicated that it will maintain spending on health and education as far as is practicable, this does not necessarily mean that spending on construction will be kept at its currently very high level. This is especially likely to be the case as the government attempts to address the issue of a ballooning public debt.

The private industrial and commercial sectors are predicted to move in opposite directions between 2010 and 2012, with the former expected to perform positively and the latter negatively. The manufacturing sector has suffered significant difficulties due to export demand falling away steeply and weak consumer spending. Thus it is expected that the level of output will have fallen to such a level by 2010 that it is almost inconceivable that is will decline any further for the year. This should be followed by moderate increases in the final two years of the forecast period as conditions begin to ease further for manufacturers. In the commercial sector, demand for offices, retail and leisure facilities has dropped off substantially and is predicted to remain depressed for quite some time. However, the economic recovery should tempt developers back into these markets in 2012.

Finally, examination of past performance in a recession suggests that repair and maintenance (R&M) output should fall heavily – in real terms public housing R&M activity fell by 19 per cent over 10 quarters, private housing R&M by 27 per cent over 15 quarters, public non-residential by 23 per cent over 14 quarters and private non-residential by 14 per cent over seven quarters in the early 1990s. The trend during this recession will be in the same direction – downwards – although it is expected that the size of the decline could be less pronounced, for reasons mentioned later on in this section. However, in the final year of the forecast, the market should see a small uptick on the basis of an improving economic environment.

3.2 Latest Orders and Output

According to the latest data from the ONS, construction output in 2008 totalled £109.7bn in 2005 prices, a 1.1% decline on the previous year. This represented a revision to the figures for 2008 originally published in March, which showed a smaller fall of 0.4%. Some shaving down in the new work sectors, particularly public housing and public non-residential construction accounted for this revision. In the first nine months of 2009, output declined by 12% when compared to the corresponding part of 2008.

Overall, activity held up much better in the repair and maintenance (R&M) sectors than in new work, with the former recording growth of 1.8% while output in the latter fell by 3.2% in 2008. This was a reversal of the trend seen in the previous two years when new work significantly out-performed R&M. In the first nine months of 2009, the value of output for the R&M sector was down by 10%, while new work output had fallen by 13% when compared to the corresponding period of 2008.

Construction new orders in 2008 totalled £38bn in 2005 prices, a 19% decline on the previous year and the first fall since 2003. In the first three quarters of 2009, the level of orders continued to look downbeat as they fell by 18% when compared with the corresponding period of 2008.

3.3 The Outlook to 2012

3.3.1 Public Housing

In 2008, public housing output totalled £3.5bn (in 2005 prices), down 8% on the preceding year. This trend continued into the first nine months of 2009 where output declined by 6% to £2.5bn, when compared to the corresponding part of 2008. Although, public housing new orders in declined by 17% year-on-year to £2.2bn, they increased by 2% in the first three quarters of 2009 on an annualised basis.

The 2008-2011 National Affordable Housing Programme (NAHP) commits £8.4bn of funding over the three-year period to provide at least 155,000 new affordable homes, a much higher level of funding than in the previous two-year NAHP. In theory, this should be leading to a much higher level of delivery, however, the totality of funds available to Registered Social Landlords (RSLs) may not have increased due to the well-publicised reluctance of banks to lend at present as they recapitalise. Nevertheless, RSLs' ability to tap into the capital markets to raise finance should allow scope for moderate growth in the sector.

Furthermore, the government announced more than £1bn worth of funding for affordable housing during 2009, some of which has already begun to filter through into work on site. The first phase of the Kickstart Housing Delivery programme has seen 136 schemes receive funding, unlocking a total of around 10,300 new homes on mixed-use developments, and should serve to drive output growth over the next couple of years.

Public housing output is estimated to have continued declining last year, especially in the light of a significant contraction in new orders last year. However, the Homes and Communities Agency (HCA), the successor body to the Housing Corporation, has been working hard to improve the delivery of potential development sites for affordable housing and this, allied with an easing of credit conditions, should lead to a return to robust growth in the sector in 2010 and 2011. However, inevitable cuts in government spending, coupled with significantly higher levels of investment in the earlier part of the forecast, should see a rapid slowdown in the rate of increase in 2012.

3.3.2 Private housing

A combination of rapidly falling house prices – leading to a "wait and see" attitude amongst potential buyers – and tighter credit conditions has led to a substantial drop in private housing demand.
In Great Britain, private housing starts in the first half of 2009 reached 37,700, a fall of 47% when compared to the corresponding six months of the previous year but an increase of 1% on the preceding half-year. Over the same period, completions were down by a quarter on a year-on year basis to 55,900.

The private housing sector saw output decline by 19 per cent in 2008 to £14.9bn. Conditions failed to ease in the first nine months of 2009 as the sector contracted by more than 30% on an annualised basis. Private housing new orders also saw the same downward movement in 2008, as the figure fell by 43% to £6.9bn, the lowest level on record. On a year-on-year basis, the first three quarters of last year saw orders fall by 35% to £3.6bn.

The Royal Institute of Chartered Surveyors (RICS) Housing Market Survey for December 2009 showed that the gap between new buyer enquiries and new instructions to estate agents continued to reduce. Although enquiries rose for the fourteenth consecutive month to take the net balance to +20, this was the slowest pace of increase since January 2009. Meanwhile the net balance for new vendor instructions rose for the seventh successive month in December 2009 to +17, unchanged from the November level. However, demand for housing was still showing signs of outstripping supply, although the rate had eased.

The pace of annual house price falls has been weakening recently, according to the Nationwide and Halifax surveys of their mortgage clients and the official Department for Communities and Local Government's (CLG) mix-adjusted measure. All three measures indicated that the strongest rate of decline was in the first quarter of 2009, although both the Nationwide and Halifax indices saw more marked deflation than the CLG measure in that quarter. Since then, house price declines have eased on an annual basis, and the Nationwide has reported two quarter-on-quarter rises in the second and third quarters of 2009. In the three months to September 2009, the Nationwide index showed an annual fall of 3 per cent in house prices, while the Halifax and CLG measures indicated slightly stronger declines, of 6.4 per cent and 7.5 per cent, respectively. Lending and affordability data from the Council of Mortgage Lenders (CML) suggests that the number of mortgage approvals continued to increase in October. After reaching a low of 23,000 in January 2009, the number of loans for house purchase have followed a general upward trend and reached 55,300 in October. This was 9 per cent above September's figure and the largest monthly total since December 2007.

With the private housing sector having faced pressures from many sides during this recession, it is our estimation that output declined by 24% last year, having seen a contraction of 20% in 2008. However, with underlying demand still there for housing, output in the sector should begin to grow once again this year as economic conditions begin to improve. Following a moderate increase in 2010, output should increase in double-digits in each of the final two years of the forecast.

3.3.3 Infrastructure

In 2008, infrastructure output increased by 15% from the 2007 level of £6.2bn. The situation continued to improve in the first three quarters of 2009 as the value of output reached £5.9bn, a rise of nearly 8% on an annualised basis. The value of new orders in the sector tends to fluctuate wildly due to the prevalence of large projects. Keeping this in mind, new orders for infrastructure construction rose by 18% in 2008 to £5.9bn and by 53% in the first nine months of 2009, on an annualised basis.

In January 2009, the Department for Transport (DfT) confirmed its commitment to invest £6bn on national strategic roads, with this funding being in addition to the £3bn allocated over the period to 2015/16 to the strategic regional roads programme. Preliminary work has started on the country's largest roads project, the M25 PFI scheme, and should accelerate now that its financing has been agreed. Although the total value of this project has been put at £6.2bn, the new build element is estimated at £1.5bn.

In Scotland, Transport Scotland published in March 2009 its updated roads programme which noted that only six major schemes were currently under construction, including the £274m M74 project. Just four new starts from the programme are expected in 2009/10, the largest of which is the £30m A96 Fochabers to Mosstodloch upgrade. The largest roads project in the pipeline north of the border is the Forth Replacement Crossing, estimated to cost between £1.7bn and £2.3bn.

At the end of March 2009, Network Rail confirmed its capital programme for Control Period 4, which runs from April 2009 to March 2014. The company reported that this will cost a total of £35bn of which nearly £12bn would be invested on projects designed to increase capacity and capability, £11.5bn on replacing older parts of the network, such as track and bridges, and a further £11.4bn to be spent on day-to-day maintenance and operational costs.

The major projects in the enhancement programme are the £5.5bn Thameslink scheme, a total which includes over £1bn for new trains, around £2.3bn on Crossrail, the £600m transformation of Birmingham New Street Station, £450m at Kings Cross and £425m on improving the rail network at Reading Station. Other schemes include £300m on the new line from Airdrie to Bathgate, and £250m remodelling junctions on the East Coast Main Line. Meanwhile, preliminary works are underway on the £16bn Crossrail scheme and expectations are that work will go ahead as planned over the forecast period.

In its latest budget forecasts for 2009/10, TfL expects to spend around £2bn on capital works, although lower passenger numbers and the recession have affected some schemes. However, TfL has just announced some £800m of cost savings to narrow the funding gap caused by the collapse of Metronet.
In terms of major projects, TfL has put the total cost of the seven-year upgrade of Victoria Station at £695m with investment forecast at £75m in 2009/10, dropping to £60m in 2010/11 but rising to around £80m for each of the next four years.

The harbours sub-sector has expanded substantially in the past couple of years and this was expected to continue over the short to medium term, with a number of large ports projects – at Felixstowe, Harwich, Thames Gateway and Teesport – due to go ahead. However, only one – at Felixstowe – is currently under construction and the biggest, at Thames Gateway, is currently under review by DP World and will probably not now commence until at least 2011.

Following a small estimated increase in output last year, the sector should experience robust rises in both 2010 and 2011. However, much of the growth in these two years is predicated on Crossrail going ahead as currently planned, and if this proves not to be the case, then the increases in output will be much more modest. Although the rate of growth should slow in the final year of the forecast, the rise should still be reasonable.

3.3.4 Public non-residential

Public non-residential output in 2008 increased by 16% year-on-year to £10.7bn (in 2005 prices). At £9.9bn the value of output in the first nine months of 2009 continued to rise, by 27% on an annualised basis. The value of new orders in 2008 for the sector increased by a quarter when compared to the 2007 level of £6.5bn. The result for the first nine months of 2009 was less buoyant as orders increased by a relatively modest 8% year-on-year.

With £9.5bn of funding committed for Waves 1-4 of the BSF programme, the outlook for the education sub-sector in the short-term is reasonable. The latest data from Partnership for Schools shows that almost all projects in waves 1 and 2 are now on site, with one or two nearing completion, while the majority of the projects in waves 3 and 4 are yet to start.

For further education colleges, the 2009 Budget allocated an extra £300m in order to enable the Learning and Skills Council to fund a limited number of projects as part of the Building Colleges for the Future (BCF) programme. However, a large chunk of is expected to be used to fund the eight colleges already guaranteed funding.
The Budget also announced that the health sub-sector is expected to benefit from the fast tracking of £100m from the 2010/11 period into 2009/10 to fund Primary Care Trust's (PCT) local capital schemes. This will be made available alongside the already allocated £500m for the 2009/10 period. The Department for Health has outlined that the additional funds will be used as part of a programme to upgrade 600 general practise surgeries to advanced training practises.

The construction of all the new main venues and infrastructure in the Olympic Park is now well underway, with the Olympic Stadium roof terracing and roof supports now in place. Meanwhile, the structure of the Aquatics Centre roof and the first residential block of the Olympic Village is also complete, although work is ongoing on the remaining 10 residential blocks. Finally, the primary electrical substation was announced to be the first Olympic building to have reached completion.

The 'other' sub-sector should benefit from the prison programme in Scotland and the £175m scheme in Wolverhampton to build a 1,620-place prison. Work is due to start onsite in February 2010.

Following another year of strong growth in 2009, public non-residential output should see a slowdown in the rate of increase in 2010, although output at this point will have reached a very high level. The small decline in 2011 is mainly predicated upon the limited availability of funding for the BSF schemes post-Wave 4 of the programme, and work coming to an end on the Olympics venues. Output should continue to fall in the final year as the Olympics project falls out of the equation altogether, legacy work excepted.

3.3.5 Industrial

Output for industrial construction fell by 19% in 2008 to £3.9bn, the lowest level since 2003. This weakness continued into 2009 as the first three quarters declined by almost 37% on an annualised basis. At £2.3bn, new orders for the sector were down 27% year-on-year in 2008. The first nine months of 2009 showed no improvement as the value of orders reached £963m, down 46% when compared to the corresponding period of 2008.

Manufacturing output is expected to have fallen significantly in 2009 due to the global trade slump and the lack of domestic demand, thus there is little or no incentive for manufactures to invest either in plant, equipment or buildings in the short term.

Demand for new distribution and logistics facilities peaked in 2007 and has fallen off sharply since then. However, demand in this sub-sector is often linked to the development of new transport hubs or improvements to existing ones. Thus in the medium term we are predicting a return to growth in the sub-sector as ports development and expansion provides a boost. DP World's new Thames Gateway port, for example, is expected to generate demand for around £1bn of distribution and logistics facilities in its hinterland over the long term. However, with this project not now expected to start until 2011, it could be 2014 or beyond before we see any of this development materialise.

Due to the industrial sector's strong links with manufacturing, we estimate a 38 per cent decline in output for 2009 as a whole. Following a year of stagnation in 2010, moderate growth should return in 2011 as some life begins to return to the warehousing sub-sector. Finally, the improving economic climate should give rise to a more reasonable outturn in 2012.

3.3.6 Commercial

Although the commercial sector is made up of many components, activity in the sector is by and large driven by the three largest sub-sectors – offices, retail and leisure – which in 2008 accounted for 72% of the sector's output. Commercial construction grew by 1.6% in 2008 to

a new high of £22.5bn, in 2005 prices. However, the first nine months of 2009 got off to a poor start as the value of output declined by more than 23% on an annualised basis to £13.3bn. New orders for the sector fell by nearly 28% in 2008 to £12.7bn, the lowest outturn since 2004. In the first three quarters of 2009, orders were down by 51% when compared to the same part of 2008 as they reached £5bn.

Office, retail and leisure construction are driven in the main by the wider economic environment, corporate profitability and levels of consumer confidence and spending. Public capital investment, and the share delivered through PFI/PPP routes, is the primary driver of the health and education sub-sectors.

The health or otherwise of the offices market is in large part driven by growth in the financial and business services sector, and with a large concentration of this sector in London, it is easily the most important office market. After a rather surprising rise in the second quarter of 2009, the level of office space under construction resumed its downward path in the third quarter of the year according to GVA Grimley's Central London Office Briefing. The outturn of 1.17 million m2 of space under construction was the lowest since the first quarter of 2007 and was nearly 20 per cent down on the previous quarter. Since its peak in the first quarter of 2008 the amount of space under construction in Central London has fallen by 43 per cent.

The retail and leisure sub-sectors have not seen quite as big a fall off in new orders as the offices sub-sector, but they have still been substantial. Despite the recent buoyancy of retail sales, trading conditions remain tough, and there is the concern that increasing tax levels and a continuing willingness among households to reduce debt levels will act as dampeners on consumer spending growth. Nevertheless, these two sub-sectors may well return to growth in 2011, a year before office construction, in particular because there are a large number of stalled mixed-use developments across the country which have large retail and leisure elements and can be re-activated quickly once economic conditions improve.

The number and value of PFI health projects either on site or in the pipeline has been falling steadily for a couple of years and this is likely to continue. The general tenor of government announcements is that the '100 new hospitals by 2010' promise has largely been delivered and there is a move away from the focus on big hospital developments. Thus after a very good year in 2008, declines in activity are in the offing for the following three years.

There has been some evidence that consortia bidding for PFI education projects through the Building Schools for the Future (BSF) programme have been struggling to put together the finance required, hence falling levels of activity. However, growth in the public side of this programme has been so strong that it raises the suspicion that there may be some misallocation of output in the official statistics. With 40 per cent of BSF funding in Waves 1 to 4 to come through the PFI route, activity in this sub-sector should be on the rise, at least in the short term.

The commercial sector is expected to see a double-digit fall in output this year and a small contraction in 2011, before bouncing back with modest growth in 2012.

3.3.7 Repair and Maintenance

As is always the case, there is much more uncertainty around forecasts for the repair and maintenance sectors (R&M) due to the relative lack of data available for analysis.

There is little doubt however that the trend in output will be a continued downward movement this year next, although, as mentioned in the Overview part of this section, the decline may not be as pronounced as in the last recession in the housing sectors for a number of reasons:

- Output in the public housing R&M sector has been subsiding since 2005 whereas in the late 1980s it was growing strongly. There are renovation programmes for council stock in place this time around that didn't exist in the 1990s – Decent Homes in England, Quality Housing Standards in Scotland and Wales. If in the short term government policy is to mitigate the falls in construction employment then it is important to keep R&M expenditure up as it is a much more labour intensive sector than new work. Furthermore if social housing providers are turning to the rehabilitation of existing properties rather than new build to meet targets in the short term, then this would help the sector. However, these factors could mean a fall off towards the end of the forecast period as social housing providers solve the problem of access to new development sites and the public sector starts reining in expenditure as life returns to the private ones.

- In the 1990s private housing R&M output started falling well before GDP declined, but the reverse seems to have been true this time around. With interest rates so low and very little incentive to save, those with surplus income at their disposal and who feel secure may well spend on their properties, particularly on energy efficiency and microgeneration measures that could yield long term cost savings. Thus the overall decline may not be as bad as in the 1990s.

The non-residential R&M sectors are much harder to call because of their heterogeneous mix. Again, in the short term if government is looking to hold employment up then expenditure in this area is much more effective than expenditure on new work. Thus output may subside relatively slowly over 2010 and 2011, although this should be followed by a small bounce back in 2012.

The only sector for which we have a stronger overall decline this time around than in the 1990s is the private non-residential R&M one. This may seem a little odd considering that our forecasts for non-government fixed investment (not including dwellings) is not as bad for the 2008-2011 period as the outturn in the early 1990s. However, it has been predicated somewhat on the very disappointing first quarter figures. In terms of recent performance, output in the sector grew very strongly between 1999 and 2003, but since then the sector's performance has been more variable, while in the five years before the 1990s recession hit the sector, it showed almost continuous growth.

3.4 Construction in the devolved nations

3.4.1 England

At £95.2bn (in 2005 prices), construction output in England saw a small decline in 2008, albeit at a marginal rate of 0.6%. The year-on-year fall was a lesser one when compared to the UK average fall of 1% over the same period. New work output in England declined in 2008 by 3.1%, the first fall since 2005. In contrast, the R&M sector as a whole grew by 2.9% having seen a weak increase in 2007 of 1%.

In 2009, total construction output in England is estimated to have seen a double digit decline of around 13%, taking the value of output to the lowest level since 2001. Following another year of contraction in 2010, albeit a smaller one of 1%, the sector should bounce back with weak growth in the final two years of the forecast.

The public housing sector is estimated to have declined for the second consecutive year in 2009 to £2.6bn, a year-on-year fall of 13%. This fall is partly predicated on a significant decline in new orders last year. However, funding allocations from the £8.4bn 2008-2011 AHP are speeding up, thus in 2010 the sector is expected to bounce back strongly with growth of around 15%, before increasing once again in 2011 but by a smaller margin of 11% to £3.3bn. This is expected to bring the level of output to the highest level since 2007.

Output for private housing is expected to have decline for the third consecutive year in England in 2009. Having seen a marginal decline in 2007 and a fall of 20% in 2008, output is predicted to reach £9.4bn in 2009, a year-on-year contraction of around 26%. The sector is expected to grow moderately in 2010 and see double-digits increases in the final two years of the forecast. Despite the three years of growth to 2012, the value of output is projected to remain well below the 2006 peak of £15.8bn.

In contrast to the housing sectors, infrastructure output is estimated to have seen a third consecutive year of increase in 2009 to take the value of output to £6bn. However, the rate of increase is expected to have slowed from nearly 9% in 2008 to around 8% in 2009, with growth coming as a result of on-going projects such as Thameslink and the expansion of Felixstowe port. In 2010, infrastructure output should continue to grow more strongly, before seeing a slight slowdown in its rate in 2011, but with the rise remaining in double figures. The increase in 2012 should also be weaker when compared to the previous year's rate, although the outturn should be reasonable nonetheless. The Crossrail project is expected to be the main, but not the only, driver of growth in the final years of the forecast.

Following significant growth of nearly 21% in the public non-residential sector in 2008, output is estimated to have risen robustly in 2009. In 2010, the increase should be in single figures as the BSF programme and the Olympic build programme continue to fuel the growth. On a negative note, the Building Colleges for the Future programme has run into problems and it looks like only £1.2bn of the £2.3bn originally earmarked for projects under this scheme will now be available. The final two years of the forecast are predicted to see falls in output as the government starts to rein-in public expenditure post-election.

Prospects for industrial construction in the short term are very grim and another significant decline in activity is estimated for 2009 on top of 2008's fall, bringing the 2009 outturn to around £2.1bn, the lowest level seen for some time. In light of the moribund nature of the development pipeline in the sector, we have predicted a year of no growth for industrial construction in 2010, before growth returns in 2011. While prospects for some of the major players in the global economy, such as China, currently look a little brighter, the eurozone, within which sits our main trading partners, is likely to suffer a similar GDP decline as the UK. Thus there is no sign as yet of increasing export demand coming to the rescue of the ailing UK manufacturers in the short term. However, the final year of the forecast is predicted to see a quickening in the rate of increase as improving economic conditions provides the impetus for manufacturers to undertake construction.

Following five years of growth to 2008, commercial construction is set to experience a decline in each of the three years to 2011, before a small bounce back in 2012. The fall of 24% in 2009 is estimated to bring the value of output to £15.3bn, the lowest since 2004. Demand for office, retail and leisure space has dropped off substantially in recent quarters as the recession bites and the figures for both output and orders in the first and second quarters of this year have been very poor. While some of the large high profile developments, such as the Heron Tower and the Shard of Glass, are either on site or going ahead, probably under the premise that by the time they hit the market things will have improved, many other projects have been cancelled or mothballed. Issues of oversupply have resurfaced in a number of regional centres.

For the repair and maintenance sectors (R&M), both housing and non-housing are estimated to have seen declines in 2009. However, the rate of contraction is expected to slow in 2010 and 2011, before seeing a small bounce back in 2012. The contractions for the housing R&M sector over the three years to 2011 are likely to be less than that of the non-housing R&M sector and that seen in the early 1990's recession due to the renovation schemes in place for the social housing stock - Decent Homes for All in England.

Figure 16: Construction Output (current prices)

		2007	2008	2009	2010	2011	2012
Public Housing		3319	2946	2564	2945	3261	3291
	annual % change	16.4	-11.2	-13	15	11	1
Private Housing		15703	12093	9442	9911	10933	12009
	annual % change	-0.1	-19.5	-26	5	10	10
Infrastructure		5112	5555	5979	6961	7929	8558
	annual % change	3.3	8.7	8	16	14	8
Public Non-residential		7598	9153	10650	11499	11275	9954
	annual % change	-5.3	20.5	16	8	-2	-12
Private Industrial		4277	3379	2106	2104	2213	2384
	annual % change	2.2	-21.0	-38	0	5	8
Private Commercial		16388	19006	15247	12073	12537	12017
	annual % change	12.1	3.1	-24	-15	-3	3
TOTAL NEW WORK		55458	53723	45988	46393	48150	49114
	annual % change	4.5	-3.1	-14.4	0.9	3.8	2.0
Housing R&M		19077	20051	18773	18111	17849	18307
	annual % change	-0.5	5.0	-6	-4	-1	3
Non-housing R&M		20610	20810	17948	17213	16924	17094
	annual % change	2.4	1.0	-14	-4	-2	1
TOTAL R&M		40287	41462	36722	35324	34774	35451
	annual % change	1.0	2.9	-11.4	-3.8	-1.5	1.9
TOTAL ALL WORK		95745	95184	82709	81717	82923	84564
	annual % change	3.0	-0.6	-13.1	-1.2	1.5	2.0

3.4.2 Scotland

At £9.3bn (in 2005 prices), construction output in Scotland stagnated in 2008. In terms of new orders, following a solid performance in the early part of the decade, they fell again in 2008. Totalling £4.1bn (current prices), new orders were 12% below 2007's figure.

The October 2009 CECA Survey of Civil Engineering Workload Trends for Scotland showed that workloads of contractors in Scotland, compared with 12 months earlier, had deteriorated significantly. This was unexpected since the rate of decline for workloads had been showing signs of easing in the earlier part of the same year. Furthermore, workloads reductions and lower order books were recorded as having been more widespread across the nation when compared with England. Forward looking indicators from the survey suggest a lower level of activity over the following 12 months, based on more businesses expecting a decline, rather than a level of stability - which was the view held in July.

In real terms, output in the Scottish construction sector is estimated to have declined in 2009, as was the case across the UK as a whole. Growth is likely to return in 2010, with output increasing slowly in each of the three years to 2012.

Buoyant performances are forecast for the infrastructure and public housing sectors, with growth expected in each of the years between 2010 and 2012. For public housing, a 31% increase in funding from the Scottish Affordable Housing Investment Programme should drive growth in the sector, although the effect of this may not be felt until 2010. Meanwhile on the infrastructure front, the main driver of growth is transport investment, with its detailed spending plan showing a marked rise in roads expenditure over the next few years. A number of large-scale road and rail projects are currently underway, including the Edinburgh tram scheme, although the Glasgow Airport Rail Link has become a recent casualty of the recession. It is interesting to note that the infrastructure sector has increased its share of Scottish new work from 10% in 2006 to 19% in 2008, another example of how strongly the Scottish Government has been driving forward its transport investment programme.

In contrast, the private housing sector is estimated to have seen a further sharp contraction in output in 2009, despite expectations of market conditions bottoming out in the second half. However, output is forecast to bounce back reasonably strongly in 2010, with double-digit growth expected in 2011 and 2012.

Output for the public non-residential sector is expected to see a moderate increase this year, before a year of moderate decline in 2011 and a steep contraction in 2012. A number of college projects are underway, with more in the pipeline, but the focus is shifting towards PPP education projects with publicly funded ones becoming less prevalent.

With the manufacturing sector continuing to look weak and no major warehouse projects in the pipeline, industrial construction is set to have a tough time in the short term. Output is predicted to remain at the same level this year as that of 2009, before a small bounce back in 2011 and a modest increase in 2012.

The commercial sector has been hard hit by the economic downturn, with retailers affected by falling consumer confidence and planned company expansions put on hold. A number of developments have been mothballed, whilst others are struggling to obtain funding. Following a double-digit decline in 2010 and a year of stagnation in 2011, output should return to growth in the final year of the forecast.

Figure 17: Construction Output (in 2005 prices)

		2007	2008	2009	2010	2011	2012
Public Housing		371	437	449	546	598	620
	annual % change	10.9	17.8	3	22	10	4
Private Housing		1677	1619	1329	1422	1581	1787
	annual % change	-13.2	-13.7	-18	7	11	13
Infrastructure		729	1169	1158	1315	1471	1538
	annual % change	11.7	60.3	-1	14	12	5
Public Non-residential		921	875	908	960	916	729
	annual % change	-14.7	-5.0	4	6	-5	-20
Private Industrial		319	284	187	187	192	195
	annual % change	-14.8	-11.0	-34	0	3	1
Private Commercial		1085	1814	1216	1076	1081	1115
	annual % change	11.2	-8.5	-33	-11	0	3
TOTAL NEW WORK		6202	6197	5245	5506	5839	5985
	annual % change	-2.9	-0.1	-15	5	6	2
Housing R&M		1635	1639	1627	1714	1786	1847
	annual % change	-3.4	0.2	-1	5	4	3
Non-housing R&M		1471	1472	1312	1219	1168	1175
	annual % change	-5.1	0.1	-11	-7	-4	1
TOTAL R&M		3106	3110	2938	2932	2952	3022
	annual % change	-4.2	0.1	-6	0	1	2
TOTAL ALL WORK		9307	9307	8183	8437	8791	9007
	annual % change	-3.3	0.0	-12	3	4	2

3.4.3 Wales

Total construction output in Wales declined to £3.8bn in 2008, down almost 8% on the 2007 level of around £4.2bn (in 2005 prices). All of this contraction came via the new work sector, which declined by 12% to £2.4bn, while the R&M sector experienced growth of just under 1% to reach £1.4bn. In current prices, Welsh new orders for last year declined by 23% year-on-year to £1.5bn. Orders in the first nine months of 2009 continued to look weak, down 3% on an annualised basis.

Following an estimated decline of around 12% last year, total construction output for Wales is expected to bounce back with small growth in each of the three years to 2012.

New work is likely to have once again lead the decline in 2009, dropping by 16%, but it should also drive the upturn, rising by 4% in each of the following two years, and by 2% in 2012. The R&M sector is predicted to contract in 2010, down 1%, before returning to growth with an increase of 2% in 2011 and 3% in 2012.

The public housing market in 2010 is expected to be unable to sustain the significant level of growth seen in 2009, although the increased funding going into housing should give another year of double-digit growth. However, each of the final two years of the forecast should see a slowdown in the rate of growth as the government comes under pressure to reduce spending.

The December 2009 RICS housing market survey showed that the net price balance for Wales was in positive territory for the second consecutive month at the seasonally adjusted level of 7. This was after the balance had registered negative figures in each of the months following May 2007, reaching its worse level of -95 in April 2008. New work in the private housing sector is expected to see growth in 2010 in Wales after two successive years of declines previously. Although the rise should be moderate for this year, the rate of increase is predicted to improve each of the following two years to 2012.

The forecast for the infrastructure market for 2010 is for a recovery where output should bounce back with a 14% increase. Although the pace of growth should slow in each of the final two years of this review period, the rises should be strong nonetheless. By 2012, output could be more than a third higher than it was in 2008. Meanwhile for public non-residential construction, output in the sector is predicted to continue increasing by double digits in 2010, before seeing sharp deceleration in growth in 2011 to give a weak rise. The final year of the forecast is projected to see a contraction just short of double-digits

as government spending on large-scale public projects becomes increasingly constrained.

The 2009 third quarter RICS Commercial Market Survey showed that the percentage balance for office demand in Wales moved from the 0 mark in the second quarter to -29, indicating a decreasing trend. In contrast, the outlook for retail demand improved as the balance rose from -67 to 20 in the three months to September 2009, with Wales being one of only three (alongside Yorkshire and Humber and Central London) to see a positive outturn. Despite some signs of an upturn, our forecast suggest that the commercial sector will continue to perform poorly this year and next, before seeing a small rise in 2012. However by this time output will be at around half the level of the 2007 outturn of £802m.

The RICS Commercial Market Survey also showed that the balance for industrial demand increased from -25 in the second quarter to 57 in the third quarter of 2009, suggesting some recovery in the sector. Industrial output in Wales will see limited growth this year, but moderate year-on-year rises thereafter to 2012.

Figure 18: Construction Output (in 2005 prices)

		2007	2008	2009	2010	2011	2012
Public Housing		80	95	138	158	165	168
	annual % change	-8.3	17.9	46	14	5	2
Private Housing		776	536	404	425	464	516
	annual % change	0.2	-30.9	-25	5	9	11
Infrastructure		345	391	367	417	458	493
	annual % change	-14.5	13.3	-6	14	10	8
Public Non-residential		573	504	573	638	646	591
	annual % change	22.1	-12.1	14	11	1	-9
Private Industrial		189	198	97	98	102	106
	annual % change	-0.8	4.8	-51	1	4	4
Private Commercial		802	718	481	404	390	398
	annual % change	30.3	-10.5	-33	-16	-4	2
TOTAL NEW WORK		2765	2441	2061	2141	2226	2272
	annual % change	8.1	-11.7	-16	4	4	2
Housing R&M		770	798	768	793	835	880
	annual % change	-4.9	3.6	-4	3	5	5
Non-housing R&M		615	599	545	511	500	508
	annual % change	1.5	-2.8	-9	-6	-2	2
TOTAL R&M		1385	1395	1312	1305	1334	1388
	annual % change	-2.1	0.7	-6	-1	2	4
TOTAL ALL WORK		4150	3837	3374	3446	3560	3661
	annual % change	4.5	-7.6	-12	2	3	3

3.4.4 Northern Ireland

Total construction output in Northern Ireland is estimated to have declined to £2.8bn (in 2005 prices) in 2009, down around 3.6% on the 2008 level of £2.9bn. The R&M sector experienced a larger magnitude of decline, of 4.4% to £506m, while the new work sector saw a smaller fall of 3.4% to reach £2.3bn. Compared to the UK, R&M represents a low proportion of total output in Northern Ireland, just 18% versus 43%.

The Ulster Bank Construction Purchasing Managers' Index (PMI) pointed to a further deterioration of business conditions in the Irish construction industry in December 2009. Activity, new business and employment were all reported to have fallen at faster rates in the month. Furthermore, firms forecast that activity would be lower in the following 12 months that the current levels. Dropping to 33.1 in the December of last year, the seasonally adjusted index fell for the thirty first consecutive month, with the decline the steepest since May 2009. The report also suggested that anecdotal evidence showed that work coming out of the pipeline (due to projects reaching completion) was not offset by new work to replace it.

Northern Ireland benefits from a very big public investment programme - £18bn over 10 years to 2018, if it goes ahead as planned. Total spending is projected to reach £4.287bn between 2008 and 2011

The public housing sector in Northern Ireland is expected to see growth this year and next as funding of £205m to deliver 5,250 new social housing units (2008-11) provides a boost for the province. However output should see a decrease in the final year of the forecast as the current funding level comes of the equation, with little in the way to replace it. In the private housing sector, Northern Ireland is predicted to return to growth weakly in 2010, following three consecutive years of decline.

The increases in the final two years of the forecast are predicted to be relatively stronger but nonetheless still moderate.

The infrastructure sector should see growth in each of the three years to 2012, although the rate of increase should slow year-on-year. Nearly £450m of roads work have now had funding confirmed, with the largest project so far being the dualling of the A1 between Beech Hill and Cloghogue, worth an estimated £152m.

The 2009 third quarter RICS Commercial Market Survey showed that the percentage balance for office demand in Northern Ireland moved from -29 in the second quarter to 0, indicating a neither increasing nor a decreasing trend. Meanwhile, the balance for retail demand remained negative. However, both sectors continued to experience an increase in available floorspace and a fall-off in starts on new developments. The story was broadly the same for the industrial sector, with the balance of demand remaining negative in an environment where the level of available floorspace was increasing and starts and completions on new developments falling. It is expected that the steep decline last year will have taken industrial output to such a low level that any further falls over the review period in Northern Ireland are almost inconceivable. However, the commercial sector should see a later return to growth, where following another decline in 2010, output is predicted to grow modestly in 2011 and 2012.

Following a year of significant growth in 2009, the public non-residential sector is expected to see another rise in 2010, albeit a smaller one of 9%. However, as government expenditure begins to fall back, output is expected to contract at an increasing rate in 2011 and 2012.

In the R&M market, the availability of further funds for the Warm Homes Initiative and the Decent Homes standard post-2010 should help housing R&M output to return to growth in the final two years of the forecast, following predicted declines in 2009 and 2010.

Construction Output (in 2005 prices)

		2007	2008	2009	2010	2011	2012
Public Housing		160	168	203	209	218	207
	annual % change	-19.9	4.8	21	3	4	-5
Private Housing		1073	793	692	699	725	762
	annual % change	-5.2	-26.9	-9	1	4	5
Infrastructure		377	499	587	589	630	634
	annual % change	17.8	32.5	14	4	7	1
Public Non-residential		385	383	475	518	505	467
	annual % change	4.3	-0.7	24	9	-3	-8
Private Industrial		76	97	63	66	69	72
	annual % change	0.0	26.6	-35	4	6	3
Private Commercial		520	488	318	304	308	315
	annual % change	3.5	-6.1	-35	-4	1	2
TOTAL NEW WORK		2591	2399	2318	2385	2456	2455
	annual % change	-0.3	-7.4	-3	3	3	0
Housing R&M		213	225	210	205	207	212
	annual % change	-1.3	5.6	-7	-3	2	2
Non-housing R&M		319	305	296	294	300	303
	annual % change	6.6	-4.5	-3	-1	2	1
TOTAL R&M		532	530	506	498	507	515
	annual % change	3.3	-0.5	-4	-2	2	1
TOTAL ALL WORK		3123	2928	2824	2883	2963	2970
	annual % change	0.3	-6.2	-4	2	3	0

3.5 Summary

In 2009, all four of the devolved nations are estimated to have experienced declines in total construction output from the previous year. Although the R&M sector contracted in each of the four nations, the year-on-year declines for new work were comparatively steeper, with the exception of Northern Ireland. The larger size of the new work market, relative to R&M, means it has a greater influence on total output.

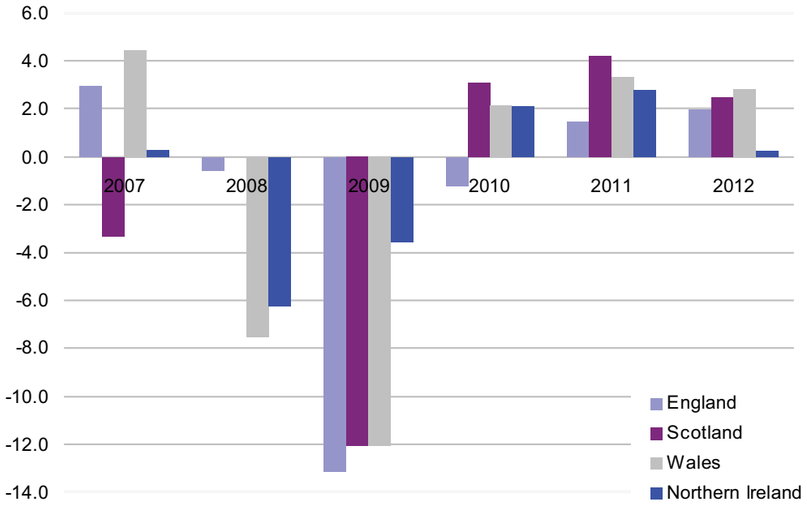
This year all of the devolved nations are forecast to return to growth, with the exception of England which is likely to continue contracting for the third consecutive year, albeit weakly. This is expected to be as a result of the R&M sector contracting by almost 4%, in contrast to the new work sector which is predicted to see a 1% year-on-year increase in output. Wales and Northern Ireland should see the same growth rates, of 2.1%, while Scotland is set to be the best performer with a rise of 3.1%. The new work sector is expected to be entirely responsible for growth in the three smaller devolved nations.

In 2011, the rates of growth are forecast to increase for each of the devolved nations year-on-year, with Scotland

predicted to see the strongest rise of 4.2%. In contrast, although England is predicted to return to growth with an increase of just 1.5%, the rise in output is expected to be the weakest, with new work projected to be entirely responsible for the increase. Meanwhile, Wales is likely to see a rise in output of 3.3% in 2011, while Northern Ireland should see a growth rate of 2.8%.

Although all of the devolved nations should continue seeing a rise in output in 2012, England should be the only one to see an improvement in its rate. However at 2%, the increase should be behind that of Scotland (2.5%) and Wales (2.8%), but greater than Northern Irelands' 0.2%.

Figure 19: Devolved Nations Construction Output Growth Rates (2007-2012)



4 The impact of the recession on the construction professions

4.1 Overview

- The Royal Institute of British Architects (RIBA) Future Trends Survey, which monitors business and employment trends in the profession, indicated that the staffing levels in April 2009 as a percentage of the figure 12 months earlier was 83%. Meanwhile, the Association for Consultancy and Engineering's (ACE) 2009 State of Business report revealed that 68.2% of member firms saw their staffing levels decrease.

- In terms of membership numbers, the Institute of Highways and Transport (IHT) suggested that the figure continued to increase, albeit at a significantly slower rate. However going forward, the institute predicted falling numbers if the profession contracted.

- The increase in claimant count, in percentage terms, over the period between November 2007 and November 2009 was the greatest for architects, quantity surveyors and managers in construction and the lowest for electrical engineers, mechanical engineers and town planners. However, the claimant count for each occupation as a percentage of the total number working in that profession showed that mechanical engineers had seen the highest level of unemployment over the 9 quarters to November 2009, followed by architects, quantity surveyors and civil engineers.

- In 2009 and 2010, total employment for construction professionals in the economy as a whole, and within the CSN footprint, is expected to decline. However in the final two years of the forecast, employment should begin to grow once again, albeit modestly.

- It should be remembered that not all construction professionals work in construction. According to the labour force survey (LFS), of the professional occupations chosen within the context of this report, only 64% work of the total workforce was employed within the ConstructionSkills footprint of SIC 45 and 74.2 in 2008.

- For the architecture profession, total employment in the economy as a whole is estimated to have seen a double-digit decline in 2009. However, the rate of contraction is predicted slow year-on-year in 2010 and 2011, before a small bounce back in 2012. The 2005/06 Construction Professional Services Survey indicated the highest level of architects' 'engagement' was in the private residential sector, although the likelihood is that the high level of speculative development of residential units inflated the figure. With private house building suffering heavily in the current climate, those practices previously focused on this market will be particularly vulnerable to contraction unless they have been able to move into other, less affected, markets. It must be kept in mind that practises may have changed their focus from one sector to another since the time of the 2005/06 survey.

- Total employment for civil engineers in 2010 is expected to continue contracting, before returning to growth in the final two years of the forecast. Since the occupation's level of engagement was the highest in the private and public building sectors according to the 2005/06 survey, the profession should suffer from falling workloads in the industrial and commercial sectors over some of the forecast period, but be offset somewhat by the buoyancy of the public non-residential and infrastructure sectors.

- Similar arguments apply to the quantity surveying profession, where due to their high level of activity in the private building sector at the time of the survey, the occupation is estimated to have seen a decline in employment of almost 4% in 2009. In 2010, the numbers employed in the occupation should grow modestly, before growing more strongly in 2011 and 2012 with increases of 2% and 1.8%, respectively.

- Managers in construction are estimated to have seen a smaller fall in employment, in percentage terms, in 2009 than the overall fall in construction output for the same year. The matching trend alongside that of total output is an important one since the occupation was seen to generate fee income across a wide range of sectors in the 2005/06 survey. Following another fall this year, and a marginal contraction in 2011, employment for managers in construction is forecast to return to growth in 2012.

- Employment for mechanical and electrical engineers is expected to move in the same direction over the forecast period. Following an estimated decline of 9.4% in 2009 and a 2.6% contraction in 2010, the two should return to growth in the final two years of the forecast. Town planning professionals should also see the same trend.

- Construction graduates are expected to suffer heavily as a result of the downturn, with Building magazine's survey of newly qualifieds indicative of this. The inflated numbers entering the job market are partly put down to the government increasing university places in the earlier part of the decade and the extended lag period for construction graduates to finish university education.

The improved image of the industry is also likely to have played a part.

- On the other side of the coin, the numbers taking early retirement from industry are expected to increase on the assumption that prospects in the industry will remain unattractive over the forecast period. Meanwhile others are likely to choose not to re-enter following redundancy, although anecdotal evidence suggests that the number doing this will be low.

- Finally, of the construction industry institutes examined, all have put measures in place in one form or another in order to help their members. These include help with issues such as redundancy, guidance on undertaking a period of study, advice with setting up private practices, running of seminars by institutes and the use of a help line for members.

4.2 A view from some of the institutions

The **Royal Institute of British Architects** (RIBA) Future Trends Survey monitors business and employment trends affecting the architects' profession. A positive balance indicates improving prospects, while a negative outturn is suggestive of deteriorating conditions. In November 2009, the workload balance reached +19, a small increase from the previous month's +15. The indicator was reported to have stood at around the same level since July 2009, thus painting a picture of cautious optimism with survey participants expecting an increase in overall workloads in the short to medium term. Furthermore, the results from the survey pointed to the larger practises feeling most confident about work to come online – the first time this has happened since the inception of the survey. Also, the sector breakdowns showed that private housing showed the most confidence in terms of workloads, while the commercial and public sectors lagged behind.

The RIBA future trends staffing index for November 2009 registered -1, indicating that architects expect to employ fewer permanent staff in the three months to February 2010. On a somewhat brighter note, the index has steadily become less negative since the low registered in February 2009, thus showing practises' less pessimistic outlook. The indicator has a clear link with the workload index since employers tend to recruit in line with the amount of work expected to come be available. Although the workload index has entered positive territory, the staffing balance was reported by the RIBA to lag it by some six to eight weeks. Therefore the outlook in regards to the recruitment of architects is unlikely to remain weak for much longer.

In the April 2009 RIBA survey, participating architects were asked to assess their current workload as a percentage of their workload twelve months previously. The mean workload figure came to 69%, demonstrating that on average architects had seen a reduction in workload of almost a third. Over the same period, practises were asked to assess their current permanent staffing levels as a percentage of the level twelve months previously. This was reported to be 83%, indicating that practices were attempting to retain as many staff as possible in anticipation of future recovery. Furthermore, survey participant were asked to assess their level of student employment (year-out and post-part 2) as a percentage of the number employed twelve months earlier. This was reported to be only 55% of the level a year ago, strongly suggesting that it is those at the bottom of the career ladder that are suffering most in this recession. This raises concerns for the future. One of the perennial problems cited by many practices when asked is that of graduates entering the job market with little or no practical experience. The results of this survey indicate that this problem may well get worse.

The personal indemnity insurance renewals figures for architects also provided an insight into the how the profession fared in the downturn. The RIBA Insurance Agency reported that declared income had fallen by 23% for smaller practises, while for larger practises (those earning fee incomes of more than £1m, income had fallen by 39%.

The A**ssociation for Consultancy and Engineering's** (ACE) 2009 State of Business report showed that 68.2% of member firms saw their staffing levels decrease in the 12 months to the summer of this year. Over the same period, 10.6% had reported an increase in their employee numbers, while the remaining 21.2% did not see any change. Looking forward, 64.9% of survey respondents felt they would keep their staff numbers at the same level in the second half of 2009, while 28.5% would reduce the headcount from the current level. Firms were less pessimistic about reducing their staff in 2010, with only 4% predicting this to be the case, while 30.5% expected to increase numbers from the existing level. The mood was even more upbeat for 2011, with 68.2% of member firms predicting to increase their workforce compared to just 0.7% projecting a decrease. Those surveyed were also questioned in regards to the ease with which they had been able to recruit over the previous year. Unsurprisingly, 38.4% had found it significantly easier, most likely due to a much larger pool of candidates from which they were now able to choose from. 29.1% stated that recruitment had become only slightly easier, while bizarrely 27.2% felt that recruitment difficulties had remained unchanged. A very small number thought that recruitment had become slightly more difficult, or significantly more difficult, at 2% and 3% respectively. The survey also questioned member firms about the types of issues facing them in the current downturn. Redundancy was the option chosen by 81% of respondents, while 58% cited a reduction in staff wages. 40% of firms had had to lay-off/resort to short-term working and 45% had changed the terms of their contracts e.g. shorter hours, full time to part time working etc.

Qualitative feedback from the **Institute of Highways and Transport** (IHT) suggests that membership numbers have held up reasonably well during the recession, although there has been anecdotal evidence of the institute's members taking up available discounts when applicable. Growth in membership (which had run at 3-4% per annum in recent years) was reported to have slowed significantly but not to have come to a standstill. Several reasons were suggested for this, including that employees feel the need to 'tidy up' their CVs should they lose their jobs in the near future by having their qualifications at the ready. Therefore people were tending to re-join if their membership had lapsed, if they had completed their qualifications or upgrade if they were eligible for a higher grade of membership.

Furthermore, it was mentioned that the decision to retain membership by individuals in the IHT was value-based if they intended to stay in employment, in that they were unlikely to dump all their professional affiliations. However, members were likely to reassess the need for multiple professional memberships. What memberships would be retained and what would be allowed to lapse very much depends on individual preference - the larger professional organisations tend to be more expensive but also tend to provide more member services than smaller organisations. Going forward, the IHT predicted a fall in membership numbers if the entire profession contracts. This is likely to be compounded by the institute's decision to re-set the annual subscription fee for this year in August 2008, before the realisation of the extent of the downturn.

4.3 Relating the 2005/2006 CPS survey results with employment and output forecasts

4.3.1 Headline findings from the Survey of UK Construction Professional Services 2005/2006:

In 2006, Davis Langdon Consulting and Experian undertook the third size and structure survey of the construction professional services sector on behalf of the Construction Industry Council. The remit of the survey was to scope out the overall size of the sector and its breakdown into types of practice, work, construction sector and region.

The results showed that when broken down by broad categories of work, the majority of construction professional services (CPS) fee income was generated in the following proportions:

- Residential – 42%, or £5.8bn
- Building – 43%, or £6.0bn
- Infrastructure – 15%, or £2.1bn

Furthermore, the data collected from the survey indicated CPS firms provide the following inputs to various types of building projects (as a proportion of all building work):

- Offices – 24%, or £1.45bn
- Retail outlets – 12%, or £0.75bn
- Leisure facilities – 11%, or £0.64bn
- Educational buildings – 16%, or £0.96bn
- Healthcare facilities – 9%, or £0.53bn
- Factories and warehouses – 14%, or £0.82bn
- Other buildings – 14%, or £0.85bn

In terms of their broad procurement category, the breakdown of CPS inputs to Private and Public projects was as follows:

- Private – 75%, or £10.5bn
- Public – 25%, or £3.4bn

The survey also revealed that almost two-thirds of fee income in the professional services sector is earned on new work (62%), with 32% being earned on refurbishment and the balance – 6% being earned on repair and maintenance. Should there be a shift towards more R&M work during, or following, the recession, this could have significant implications for professionals' workloads. The expected impact would be a reduced level of fee income being earned by professionals due to the lesser need of their skills, although the workload of trades-people would likely increase – especially since R&M is particularly labour intensive.

A third of all CPS fee income was generated on projects in the South East and Greater London, while the South West and Scotland were also of note. A greater proportion of fee income was found to have been earned on new build projects in the South East and Greater London. Firms were asked to allocate their fee income to the regions where their relevant projects were located, as opposed to the location of their corporate offices. It was estimated that the gross levels of fee income generated in each region of the UK was as follows:

- North East – £0.36 billion (3%)
- Yorkshire & Humber - £0.69 billion (5%)
- East Midlands - £0.83 billion (6%)
- East of England - £0.33 billion (7%)
- South East - £2.61 billion (20%)
- Greater London - £1.82 billion (13%)
- South West - £1.43 billion (10%)
- West Midlands - £1.02 billion (7%)

• North West - £1.18 billion (8%)

• Wales - £0.61 billion (4%)

• Scotland - £1.45 billion (10%)

• Northern Ireland – £0.97 billion (7%)

The regional pattern of fee income was broadly in line with contractor's output in the same period, in that a large proportion of all income was generated in Greater London and the South East. Indeed, contractors output in these regions accounted for 33% of all work in 2005.

At a devolved nation level, the above results equate to the following:

• England – £10.27bn (77%)

• Wales – £0.61bn (5%)

• Scotland – £1.45bn (11%)

• Northern Ireland – £0.97bn (7%)

This shows that England's fee income accounts for more than three-quarters of the UK total. Scotland was the next biggest at £1.45bn, constituting approximately 11% of the total, and Northern Ireland at around 7%. Wales' fee income was the smallest at £0.61bn, only 5% of the UK total.

Of the non-residential building sectors, offices generated the largest proportion of fee income, and geographically this would be strongly skewed to London and the South East, given the size of the financial and business services sector in those areas. With the downturn particularly affecting the offices sub-sector, the impact on the construction workforce in London and the South East is likely to be disproportionate, unless those practices with a strong presence in the sub-sector have managed to be fleet of foot.

The decision to specialise by a firm in work on particular types of building is borne out of a desire to increase their competitive advantage by developing a core competency within that sector of the industry. However, this does leave such specialist practices much more vulnerable than more generalised practices in a downturn. While total construction activity will contract during a recession, this contraction will not necessarily apply across every sector, thus practices with multi-sector coverage will have more opportunity to shift from sectors that are declining to ones that are still growing. Unless the 'niche market' practice happens to be working in one of the sectors that is still buoyant then it is very vulnerable to the recession and will almost certainly find it more difficult to obtain work in other sectors where it has not had a presence in the past than practices that have.

As well as 'horizontal' diversification, firms may also benefit from 'vertical' integration during the course of the recession. The recent merger between Davis Langdon, whose core business is quantity surveying and cost consultancy, and DEGW - a design consultants firm - shows that some firms are looking at streamlining their processes to be more cost effective for clients in the current recession and are looking to offer a more complete service.

Although the 2005/06 survey looked at which parts of the UK generate what proportion of fee income, it must also be remembered that not all of the professionals' income is derived from the UK. For example, architects practises may undertake work overseas, and vice versa. Since there is no mechanism in place to record the flow of fee incomes between the UK and overseas, this introduces a further margin of error and gives lesser ability to have insight into firms' strategies in place to combat the recession i.e. do firms turn to work overseas in order to compensate for the fall-off in work in the UK?

4.3.2 Relative size of professional occupations across the economy and within the ConstructionSkills footprint

Figure 20: Percentage share of occupations within the Whole Economy in 2008

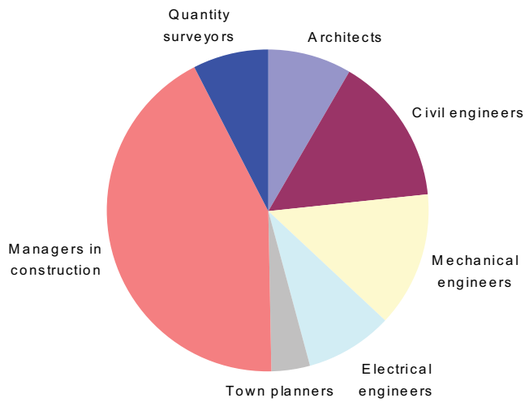
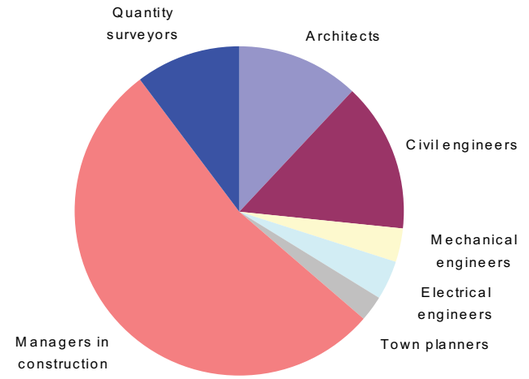


Figure 21: Percentage share of occupations within the ConstructionSkills Footprint in 2008



An important point to be made, which is sometimes forgotten, is that a significant proportion of professionals do not work within construction as defined by the ConstructionSkills footprint – of SIC 45 and 74.2. The table below shows the industries in which some of these professionals work.

Figure 22: % of each occupation working in each industry (UK, 2007)

Occupation group	Agriculture, hunting & forestry	Mining & quarrying	Manufacturing	Electricity, gas & water supply	Education	Health & social work	Other community, social & personal services
Construction managers	1%	1%	36%	2%	1%	2%	3%
Civil engineers	0%	2%	7%	6%	0%	0%	2%
Other construction professionals …	0%	2%	44%	4%	2%	1%	2%
Architects	2%	2%	2%	0%	0%	1%	0%
Surveyors	0%	1%	2%	0%	0%	0%	1%

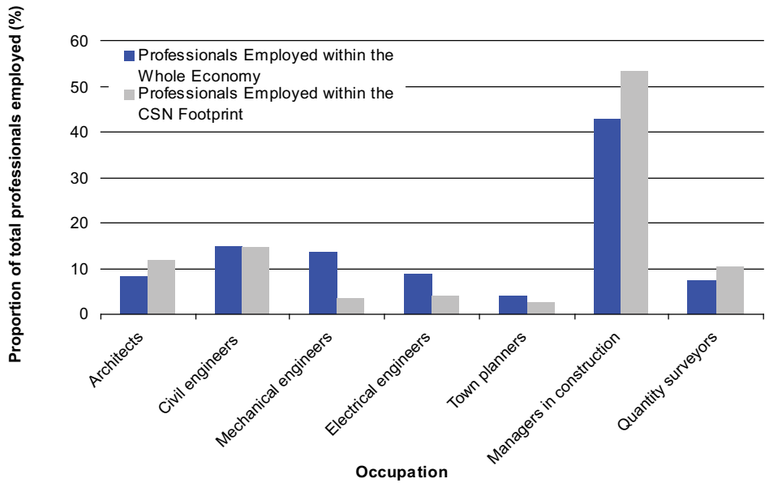
Occupation group	Construction (SIC45&74.2)	Wholesale, retail & motor trade	Hotels & restaurants	Transport, storage & communication	Financial intermediation	Real estate, renting & business activities	Public administration & defense
Construction managers	27%	5%	1%	9%	1%	8%	4%
Civil engineers	71%	1%	0%	4%	0%	4%	3%
Other construction professionals …	22%	3%	0%	7%	0%	6%	7%
Architects	82%	0%	1%	0%	1%	6%	4%
Surveyors	65%	1%	0%	1%	2%	21%	6%

In the economy as a whole, the largest group of professionals was managers in construction, accounting for approximately 43% of the total employed in 2007 and 2008. The ONS defines this occupation as 'managers in construction plan, organise, direct, coordinate the construction and maintenance of civil and structural engineering works including houses, flats, factories, roads and runways, bridges, tunnels and railway works, harbour, dock and marine works and water supply, drainage and sewage works'. Therefore it is not surprising to see that the number is a large one considering the span which the definition of the standard occupation code (SOC) encompasses. Civil and mechanical engineering professions each held around 14% of the total professional market in 2007, although the mechanical engineering occupation was the slightly bigger one. In 2008 this changed as the number of civil engineers employed grew strongly while the mechanical engineering occupation fell back. This brought the share of the former to 15%, while the latter remained unchanged at 14%. Although in 2007 architects and electrical engineers held similar shares of 9% each, the following year saw architects drop their share by one point to 8% as the numbers employed in the economy declined, while electrical engineers stayed at around the same level. Town planners made up 4% of the total professional workforce in 2007 and 2008, while quantity surveyors saw their numbers increase in 2008 to take the occupation's share from 6% in 2007 to 7% in 2008.

In 2008, the civil engineering occupation within the ConstructionSkills footprint made up 15% of the total

professional workforce, the same proportion as that when compared to the UK economy as a whole. However over the same period, the mechanical and electrical engineering occupations accounted for just 3% and 4%, respectively, of the total professional employment, much smaller than the 14% and 9% shares seen in the economy as a whole. This is down to the nature of skills held by the two occupations in that they are relevant and applicable across different industries in the economy. This thereby affords greater flexibility in terms of being able to move from one industry to another once conditions begin to get tough.

Figure 23: Comparison of occupations across the ConstructionSkills footprint and the economy



For town planners, the occupation's size as a proportion of total professional employment in 2008 within the context of the ConstructionSkills footprint was approximately the same as that of the economy as a whole. Unsurprisingly, the story for architects, managers in construction and quantity surveyors was different. All three held noticeably larger shares with the ConstructionSkills footprint when compared with the economy as a whole, with architects at 12% (to 8% for the economy), managers in construction at 53% (to 43%) and quantity surveyors at 10% (to 7%). The nature of the occupations' technical skills can be argued to be relatively more specific to the construction industry as defined by the CSN footprint (SIC 45 and 74.2), hence their greater prominence within that context.

A key assumption derived from this, and upon which we base our later reasoning, is that the prevalence of a certain occupation (due to the nature of their activity) across the different sectors of the economy can be beneficial to that profession during a downturn. This is expected to be as a result of greater workforce mobility across different industries during a period of high unemployment in one sector. In the three years to 2011, it is expected that nearly all of the occupations' size as a proportion of total employment will remain broadly unchanged from the 2008 level. In the CSN footprint, architects are likely to lose a percentage point from its share of total employment in 2010, as are managers in construction in 2011. Conversely, Quantity Surveyors are projected to see their share increase by the same magnitude in 2011.

Figure 24: Occupations' share as a proportion of total professional employment (%)

	2007	2008	2009	2010	2011	2012
Architects (Economy)	9	8	8	8	8	8
Architects (CSN Footprint)	13	12	12	11	11	11
Civil engineers (Economy)	14	15	15	15	15	15
Civil engineers (CSN Footprint)	16	15	15	15	15	15
Mechanical engineers (Economy)	14	14	14	14	14	14
Mechanical engineers (CSN Footprint)	4	3	3	3	3	3
Electrical engineers (Economy)	9	9	9	9	9	9
Electrical engineers (CSN Footprint)	3	4	4	4	4	4
Town planners (Economy)	4	4	4	4	4	4
Town planners (CSN Footprint)	3	3	3	3	3	3
Managers in construction (Economy)	43	43	43	42	42	42
Managers in construction (CSN Footprint)	53	53	53	53	52	52
Quantity surveyors (Economy)	6	7	8	8	8	8
Quantity surveyors (CSN Footprint)	8	10	11	11	12	12

4.4 Rising unemployment among professionals

In broad terms, the claimant count for the occupations began to increase at the end of 2007. It fell back slightly in the three months to May 2008, before rising once again in the three months to August 2008. The rate of increase for the claimant count continued to rise over each of the subsequent three quarters to February 2009, before showing signs of easing to August 2009. Finally in the three months to November 2009, the claimant count actually reduced across all of the chosen occupations, with the exception of the civil engineering profession, which experienced a rise.

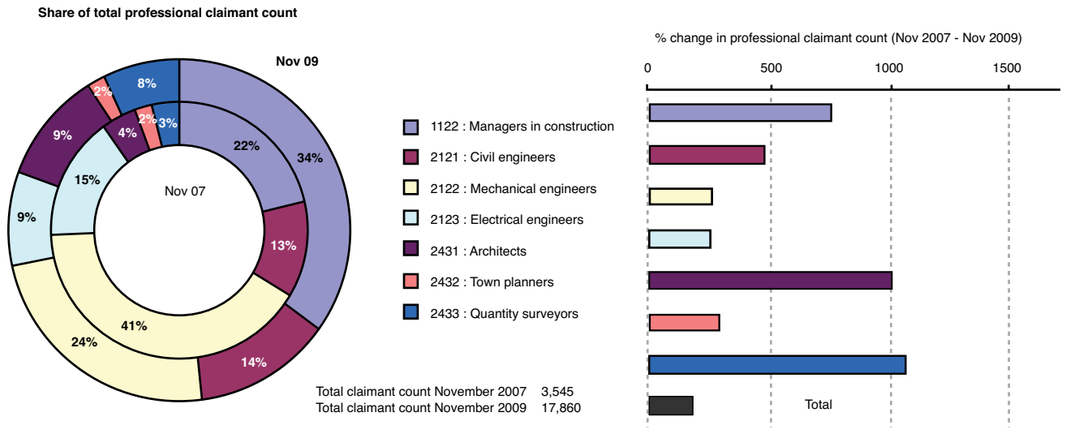
Figure 25: Claimant count by Standard Occupational Classification – Main Occupations

Date	Managers in construction	Civil engineers	Mechanical engineers	Electrical engineers	Architects	Town planners	Quantity surveyors	Building inspectors	Estimators, valuers and assessors
November 2007	720	410	1,320	495	145	70	110	65	21
February 2008	845	445	1,395	545	150	60	135	65	24
May 2008	1,020	440	1,250	520	135	45	150	45	22
August 2008	1,875	650	1,490	595	340	115	315	60	31
November 2008	3,355	995	1,900	755	670	155	485	100	45
February 2009	5,610	1,710	3,275	1,205	1,245	165	895	120	67
May 2009	6,600	2,200	3,975	1,510	1,690	230	1,270	150	76
August 2009	5,965	2,335	4,310	1,570	1,995	300	1,370	180	78
November 2009	5,730	2,390	4,105	1,560	1,560	270	1,310	165	75

The professions which saw the largest increases in their claimant counts between November 2007 and November 2009 were managers in construction and mechanical engineers, where for the former occupation the number grew from 720 to 5,730, and for the latter the figure rose from 1,320 to 4,105. In contrast, the occupation to have seen the smallest increase in its claimant counts was building inspectors, rising by 65 to 165 over the same period. However, when measured as a proportion of the November 2007 level, architects and quantity surveyors had seen the largest increase in the claimant count in November 2009.

One must be careful in the way the above claimant count figures are interpreted. Although at face value it seems that architects and quantity surveyors have fared the worst so far in relative terms, the story may be different when looking at these claimant counts as a proportion of the total number employed in that particular occupation. This is looked at more detail in the later part of this chapter and is more revealing of what is actually happening on an occupation-by-occupation basis.

Figure 26: Claimant count comparisons for professionals



As was highlighted in the previous section, electrical and mechanical engineers and town planners' tend to be spread more widely across the economy than other professionals and this should, in theory, give them relatively greater immunity from the effects of the downturn. Therefore it is not surprising to see the claimant count percentage increases for architects, QS, and construction managers at a much higher level than electrical and mechanical engineers and town planners between November 2007 and November 2009.

Another explanation for the higher claimant count for some categories of occupation may be due to the 'front-end' nature of the occupations (i.e. they are largely involved in the early stages of the construction process). Architects especially tend to be involved at the start of a construction timeline – the design stage, while construction managers and QS' often work on projects from inception to completion as they manage processes and control costs, respectively. Conversely, electrical and mechanical engineers have greater involvement towards the latter stages of a project, thus increases in unemployment for these occupations may lag that of other occupations.

The two charts above show that managers in construction, architects and quantity surveyors saw the largest changes in their claimant counts, illustrating the points that they are more susceptible due to the 'front-end' nature of the occupations.

Figure 27: Claimant count as a proportion of total occupational employment

Date	Managers in construction	Civil engineers	Mechanical engineers	Electrical engineers	Architects	Town planners	Quantity surveyors
November 2007	0.3%	0.5%	1.6%	0.9%	0.3%	0.3%	0.2%
February 2008	0.3%	0.5%	1.7%	1.0%	0.3%	0.3%	0.3%
May 2008	0.4%	0.5%	1.5%	1.0%	0.3%	0.2%	0.3%
August 2008	0.7%	0.7%	1.8%	1.1%	0.7%	0.5%	0.7%
November 2008	1.3%	1.1%	2.3%	1.4%	1.3%	0.7%	1.1%
February 2009	2.2%	1.9%	4.0%	2.3%	2.5%	0.7%	2.0%
May 2009	2.5%	2.4%	4.9%	2.8%	3.4%	1.0%	2.8%
August 2009	2.3%	2.6%	5.3%	2.9%	4.0%	1.3%	3.1%
November 2009	2.2%	2.6%	5.0%	2.9%	3.2%	1.1%	2.9%

However the story is slightly different when the claimant count is analysed as a proportion of the total employed on an occupation-by-occupation basis. Mechanical engineers were shown to be the ones with the highest ratio at 5% in November 2009, a 3.4% change from the November 2007 level where the claimant count was broadly at low levels across the occupations. Over the same period, architects saw a 2.9% increase in the ratio, while quantity surveyors saw a 2.7% change in the same direction. Civil and electrical engineers followed with rises of 2.2% and 2%, respectively, over the two years to November 2009, while managers in construction experienced a climb in their claimant count by 1.9%. Town planners saw the smallest increase at 0.8%, although this may be put down to a large proportion of these professionals being employed in local government – which has fared better in employment terms than the private construction sector during the downturn.

The outturn for mechanical engineers was not particularly surprising. Although the occupation has to some extent weathered the storm a little better due to the greater breadth of sectors across which it is spread, its exposure to the manufacturing sector – which has seen significant declines in output – has meant that the profession has also seen a steep rise in unemployment. The results for architects, quantity surveyors, civil engineers and managers in construction were in line with expectations due to the occupations' involvement at the earlier stage of the construction process and because their highest levels of activity are generated within the construction industry (as defined by the ConstructionSkills footprint of SIC 45 and 74.2), rather than being more widely spread across the economy.

A point which must be kept in mind when looking at the claimant count is that it does not necessarily reflect the totality of unemployment because there may be those in the market who are unemployed but do not claim benefits and therefore would not be included in these statistics.

Figure 28: Claimant count by Standard Occupational Classification – Subsidiary Occupations

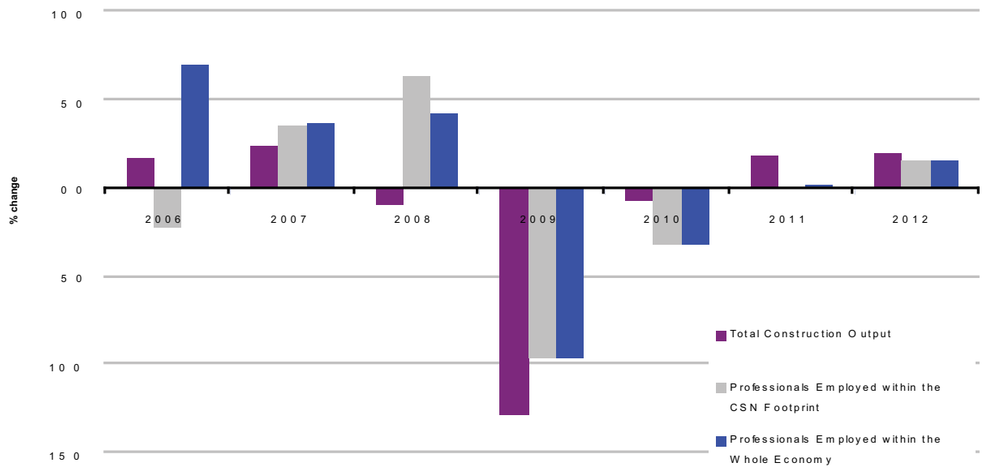
Date	1121 : Production, works and maintenance managers	1231 : Property, housing and land managers	1239 : Managers and proprietors in other services n.e.c.	2128 : Planning and quality control engineers	2129 : Engineering professionals n.e.c.	2434 : Chartered surveyors (not quantity surveyors)	3114 : Building and civil engineering technicians	3121 : Architectural technologists and town planning technicians	3122 : Draughts-persons
October 2007	1,610	455	720	225	650	230	205	150	515
January 2008	1,770	435	730	250	625	240	205	145	545
April 2008	1,775	490	720	210	630	230	210	130	525
July 2008	1,860	575	760	220	620	390	280	240	595
October 2008	2,235	760	855	275	725	535	330	480	745
January 2009	3,780	1,115	1,250	490	1,170	975	625	815	1,340
April 2009	5,010	1,405	1,590	755	1,735	1,295	830	1,180	2,000
July 2009	5,095	1,465	1,600	790	1,910	1,350	925	1,290	2,105

Source: JobCentre Plus.

4.5 Exploring the relationship between output and employment

Theory suggests that as total construction output rises, as a result of increased demand for construction services, employment too should climb upwards. Increased demand for services drives up the need for labour, and as professionals start to become a scarce commodity in the employment market, this pushes up the wage rate. Although the salaries are bid up by employers in order to acquire the relevant skills, there is a lag between a change in output and a consequent change in employment numbers in the same direction. There are various reasons for this including as a result of a gap in where employees' wages have not been bid up to a point where the marginal benefit (in monetary terms) outweighs the costs of moving. The lag also exists in part because of people entering the professional employment market at a later period having been at a stage where they were training beforehand. The cost to an employee of moving comes in the form of a change in their environment, in terms of a different company culture, getting used to different work processes and people etc. This is discussed in greater detail in the later part of the report entitled 'Graduates and newly qualifies professionals'.

Figure 29: Comparing output and employment (across the economy and within the Construction-Skills Footprint)



The chart above shows a modest increase in total construction output in the UK in 2006, having seen a small contraction in the preceding year. Those employed in the ConstructionSkills footprint would therefore, taking into account the lag, continue to experience falls in employment for 2006, as is the case. However the strong increase in total professionals' employment across the economy as a whole will have been due to growth in other sectors. This therefore explains, to some extent, the employment growth (in both contexts) outperforming output in 2007. In 2008, although total construction output contracted, employment for professional continued to grow, which may once again be argued to be as a result of the lag. The value of construction work is estimated to have fallen in 2009, and is projected to continue doing so in 2010, before bouncing back in the final two years of the forecast. Employment is predicted to move in the same direction over the forecast period.

However, some caution needs to be taken in interpreting these figures. Firstly, different occupations would enter the construction process at separate points, thus the level of change in employment would be dependent on the nature of the project and therefore the different occupations' degree of involvement. Secondly, the labour force survey (LFS) data only surveys around 55,000 households each quarter, of which only a small proportion would be representative of the construction professional services sector. Thus when questioning the LFS data at four-digit SOC level it needs to be recognised that some of the sample sizes will be small, leading to the likelihood of a wide margin of error in the data. A third factor is the lack of annual fee income data for the construction professional services sector – construction output data acts as a reasonable proxy, but it is not ideal.

Figure 30: Professional 'engagement' by major sector

		Architecture	Building services engineering	Civil and Structural Engineering	Management Consultancy (not project related)	Multi-disciplinary	Planning	Project Management	Quantity Surveying	Surveying	Other
RESIDENTIAL	Private	59	23	35	15	36	44	51	31	48	
	Public	22	16	16	33	20	30	10	27	24	
BUILDING	Private	38	59	43	40	41	24	72	49	41	
	Public	33	44	22	50	26	33	59	34	29	
INFRASTRUCTURE	Private	14	31	26	n/a	16	28	40	13	32	
	Public	23	8	38	n/a	37	20	42	22	28	

Note: the higher the score, the higher the engagement
Source: Construction Professional Services Size and Structure Survey, 2005/06, CIC.

4.5.1 Relating the 2005/06 survey to the forecasts

Using the results from the 2005/06 Construction Professional Services Survey, a number of interesting relationships can be drawn between the prevalence of a firm in a specific sector (measured in terms of the average percentage of fee income earned in that sector) and the outlook of different sectors in the UK according to our forecasts. In other words, if 'A&B Architects' generates the largest proportion of their income in public building, and the outlook for public building is particularly buoyant this year, then the probable outcome for that firm going forward is that their business will do well, should they continue to win bids and see growth in their revenues. However, this is based on the assumption, as argued in the earlier part of the report, that firms which already have experience in 'Sector A' but no experience in 'Sector B' will find it more difficult to win work in the latter one due to greater competitiveness from firms already operating in that sector. Another assumption which has been made is that, in general, the level of activity of firms across the sectors as indicated by the participants of the 2006 survey has largely remained unchanged today. A final caveat to this methodology is that those who filled out the survey are assumed to know the nature of their work in terms of whether it is 'public' or 'private' in the three broadly defined sectors.

The figures in the table above were calculated from the results of the 2005/06 Size and Structure Survey by using a statistical computer programme to cross-tab the percentage of fee income earned by a firm against the three sectors (residential, building and infrastructure). This gave a professional 'engagement' figure to indicate where firms' activity levels were the highest. Therefore the higher the figure, the greater the level of engagement of that firm in that particular sector.

For architecture firms, the greatest level of engagement was in the private residential sector at 59, although it must be kept in mind that this figure is likely to have been inflated somewhat by the large-scale residential developments under construction at the time of the survey. In contrast, only 22 was recorded for the public residential sector. Private house building experienced a very sharp contraction last year which is predicted to be even worse this year before growth returns in 2010, albeit from the lowest base since 1992. Thus considering the fact that architects' level of engagement was the highest in the private residential sector, the profession may fare poorly this year and next unless practices have been able to move into other areas. Architects are unlikely to benefit substantially from the ongoing and future programmes of investment in the infrastructure sector, since the engagement figure was only 14 for the private side and 23 for the public. Our forecasts suggest that the number of architects will decline by almost 12% this year and continue to fall away in 2010 and 2011, although at a decreasing rate. In 2012, the profession is expected to recover slightly as the employment market plays catch up with the improving prospects in the sectors in which architects are more prevalent.

For civil and structural engineers, a figure of 43 for engagement was seen for the private side and 22 for the public in the building sector. Meanwhile, a score of 38 was recorded for public infrastructure and 35 for private residential construction. This is a much more even spread than for architects and thus rises in activity in some sectors, such as infrastructure, will help mitigate the falls in others, such as housing. Nevertheless, with construction activity falling off overall, the expectation is for a decline in employment for civil and structural engineers, although the extent of the contraction is likely to be limited somewhat by the buoyancy of the infrastructure sector. The number of those employed in the occupation is likely to fall by almost 10% in 2009 and by around 4% in 2010, before increasing slowly in 2011 and 2012.

The building sector generated the greatest level of activity for quantity surveyors (QS) according to the 2005/06 survey results, with the private side seeing an engagement figure of 49 to the public side's 34. It is not surprising to see QS' experiencing their greatest level of activity in the non-residential building sector since a greater variety of risks exist in terms of costing out projects, due to more complex construction processes. This is likely to require more detailed bills of quantities, thus generating more income for the QS profession. Thus, the sharp downturn in commercial and industrial construction in 2009, continuing into 2010 and 2011 for the commercial sector, is likely to have a negative effect on employment in the profession. However over the same period public non-residential construction is projected to see robust increases in activity, thus mitigating the impact of the falls in other non-residential building sectors. Our forecasts show an almost 4% decline for the number of QS's employed in the economy as a whole in 2009, but the figure should grow marginally in 2010 and slightly more strongly, at around 2%, in 2011 and 2012.

The project management occupation, which can broadly be said to be in line with the 'managers in construction' category as shown in our forecasts, is predicted to have experienced a fall in numbers by around 10% in 2009. This is slightly less than the fall predicted for construction output overall in 2009 (a 13% decline). The rate of fall for the occupation is expected to slow to 4% in 2010, compared to a 1% fall in total construction output in the UK. Thus it may be said the occupation is closely linked to the trend of construction output in the UK, not a surprising result when compared with the 2006 survey results where the occupation can be seen to be one which is prevalent across the different sectors fairly evenly in terms of the engagement score. Although the highest figures are recorded for the private building and private residential sectors at 72 and 51, respectively, public building and infrastructure sectors also accounted for a large amount. In 2011, managers in construction are expected to continue to see a marginal fall in numbers, before seeing an increase in the final year of the forecast.

Mechanical and electrical engineers are expected to move in the same direction, and to the same degree, over the forecast period. This is predicated upon their close links in terms of the sectors in which they operate and overlap, as well as the stage of the construction process at which they enter. Following a contraction of more than 9% in the two occupations' numbers in 2009, they are projected to continue to see a fall in 2010, by nearly 3%. However, the two engineering professions should grow slightly in 2011 as the economy begins to recover. The degree of falls in the two occupations is expected to be less due to a greater scope, in terms of industries, in which the two occupations operate. Finally, the town planning profession is predicted to follow the same trend as that of the mechanical and electrical engineering ones.

Figure 31: Professionals within the whole economy:

Occupation	2007	2008	2009	2010	2011	2012
Architects 2431	54,420	49,840	44,070	41,945	41,416	41,834
annual % change		-8.4	-11.6	-4.8	-1.3	1.0
Civil engineers 2121	79,030	90,904	82,006	79,094	79,261	81,016
annual % change		15.0	-9.8	-3.6	0.2	2.2
Mechanical engineers 2122	82,349	81,472	73,793	71,911	72,452	73,801
annual % change		-1.1	-9.4	-2.6	0.8	1.9
Electrical engineers 2123	53,522	53,541	48,495	47,258	47,813	48,500
annual % change		0.0	-9.4	-2.6	0.8	1.9
Town planners 2432	22,650	23,814	21,569	21,019	21,177	21,572
annual % change		5.1	-9.4	-2.6	0.8	1.9
Managers in construction 1122	251,301	258,970	232,398	223,826	223,355	226,314
annual % change		3.1	-10.3	-3.7	-0.2	1.3
Quantity surveyors 2433	35,904	44,884	43,112	43,353	44,227	45,036
annual % change		25.0	-3.9	0.6	2.0	1.8

It should be remembered that not all construction professionals work in construction. This can be seen when comparing the two tables (above and below), with LFS data indicating that only 64% of the seven categories of professionals employed worked in the ConstructionSkills footprint of SIC 45 and 74.2 in 2008.

Figure 32: Professionals within the ConstructionSkills footprint:

Occupation	2007	2008	2009	2010	2011	2012
Architects 2431	47,121	45,842	40,536	38,579	38,091	38,474
annual % change		-2.7	-11.6	-4.8	-1.3	1.0
Civil engineers 2121	58,887	57,256	51,552	49,817	49,923	51,028
annual % change		-2.8	-9.8	-3.5	0.2	2.2
Mechanical engineers 2122	14,117	12,820	11,612	11,315	11,401	11,613
annual % change		-9.2	-9.4	-2.6	0.8	1.9
Electrical engineers 2123	11,551	15,296	13,854	13,501	13,602	13,856
annual % change		32.4	-9.4	-2.6	0.8	1.9
Town planners 2432	10,454	10,106	9,153	8,920	8,967	9,154
annual % change		-3.3	-9.4	-2.6	0.8	1.9
Managers in construction 1122	192,295	205,034	184,893	178,074	177,699	180,053
annual % change		7.1	-10.3	-3.7	-0.2	1.3
Quantity surveyors 2433	30,080	40,070	38,488	38,703	39,484	40,205
annual % change		33.2	-3.9	0.6	2.0	1.8

4.5.2 Inflows and Outflows from the industry

As with all occupations, the construction professional sector experiences a continual level of inflows and outflows of its workforce, that is, people moving in and out of the sector for various reasons. The LFS data – based on a quarterly survey of approximately 55,000 households (around 120,000 people) across the UK – can be used to calculate these flows. Data looking at graduates and retirees from the occupations, suggests that inflows fell slightly in 2007 from the previous year's level before increasing substantially in 2008. For outflows, the number increased slightly year-on-year in 2007, before jumping up significantly in 2008. On a devolved nation level, figures tend to fluctuate significantly on an annual basis as a result of the small sample size of construction professional encapsulated by the LFS and therefore may only be used as very rough indication of changes ongoing over the years.

Changes in the inflow of graduates across the three years may partly be explained by structural changes in the economy and the introduction of new government policy. Around the start of this decade, shortages of construction professionals led the government to increase university places for the relevant courses in order to plug the gap. However there is a large lag time between undergraduate entry and the point at which they are job ready, as much as seven years in the case of architecture students. Thus the jump in graduate inflows to the sector may be as a result of policy put in place much earlier in the decade. Furthermore it may be argued that the recent popularity of television shows such as 'Grand Designs' and other property development programmes have led to an improvement in the image of the industry, making it more appealing to young people.

In contrast, although the number of people retiring from the industry has been increasing in recent years, the rises have been relatively less pronounced. Once again the year-on-year fluctuations may be a result of the small data samples. Construction professionals are notoriously reluctant to 'retire', many working on well into their 70s. This characteristic of the sector may have been strengthened in the current downturn as many will have seen their pension 'pots' shrink alarmingly, leaving no option but to work on well past normal retirement age. However, much of this 'grey' workforce may be part-time and independent, many having 'officially' retired from larger practices some time ago.

The contrary argument to this is that those who were nearing retirement age may have left early as a result of the recession, as much in disgust at the return of the cyclical nature of the industry as anything else. However, it is interesting that a number of practices have gone on to short time working in an effort to minimise redundancies. Building magazine has recently reported that some practices are considering asking some of their workforce to work 4 days a week instead of 5, whilst wages cuts have also been enforced across others. IFF Research has recently undertaken a face-to-face survey across 30 professional services firms in the UK as part of this study, which has suggested that around a quarter of firms have made redundancies as a result of the recession, although this was more the case with smaller-sized firms.

4.5.3 Graduates and newly qualified professionals

The sharp increases in unemployment in the construction industry (170,000 redundancies in the year to August 2009 according to the ONS), is likely to lead to increasing numbers entering higher/further education. It is expected a proportion will use the redundancy pay-off to invest in furthering their skills in order to enhance their prospects in anticipation of the upturn. Construction professionals may view the current situation as an opportunity to build on their previous degrees by undertaking courses such as a Masters degree, which tends to last 1 year (therefore requiring a relatively short period of commitment). This is likely to provide those that take this route with greater opportunities when re-entering the employment market. However, some professionals, or those newly qualified, may become disheartened with the lack of opportunities in the industry and re-train in a different field by undertaking conversion courses, raising outflows from the industry.

The problem now rearing its head is the lack of opportunities for new graduates to enter the industry. Building magazine's survey of 604 construction graduates showed that 61% did not have permanent, salaried employment, not a surprising result considering that companies have drastically reduced their recruitment numbers for their graduate programmes, or have suspended them altogether. The survey also indicated that 27% were considering working outside of construction, with popular alternatives being teaching and banking, although only 1.5% had considered leaving construction permanently. Nonetheless, this raises the potential of large out-flows from the industry in the short to medium term, though it remains to be seen how much of the residual other industries are able to accommodate. Long term knock-on effects of outflows of the brightest graduates may therefore lead to lower productivity in the industry.

Other medium to long-term factors which may lead to shortages of professionals in the construction sector may come as a result of parents discouraging their children from going into the industry, viewing it as a bad career choice. Such issues are likely to be compounded by a lack of non-cognates (those who study non-construction related degrees) entering the industry during the boom times from the established universities, due in part to the smaller presence of construction companies at recruitment fairs relative to other industries such as banking and financial services.

For careers such as those for architects, which require a significant period of study to gain full chartered status, the option of leaving the industry, during the course of study or upon qualification, is less likely to be taken than in other areas of the economy where the input is smaller. The specificity of the skills possessed by architects as well as the sunk costs in education are expected to be great enough to lead students to continue their studies to the end since their technical skills are unlikely to be as transferable as those of other more generic degree courses such as business. Building magazine's survey showed that professionals are least likely to look outside the built environment, with only 13% of quantity surveyors willing to change industries.

4.6 Measures being undertaken by construction institutions to help members back into employment

A number of professional construction institutes have put measures in place in order to help their members through the recession. This ranges from training/ development advice to suggestions for those made redundant or insolvent. In the case of the Institute of Highway Incorporated Engineers (IHIE), their website offers concessionary membership fees if unemployed. This is in order to allow those not currently active in the profession to stay abreast of developments in their sector of expertise, whilst simultaneously allowing the institute to retain its membership numbers.

The IHIE website also offers recommendations on an educational course entitled 'Return to Science, Engineering and Technology' at the Open University to those in the profession, possibly as a means to give those who have been out of work something of a refresher. However, rather than being a course which teaches those opting to take part a run-through the technical aspects, it offers a lesson in 'softer' skills such as the evaluation of skills and experience, making new contacts and reviving old ones, and an overhaul of the CV. Therefore, the

approach being recommended by the institute is not an update on the technical aspect of skills, but direct help and advice on regaining employment in the profession. For those in financial difficulty, the website also points towards bursaries available for those interested in the course, although these only seem to be offered to women since the UK Resource for Centre for Women (UKRC) and Women in Technology & Science (WITS) are the sponsors.

The IHIE website also advises those who have been 'credit crunched'. It directs members and non-members (since access to this part of the site is free to all) towards the Citizens Advice Bureau website in order to gain advice on more general matters such as money, housing, health, education and civil rights. Other areas of help on offer are confidential advice for those 'concerned about something at work' and 'moving from public sector to consultancy' in order to help jobseekers with extensive work experience setup their own business following redundancy, as well as move into other positions outside of the public sector. This portion of the site directs those interested in such an option to other, more detailed, sources of advice, including a central government website for general redundancy advice.

The **Royal Institution of Chartered Surveyors'** (RICS) also has a dedicated area on its website entitled 'Redundancy Help', which works in collaboration with an organisation named Lioheart, a benevolent fund for RICS members and their families. A detailed advice guide is available for download in pdf form and offers help with issues around redundancy specifically for RICS members. The RICS' approach in specifically directing advice to their own members through one standardised guide, rather than pointing towards a variety of other internet based sources, can be argued to be an especially practical resource in place for those in need. The guide is also summarised on the website. Furthermore, the RICS offers a forum for members who have been made redundant, allowing discussion and sharing of advice, a useful and innovative tool employed by the institution to encourage interaction between those experiencing similar difficulties.

Although the **Association of Building Engineers** (ABE) does not seem to directly offer advice on its website for those affected by the recession, it is employing other strategies to help members experiencing difficulties. The institute reported that the areas which have initially been seen to have been affected have been training and development, while the availability of employment posts for trainees/ juniors have also decreased. In order to counter such effects, the institution stated its intentions to promote Advanced Apprenticeship Schemes to help prepare members and organisations to take on roles to facilitate future development in the building engineering professions over the downturn period. Therefore, this strategy seems to be about actively targeting the creation of roles on a junior level as well as the encouragement of greater development through training. In terms of membership numbers, anecdotal evidence suggests that figures for the institute have been falling. However, there have been some indications of individuals retaining or taking up membership with the institute in anticipation of being better placed for an upturn.

The **Institute of Chartered Architectural Technologists** (CIAT) also employs a number of similar strategies as those described for other institutes in order t help its members. It has a dedicated area which provides advice for those affected by the recession on areas such as redundancy, state benefits, finding a new job, and general help being offered by the government. The website also encourages members to develop a specialism in order to 'diversify' and acquire new skills, whilst also upgrading their level of membership through qualification. The institute also provides a guide for members on how to set up their own businesses.

In response to increased enquiries about members' standing in terms of their CIAT membership following bankruptcy, the website has dedicated a specific page. Normally, if a member business was to be made insolvent, according to the institute's policy, their membership would automatically be revoked (in the case of malpractice for example). However, CIAT may reverse the cessation of membership on a discretionary basis should a business be unable to continue trading in these current times, an especially useful measure for those who became insolvent through no fault of their own. The institute also directs those members suffering hardship towards the Architects Benevolent Fund, although CIAT also has a small fund in place in the form of grants for the relief of financial hardship for members in Ireland and Hong Kong. For students and recent graduates of Architectural Technology, CIAT provides advice in bite size chunks in order to help them on to the first rung of their career ladder. The institute is the only one to provide advice focused towards students, who arguably, are the greatest victims of the recession. This is therefore a useful addition to the website for younger members, especially in light of a recent Association of Graduate Recruiters (AGR) survey showing that, with the exception of IT, construction companies had seen the greatest percentage fall in the number of vacancies in 2008/09 at around 40%. Engineering and industrial and investment banking followed close behind.

As with the IHIE, CIAT have reduced their subscription prices in order to remain as affordable as possible to members, whilst at the same time, retaining or even increasing their membership numbers. The effect of this concession has been clear to see according to the institute. Despite the number of CIAT members on unwaged subscription rising from 37 at the end of January 2009 to 125 at the end of June 2009, overall membership levels increased, measured in terms of the rise in subscription returns.

The **Royal Institute of Architects** (RIBA) has also been actively involved in trying to help and support its members during the recession. This has come in the form of holding seminars in different parts of the UK to provide guidance and tips on how to survive the recession. These events aim to provide those attending guidance on how to prepare their own 'survival kit', enabling them to take a preventative, rather than a reactive, stance on tackling the downturn. In order to attend, fees must be paid, although RIBA members are provided with concessions. Furthermore, the institute teamed up with the **Association of Consultant Architects** (ACA) in 2008 to set up a 'Recovery Task Force'. This is expected to help identify practical measures to 'enhance economic activity' in the design and construction sectors, provide best practise advice to members, as well as finding methods to help graduates to find work placements. The RIBA has also launched a Future Trends Survey to monitor the employment and business trends affecting the profession, another forward-looking initiative to help members prepare for the short to medium term.

Although the **Royal Town Planning Institute** (RTPI) has also got advice on its website for those facing difficulties as a result of the recession, the content is restricted to members only. Guidance is provided on redundancy by directing members towards relevant sources of information, while direct advice is available on issues such as insurance against joblessness and help provided by trade unions. Furthermore, provision has been made for members in the form of an 'employment law helpline' to provide informal advice, with the RTPI the only one to have such a measure in place. Other areas of help come in the form of discounted membership for those on lower incomes, financial support through the RTPI Trust for those under pressure and workshops for those needing help with CV writing and interview techniques. The RTPI also supports its members by providing suggestions on its website on business issues for those who are self-employed and by pointing towards sources where jobs are advertised for graduates and those with experience.

Finally, the **Association for Consultancy and Engineering** (ACE) has recently pledged the government to reduce the barriers to entry for the engineering profession in order to meet future capacity for demand. The institute reported that despite the poor economic climate, there remained opportunities for professionals practising engineering, especially in order to meet the government's agenda on climate change over the longer term. In the 2009 State of Business Report, compiled using survey data, ACE suggested that robust demand for specialist skills existed in energy, transport infrastructure and utilities. This is supported up by the AGR's survey, where the only areas to have seen an increase in vacancies over the 2008/09 period was energy, water and utilities.

5 The longer term possibilities

The main part of the report has dealt with the current economic downturn and its effects on construction activity and the work of professionals, and the short term prospects as we slowly emerge from the recession. However, in the medium to long term, structural changes in the economy and the construction industry are likely to impact on the type, level and nature of activities undertaken by construction professionals.

In the medium term economic growth in the UK is expected to under-perform the long term average of around 2.5% GDP growth per year. The lending regime, while easing from its very restrictive nature in the recent past, is unlikely to return to the freewheeling days of the decade to 2007. Thus consumers are likely to find credit a little less easy to access going forward than they did in the boom. Levels of household indebtedness remain high and may also colour consumers' views on spending versus saving over the longer term.

On the public side, government investment is set to fall over the medium term. The public debt is projected to reach 80% of GDP by 2013 and it is generally recognised that this will need to be reduced fairly quickly if the international investment community is not to lose faith in government gilts and bonds. Thus public expenditure cuts are inevitable, the debate now being about when and how much. The situation may also entail tax rises, which would further constrain growth in consumer expenditure. Thus an annual average growth rate in GDP of around 2% over the next five years or so is much more likely than the long term average.

A lower level of economic growth will inevitably impact on construction as demand for new private buildings – houses, offices, shops, leisure facilities – is likely to be less strong. Furthermore, as government is a major consumer of construction services, public expenditure cuts will directly impinge upon areas such as health and education building. On our current predictions, construction output will not return to 2007 levels until around 2018, and the industry's growth rate in real terms is projected to average 1.8% a year in the decade to 2019, compared with 2.5% a year in the decade to 2007. This lower growth rate will obviously have negative implications for the strength of employment growth in the industry over the next decade – it is likely to be significantly slower than in the equivalent period to 2007.

Not only are overall growth rates likely to be lower, but there are likely to be significant shifts in the type of work undertaken. Over the decade to 2007, strongest growth was in the public housing, public non-residential and private commercial sectors. While in the short term expenditure by the public sector is helping to mitigate falls in private investment, this pattern will reverse in the near future and over the decade to 2019, private housing and infrastructure (it should be remembered that around two-thirds of work in the infrastructure sector is now for private clients) take over as the fastest growing sectors. If we cast our minds back to levels of 'engagement' in different sectors by construction professionals, these changes in the types of work undertaken have implications for which type of discipline may be more in demand in the medium term.

A further shift may entail a move away from new work and into repair and maintenance as a sort of 'make to and mend scenario' in a more constrained public investment world. According to the 2005/06 Construction Professionals' Survey, only 6% of practices' fee incomes were generated in the repair and maintenance sector, suggesting that a shift towards this sector could be a bad thing as far as professionals fee incomes are concerned. However, the expected move towards greater energy efficiency and sustainability will place new demands on both construction industry professionals and construction managers and may create new opportunities.

There is likely to be an increased focus on the whole life performance and cost of buildings and infrastructure, particularly with respect to issues of energy usage. This will require a higher level of understanding on the part of the construction professions of whole building performance and how the different elements of the building inter-relate to drive overall performance and cost. To the extent that such changes are accompanied by an increased shift towards off-site production and prefabrication, designers will also have to acquire the skills not only to design the building against new performance criteria but also how to design and configure components in such a way that they can be manufactured efficiently using an automated factory process.

Construction managers too will need a broader level of understanding with respect to the design and construction of the building (where each individual unit may require certification to a given performance standard) and, if off-site construction methods are increasingly adopted, to project planning, logistical planning and commissioning as well. A higher level of supervision is also likely to be required across site activities to achieve the requisite standards of build.

Once a building constructed to higher environmental and energy efficiency standards has been completed and is operational the focus then shifts to the facilities management of such a structure. There will be an increasing need for facilities managers with an understanding of the nature of the building and how to operate it at its optimum efficiency.

On the housing side, there is increasing awareness that addressing the carbon emissions of the existing stock is of at least equal importance as building new stock to good efficiency levels if government is to deliver on its carbon emission targets. There are two aspects of this – energy efficiency measures and microgeneration installation. Energy efficiency measures include such things as cavity wall and loft insulation, double glazing, and boiler replacement, while microgeneration includes solar and photovoltaic panels, wind turbines, and ground source heat pumps. For the average householder, however, the plethora of information on specific types of energy efficiency measures and microgeneration installations can be confusing, and there is scope for an 'environmental consultant' to provide personalised guidance on what would be appropriate for individual properties.

There is a generally accepted view that the current trends in the use of information communications technology (ICT) in design will be extended in quality and scope. The logical extension is for greater use of ICT on-site, integrating design with the manufacturing, delivery, construction, commissioning and operational processes, although this is likely to be truer of larger sites and new-build, rather than of small sites and R&M work. Construction professionals are likely to need a wider skill base in ICT operations to integrate design, scheduling, manufacture, delivery/site logistics. As is the case with off-site manufacturing and the drive for carbon neutrality, this will involve the application of a wider range of skills than that currently held by many individual professionals including design disciplines, in particular an appreciation and understanding of how the various elements of a building inter-relate both with respect to its construction and lifetime performance.

Change in the construction industry, whether technological or otherwise, tends to be slow. The industry is a fragmented one, with a huge preponderance of small firms. According to ONS' 2009 Construction Statistics Annual 93% of contractors employed 13 people or less in 2007, while the 2005/06 Construction Professionals Survey indicated that 84% of practices employed less than 10 people. Thus it takes a long time for innovative processes developed at the cutting edge of the industry to filter down. However, imperatives around how we deliver the built environment for tomorrow while helping to reduce its affects on climate change, are leading to an increasingly stringent regulatory framework around carbon emissions. Thus it may be that the pace of change picks up over the medium term.

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