

The Agents' company visit scores

By Jon Relleen of the Bank's Greater London Agency and David Copple, Matthew Corder and Nicholas Fawcett of the Bank's Structural Economic Analysis Division.⁽¹⁾

The Bank's Agents collect economic intelligence from the business community around the United Kingdom, enriching the range of information available to the Monetary Policy Committee (MPC). The intelligence is largely qualitative, but Agents also make quantitative judgements in the form of scores. The Bank has published Agents' macroeconomic scores each month since 2006. In addition, since 2007, Agents have assigned 'company visit scores' based on information gathered from their confidential meetings with individual UK firms. This internal data set covers a broad cross-section of UK companies and has become helpful to the MPC when considering business conditions and particularly for considering differences across companies. The scores have been used recently to try to understand better trends both in productivity and in the level of spare capacity within firms, on which there is a paucity of alternative data sources.

The Bank has twelve Agencies spread across the United Kingdom, whose role is to gather economic intelligence to inform the Monetary Policy Committee's (MPC's) assessments of business conditions.⁽²⁾ This is primarily achieved by conducting bilateral meetings with senior executives at UK companies. The Agents then seek to draw out trends and themes for the MPC in a monthly *Summary of Business Conditions*, which since 2006 has included a series of 'macroeconomic scores' to represent the Agents' collective judgement about various economic factors.⁽³⁾ Alongside this, the MPC regularly asks the Agents to conduct surveys on specific issues.⁽⁴⁾

Since 2007, the Agents have also assigned company visit scores (CVS) based on information gathered in meetings with individual UK companies. The initial aim was to help Agents marshal qualitative intelligence more systematically and thus to help assign the monthly macroeconomic scores. But CVS have also become useful in their own right within the Bank. In particular, they can be used to consider the diversity of business conditions across firms, helping to provide insights not available from other data sources.

This article outlines the usefulness of the CVS data set. The first section sets out the scoring process, and the second shows two examples of how CVS have been used recently to help the MPC assess UK business conditions. In the first example, CVS are used to try to explain the sharp rise in employment seen over the past two and a half years. The second example considers the average amount of spare capacity within companies across the economy as a whole,

and how this might affect inflation. In each case, the range of conditions observed across firms interviewed offers greater insight into economic conditions than aggregate measures by themselves would allow.

The Bank places the utmost importance on the confidential nature of discussions between Agents and company contacts. Qualitative intelligence provided by Agents to the MPC relates to general trends and themes rather than individual firms: analysis using CVS is based on aggregated and anonymised data.

From qualitative intelligence to quantitative judgements

To gain insights into trends and developments across the economy, the Bank's Agents maintain regular contact with a broad range of firms, representative bodies and public organisations around the United Kingdom. Collectively, the Agents conduct about 5,500 bilateral meetings each year, as well as attending numerous business groups and other fora.

The Agents have face-to-face meetings with key decision-makers in these organisations in order to obtain a

(1) The authors would like to thank Sebastien Cross, Lizzie Peck, Lorna Pringle and Conor Sacks for their help in producing this article.

(2) For more information, see Beverly (1997), Eckersley and Webber (2003) and www.bankofengland.co.uk/monetarypolicy/Pages/agencies/default.aspx.

(3) Ellis and Pike (2005) describe the introduction of the Agents' scores and their comparability with ONS data. Dwyer (2008) reviews these scores in the light of ten years of data.

(4) For a review of Agents' Surveys since the start of the financial crisis see Belsham, Caunt and Duff (2012).

timely, detailed and well-informed picture of economic conditions. Their conversations cover recent business conditions and expectations for the future as well as specific issues of interest to the Bank, which can involve a survey commissioned by the MPC.

Much of the Agents' intelligence is qualitative. Each month, the Agents draw out trends and themes for the MPC in their *Summary of Business Conditions*.⁽¹⁾ And whereas official data play the most prominent role in the MPC's assessment of economic conditions, there are significant benefits from having up-to-date descriptive information about business conditions and firms' strategic responses to those conditions. This is especially the case for topics for which there is a lack of data, where data are published with a lag, or there are difficulties in interpreting underlying trends.

Alongside qualitative information, the Agents developed a set of scores to capture their quantitative judgements about various macroeconomic factors. The main added value of these macroeconomic scores for monetary policy is that movements in scores over time can help indicate how economic conditions are evolving. Each month since 1997, the Agents have assigned scores for a range of variables covering UK demand, output, labour market conditions, capacity pressures and costs and prices. The scores are published in an annex to the *Agents' Summary of Business Conditions*, and have been found to be useful in capturing, among other things, turning points in macroeconomic activity.⁽²⁾

The company visit scores

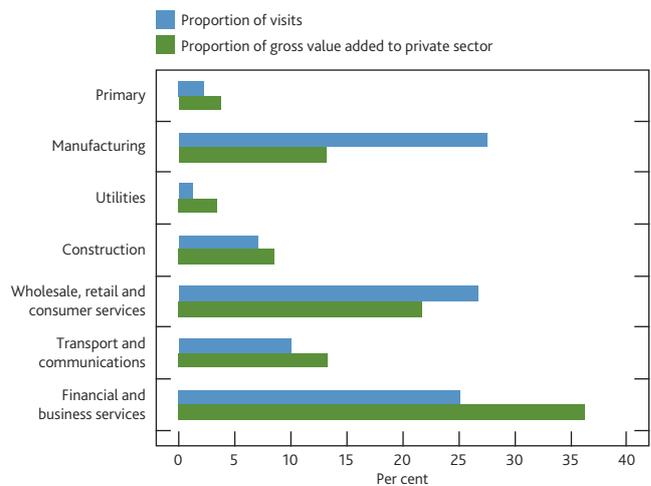
Partly to help them assign these monthly scores, the Agents also started assigning company visit scores (CVS) during 2007 as a way of marshalling the intelligence gathered from firms more systematically.⁽³⁾ CVS are based on information from meetings with individual firms and cover eleven variables, which are analogous to the macroeconomic scores.

CVS cover demand and output (sales turnover, exports and investment); factor utilisation (capacity utilisation, employment and recruitment conditions); and costs and prices (labour costs, non-labour costs, output prices and profits). Each variable is scored on a scale of -5 to +5. The box on page 61 outlines the scoring methodology in more detail. Importantly, a considerable element of judgement is involved.

Over time, the number of meetings for which Agents have assigned scores has steadily increased. In total, the CVS data set now reflects information from nearly 17,000 company visits. And these companies reflect a broad cross-section of UK firms (**Chart 1**).

As the CVS data set has grown, it has become increasingly useful as an internal Bank analytical tool. There are three

Chart 1 Distribution of private sector firms covered by the CVS data set^(a)



Sources: ONS and Bank calculations.

(a) Proportion of visits and gross value added are both measured as a share of private sector totals. Many companies are recorded in the data set more than once as Agents typically visit firms at roughly twelve-month intervals.

benefits of the data set: first, its disaggregated nature, which allows the Bank to analyse differences in business conditions across UK firms; second, the scores are available very quickly following a company visit, providing timely data for use when briefing the MPC; and third, some scores cover variables for which there are no aggregate data.

However, analysis using CVS will only be useful for monetary policy if the data are robust, and if aggregated CVS data track trends in official data sources. The box on pages 64–65 outlines a simple 'sense check' on the aggregated CVS series. It finds evidence that aggregate CVS follow trends that are broadly consistent with macroeconomic data — although the extent of this varies across CVS variables.

In most cases, CVS variables are not perfectly comparable to official data series. And CVS series would not be expected to match exactly even perfectly comparable macroeconomic data. For example, there may be a 'survivorship bias', as struggling firms are more likely to fall out of the sample. Scoring judgements made by Agents may also vary slightly. Nevertheless, there is evidence that aggregate CVS capture broad economic trends and hence are a potentially useful tool for economic analysis.

(1) The summaries are published each month on the Bank's website at www.bankofengland.co.uk/publications/Pages/agentssummary/default.aspx.

(2) See Dwyer (2008).

(3) The development of CVS benefited from ideas pioneered at the Reserve Bank of Australia, which conducts a business liaison programme and assigns scores based on information gathered from firms.

Scoring based on company visits

After visiting companies, Agents assign company visit scores (CVS) based on information gathered during the meeting. The emphasis is on scoring economic variables based on information from firms, rather than scoring company financial performance. Guidelines for the Agents help ensure that judgements about scores are as comparable as possible. And these guidelines are regularly reviewed by the Agents to ensure the quality and consistency of scoring. Nevertheless there is inherently scope for differences in interpretation from Agent to Agent.

Variables scored

The economic variables scored for each company visit mostly correspond with equivalent variables used in the Agents' monthly macroeconomic scores. There are currently eleven CVS variables:

Demand and output

- Total demand (nominal turnover)
- Exports (nominal export sales)
- Investment (capital expenditure)

Factor utilisation

- Capacity utilisation (versus all productive factors)
- Employment (actual headcount)
- Recruitment conditions (hiring difficulties)

Costs and prices

- Total labour costs (salaries, pensions and bonuses per employee)
- Pay (salaries per employee)
- Non-labour costs (value of other operating costs)
- Output prices (retail or business prices)
- Profits (pre-tax profit as a share of turnover)

Moreover, for each variable there is a score for past experience as well as one for expectations. So a maximum of 22 scores may be entered for each company visit, although the Agent only assigns scores for variables where he/she has sufficient information.

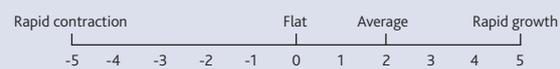
The majority of scores describe a change in the level of that variable; either the past three months relative to a year ago, or the past three months relative to the expected level one year forward. So these scores are essentially measuring annual growth rates (with annual comparisons helping to control for seasonality). The exceptions are recruitment difficulties and capacity constraints, which are scored according to the level of the variable in the past/next three months relative to what is considered 'normal' for that firm.

The scoring scale

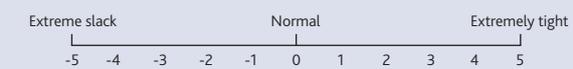
Each variable is scored on a symmetric scale that ranges from -5 to +5, the same as for the Agents' macroeconomic scores. For growth variables, a score of +5 indicates a rapidly rising level, 0 indicates an unchanged level and -5 a rapidly falling level. For capacity utilisation and recruitment difficulties, +5 indicates extremely tight capacity constraints or hiring conditions, -5 indicates plenty of slack in supply conditions or the labour market, and 0 represents normal conditions.

Scores of +5 or -5 are reserved for extreme cases; they are usually associated with unprecedented conditions facing a firm. Assigning a non-zero score between +5 and -5 requires judgement. But for growth scores a rule of thumb is that a score of +2 is at the mid-point of the range of normal growth, and can be interpreted as the usual or average rate of growth for the firm in that variable over previous years.

Scale for growth variables



Scale for non-growth variables



The role of judgement

When assigning scores, Agents draw on a range of information, both qualitative and quantitative, from the interview about recent activity as well as gauging the company's expectations for the future. A benefit of face-to-face meetings is that they provide scope for dialogue and clarification of the information reported. However, there remains a considerable element of judgement involved. Although the Agents make every effort to ensure consistency in their approach it remains possible, or even likely, that information is interpreted differently by different Agents.

Confidentiality

The detailed content of each interview and the scores assigned after each company visit are treated as strictly confidential by the Bank. Analysis using CVS looks at aggregated series or the distribution of scores, rather than referencing specific companies.

Using the CVS to understand employment and inflation

Despite weak output growth over the past three years, private sector employment has risen by over one million. In recent meetings, the MPC has commented on the difficulty of reconciling the strength of employment with the weakness in output.⁽¹⁾ The implication for measured private sector productivity is that output per hour is around 15% lower than it would have been had it continued to grow at its pre-2008/09 recession average rate.

Several factors are likely to lie behind this productivity puzzle. The November 2012 *Inflation Report* sets out the most likely explanations. These can be grouped into three categories: first, data measurement issues; second, the direct impact on *measured* productivity of the weakness in demand itself; and third, weak growth in *underlying* productivity, which is the amount that a given labour force could produce if demand were not a constraint on output.⁽²⁾ The MPC has attached some weight to each explanation.

This section shows how CVS data have been used to shed light on the productivity puzzle. Two aspects are covered: first, companies' hiring and firing decisions since the crisis; and second, the margin of spare capacity within companies that opened up at the onset of the crisis, and how this has evolved since.

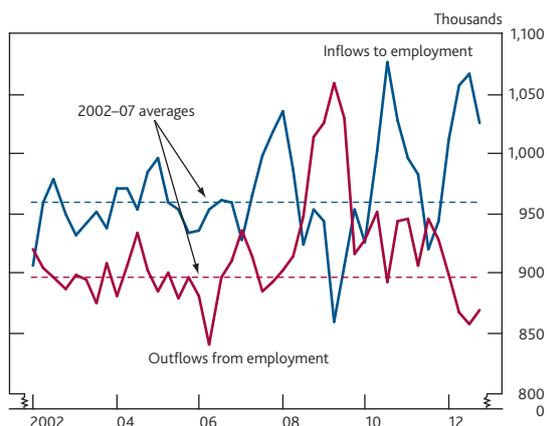
Explaining trends in employment

The aggregate employment figures mask a wide variety of experiences at the individual company level. For example, faced with weakness in demand, some companies — especially smaller ones — will have needed to retain a minimum level of staffing to continue operating. Others may have retained staff in anticipation of a future return to more normal demand growth. Gross flows into and out of employment in a quarter are extremely large (**Chart 2**), averaging just under one million. So even small changes in companies' hiring and firing decisions could have a substantial impact on aggregate net employment figures.

The differences across companies in the CVS data set are shown in **Chart 3**. This compares the employment scores of firms interviewed in 2009 to those interviewed in 2012. Even during the depths of the recession in 2009, while many firms may have been shrinking their workforce, others were expanding employment.

Chart 3 also shows that the distribution of firms' employment scores has changed over time. For example, a typical firm in 2012 is more likely to have had a 'neutral' employment experience — with employment broadly unchanged — than in 2009, when most firms were reporting a net fall in the number

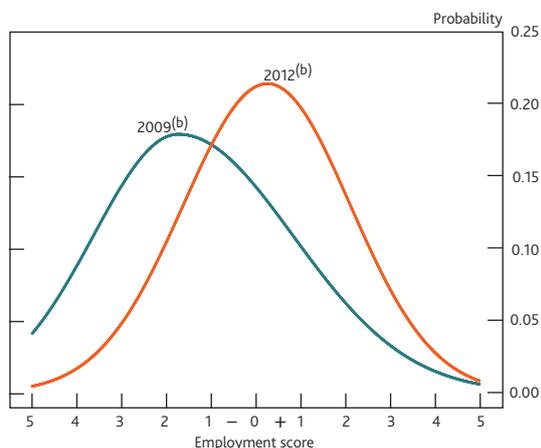
Chart 2 Inflows to and outflows from employment^(a)



Sources: ONS and Bank calculations.

(a) Two-quarter moving averages.

Chart 3 Distribution of CVS employment scores^(a)



Source: Bank calculations.

(a) The CVS have been fitted to a distribution, to smooth some of the volatility in the underlying data. This helps to highlight changes in the mean, spread and skew of scores.
(b) All scores collected over each calendar year.

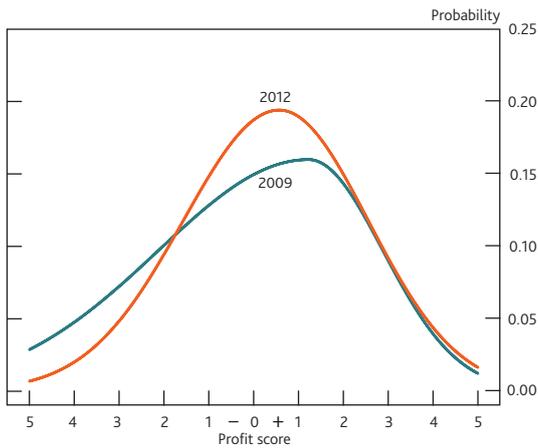
of employees. **Chart 4** shows a similar comparison, but for profit scores. This, too, reveals substantial variation in companies' experiences, with the distribution of profit scores having narrowed somewhat since 2009.

CVS data shed light on the relationship between firms' profitability and their employment decisions, at a company level. **Chart 5** groups firms together according to their profit scores, from -5 to +5, and calculates the average employment score for each group. This is shown by the 'bubbles' in the chart. The area of each bubble indicates the proportion of firms reporting a given profit score and the colours relate to the timing of data used: red scores for 2009–10 and blue for 2011–12.

(1) For example, in the minutes of the January 2013 meeting, the MPC observed that the productivity shortfall was 'outside past experience', and that understanding it was a key challenge.

(2) See the box on page 33 of the November 2012 *Inflation Report*.

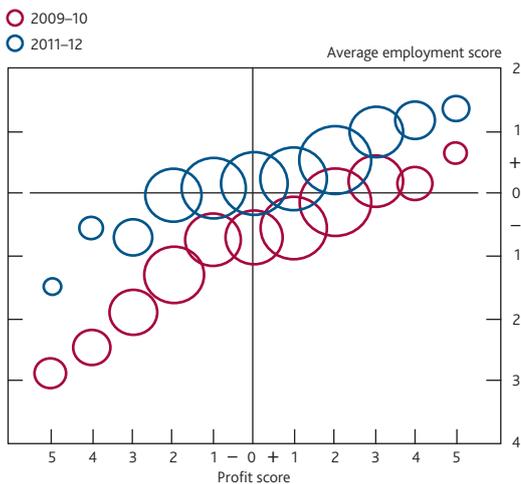
Chart 4 Distribution of CVS profit scores^(a)



Source: Bank calculations.

(a) See footnotes to Chart 3.

Chart 5 Average score for expected employment for a given profit score^{(a)(b)}



Source: Bank calculations.

(a) The area of each bubble indicates the proportion of firms reporting the corresponding profit score.
 (b) All scores collected over these calendar years.

Chart 5 suggests that the relationship between profitability and employment is not linear. Whereas a higher profit score is typically associated with an increase in employment, and vice versa, there is an area of 'inaction' between profit scores of -1 and +1: within this range, the reported level of employment is unchanged. Firms within this range appear to be relatively unlikely to change employment in response to small variations in profitability. This could be due to hiring and firing costs.

This is relevant to the MPC's analysis of the productivity puzzle, as it could partly explain why employment has risen since 2010. **Chart 5** shows that, relative to 2009–10, more firms in 2011–12 were hiring staff (top-right corner of **Chart 5**) than shedding staff (bottom-left corner). The blue bubbles for profit scores below -2 are smaller than the corresponding red bubbles. The proportion of firms that had very low profit scores has fallen, with more now in the area of inaction: these

firms may find it more costly to reduce employment than to keep it unchanged. This reduction in *gross* flows out of employment can account for part of the sharp rise in *net* flows into employment.

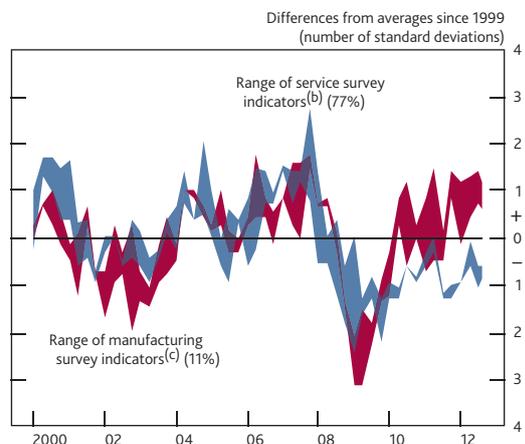
Chart 5 also shows a shift in the relationship between employment and profit scores between 2009–10 and 2011–12. For a given profit score (on the horizontal axis), the average employment score across firms is higher in the 2011–12 period. This shift reflects movements in other firm-level characteristics. For example, some Agents' contacts reported that they had started hiring workers in anticipation of a recovery in demand. This is echoed by a substantial rise in both firms' actual and expected demand scores in the CVS data set between the periods 2009–10 and 2011–12. Taken together, these data provide some explanation for why employment has risen.

Spare capacity and inflation

One illustration of the productivity puzzle has been in surveys of spare capacity. Spare capacity measures how far firms are operating above or below 'normal' levels of supply capacity, given their existing resources. Estimates of capacity utilisation can be useful in assessing the balance between demand and supply in the economy, and therefore pressure on costs and prices.

Existing surveys suggest that the degree of spare capacity in the economy widened in 2008–09, but by less than might have been expected given the scale of the fall in output. Since then, surveys have suggested a marked reduction in the degree of spare capacity, despite the slow growth in output. **Chart 6** shows a range of survey indicators of capacity utilisation by sector (a more negative value represents a larger margin of

Chart 6 Survey indicators of capacity utilisation by sector^(a)



Sources: British Chambers of Commerce (BCC), Confederation of British Industry (CBI), CBI/PricewaterhouseCoopers, ONS and Bank calculations.

(a) The figures in parentheses show 2009 weights in whole-economy gross value added.
 (b) Includes measures of services capacity utilisation from the BCC and CBI. The CBI measure weights together financial services, business/consumer services and distributive trade surveys using shares in nominal value added. The BCC data are not seasonally adjusted.
 (c) Includes measures of manufacturing capacity utilisation from the CBI, and a measure of non-services capacity utilisation from BCC. The BCC data are not seasonally adjusted.

Comparing aggregate company visit scores with economic trends

The key benefit of the company visit scores (CVS) data set is its disaggregated nature, which allows analysis of business conditions across UK firms. But analysis using CVS will only be useful for macroeconomic policy makers if the data are robust and if aggregate CVS broadly track trends across the economy.

This box provides a simple 'sense check' on that, by comparing aggregated CVS series with UK economic trends. It shows that many aggregate CVS series follow trends that are broadly consistent with trends in the economy.

Reasons to expect some differences between CVS and official economic data

CVS series are not expected to match official data perfectly. In part this is because the information incorporated into CVS may not be exactly the same as for official economic data series. For example, CVS demand scores reflect annual growth in firms' turnover, which is not perfectly comparable with official data for private sector nominal output growth.

Moreover, CVS series would not be expected to match even perfectly comparable macroeconomic data exactly, for two broad reasons. First, there is likely to be a sample bias. The CVS data set has a higher proportion of large firms, by number, than the economy. Moreover, there may be a 'survivorship bias', because firms that go bust fall out of the sample, and struggling firms may be less able to spare the time for a visit. Second, assigning scores requires judgements (as explained in the box on page 61) and while there are regularly reviewed guidelines to help consistency, judgements made by different Agents will vary slightly. This may be particularly relevant for variables that can be difficult to score; for example, if contacts are less familiar with certain metrics for their firm. And judging 'normal' conditions or trend growth rates has been difficult in recent years given a persistent slowdown in economic growth.

Comparisons between CVS and official data

Nevertheless, there is evidence of aggregate CVS following trends that are broadly consistent with trends in the economy. And this offers some support for CVS being a useful tool for economic analysis. For example, **Chart A** shows that aggregate CVS demand scores (which reflect annual growth in firms' turnover) follow a broadly similar trend to official data for private sector nominal output growth.

Similarities between time series of CVS and comparable official data vary across CVS variables. Consistent with this, Agents report that collecting information on changes in firms' turnover and employment, for instance, is often easier than for some other variables, where the information given can be more complex or ambiguous.

Chart A CVS for demand and official data for private sector nominal output growth^{(a)(b)}



Sources: ONS and Bank calculations.

- (a) Quarterly averages of CVS and annual growth in quarterly data for private sector nominal output. Private sector output is used given the low proportion of CVS assigned to public sector bodies.
- (b) The CVS series is shifted back by half a quarter to be more consistent with ONS data. This is because, in a given meeting, Agents ask firms about their previous three months' activity (relative to the year before). Taking the average of CVS data from meetings in a given quarter therefore reflects a period covering six months in total. Hence CVS data are plotted between the two quarterly ONS observations covering this six-month period.

One way of comparing the various CVS series is to use statistical tests. **Table 1** summarises results for CVS variables where there is a reasonably comparable official data series. Because CVS have only been assigned for about five years, which is not a long period in the context of macroeconomic trends, these statistical results should be treated with caution.⁽¹⁾ Nevertheless, the ranking of the statistical correlations may offer some guide to the robustness of each CVS series when using them for analysis.

Table 1 Backward-looking CVS: correlations with official data^(a)

CVS variable	Related ONS variable	Correlation coefficient
Pay	Average weekly earnings (AWE) regular pay	0.872
Investment	Business investment	0.848
Demand	Private sector nominal output	0.847
Employment	Private sector employment	0.844
Total labour cost	AWE total pay	0.836
Exports	Exports	0.796
Pre-tax profit	Gross operating surplus	0.611

(a) The table reports correlation coefficients for quarterly data. See footnote (1) in this box on interpreting the results.

Forward-looking CVS series

Forward-looking CVS offer a potentially useful insight into the future evolution of business conditions and corporate activity. The Agents ask firms about expectations for one year ahead, as compared with the past three months, so this would correspond with activity three or four quarters in the future.

Statistically, most forward-looking CVS do not show strong relationships with official data one year ahead (**Table 2**). However, they do exhibit stronger relationships at shorter

Table 2 Forward-looking CVS series relationships with official data

CVS variable	Related ONS variable	Correlation one-year lag	Best CVS lag ^(a)	Highest correlation
Pay	AWE regular pay	0.394	1	0.865
Total labour cost	AWE total pay	0.389	2	0.834
Employment	Private sector employment	0.179	1	0.898
Investment	Business investment	-0.031	0	0.767
Pre-tax profit	Gross operating surplus	-0.135	1	0.596
Demand	Private sector nominal output	-0.315	1	0.907
Exports	Exports	-0.326	1	0.847

Note: See footnote (1) in this box on interpreting the results.

(a) Refers to the number of quarters that ONS data are lagged in order to achieve highest correlation with the CVS series.

horizons. This may suggest there is some predictive value in the forward-looking scores, but only for one or two quarters ahead. Indeed, this seems intuitive given that firms often have a reasonable feel for activity in the near future, for example based on recent orders. But conditions a year ahead are more difficult to predict, in large part due to unexpected economic shocks outside firms' control.

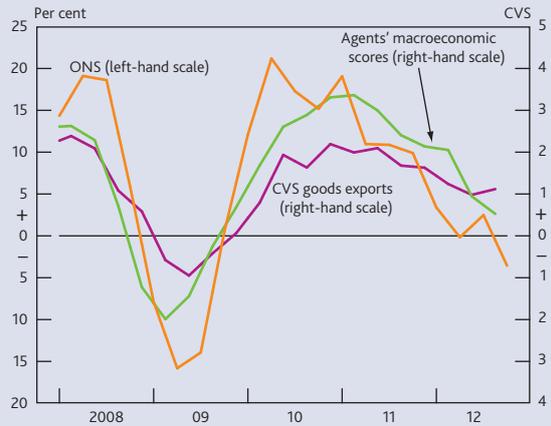
Sectoral comparisons

It is more difficult to find whole-economy data comparators for certain CVS variables: recruitment conditions; spare capacity; non-labour input costs; and output prices. However, one of the advantages of the CVS data set is that it is possible to construct series at a sectoral level. And at the sectoral level it is also possible to compare CVS series with the Agents' monthly macroeconomic scores. For example, **Chart B** compares exports CVS for manufacturing firms with official data for goods exports, as well as with the Agents' macroeconomic scores for manufacturing exports.

spare capacity). It suggests that a typical manufacturing firm is now operating slightly above normal capacity, whereas the typical service sector firm continues to report a degree of spare capacity.

Data from the CVS data set shed more light on capacity utilisation than existing surveys, in part because Agents try to assess the *degree* of spare capacity. That is, they provide a **quantitative** read of how far firms are operating above or below normal capacity. In contrast, most existing surveys are **qualitative**, asking simply *whether* firms have spare capacity.⁽¹⁾ An example helps to illustrate the difference between the two methods: suppose ten firms were operating at 10% below normal capacity and another ten firms of similar size were operating at 5% above normal capacity. In this case, a qualitative survey reporting the net balance of firms above and below spare capacity would report no spare capacity across

Chart B Scores for manufacturing exports and official goods exports data^{(a)(b)}



Sources: ONS and Bank calculations.

(a) Quarterly averages of CVS and Agents' macroeconomic scores, and annual growth in quarterly data for goods exports.
 (b) See footnote (b) to **Chart A**.

The chart shows that each series exhibits a roughly similar trend. Statistically, the Agents' published macroeconomic scores capture moves in the official data more closely than the CVS series. This is perhaps to be expected because the macroeconomic scores take into account a broader range of information, such as business surveys, trade body data, roundtable discussions and media reports. Moreover, looking at CVS data by sector markedly reduces the number of underlying data observations. One would expect the series to become less reliable as the sample size gets smaller.

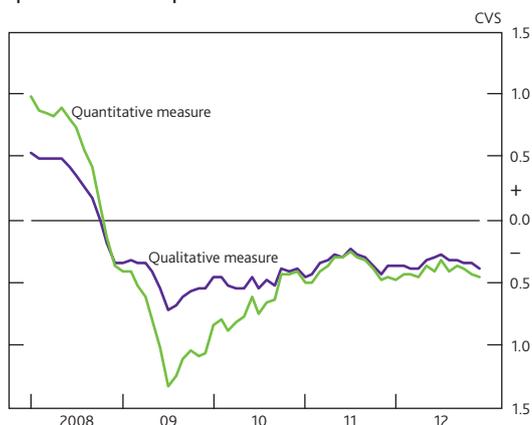
(1) Reported correlations may overstate the strength of the relationships due to overlapping observations: since CVS variables are based on annual growth rates, their comparators are also annualised rates, so quarterly observations contain overlapping periods. This should be borne in mind when interpreting the coefficients. Ideally, the overlapping observations would be discarded but, for this data set, that would leave only five observations (which is not enough for robust statistical analysis).

the economy as a whole. But a quantitative survey would — more accurately — show that across all firms, there was 2.5% spare capacity.

The CVS data illustrate the difference between quantitative and qualitative measures of capacity utilisation during the crisis. The purple line in **Chart 7** reports the CVS capacity utilisation score after it has been converted into a qualitative measure, similar to a survey net balance.⁽²⁾ The green line shows a quantitative measure, given by the average score across firms. During the depths of the crisis in 2009 and 2010,

(1) The CBI provides both quantitative and qualitative measures of manufacturing spare capacity. But since the manufacturing sector is only a small part of the UK economy, this only provides a partial view of the overall story.
 (2) The net balance measure is constructed by assigning each score above zero a value of +2 and each score below zero a value of -2. These values are suggested as representing the average variance above or below 'normal', according to the Agents' scoring guidance for their macroeconomic capacity utilisation scores.

Chart 7 CVS capacity utilisation data: comparison of qualitative and quantitative measures^{(a)(b)}



Source: Bank calculations.

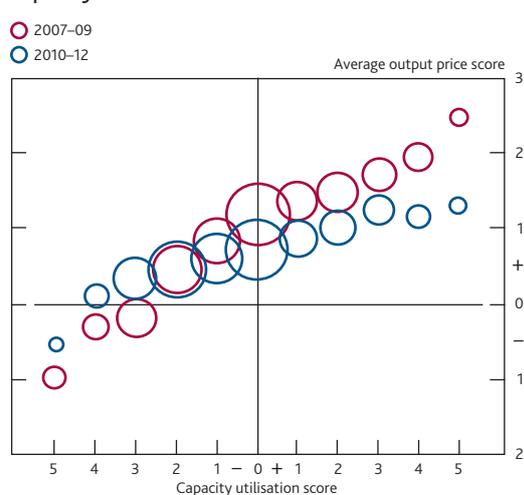
- (a) The qualitative measure is calculated by assigning a score of +2 to all positive company visit scores, -2 to all negative scores, and 0 to the remainder and taking the arithmetic mean of these over the preceding three months. A value of 2, above or below zero, is suggested as representing the average variance above or below 'normal', according to the Agents' scoring guidance for the scores that are recorded as levels.
- (b) The quantitative measure is the arithmetic average of the CVS (which lies between -5 and +5) over the preceding three months.

the quantitative measure pointed to a greater degree of spare capacity than the qualitative measure, although this gap has since narrowed. So while the CVS can help explain the apparent disparity between qualitative surveys of spare capacity and trends in output in the depths of the crisis, they are less helpful in explaining recent developments.

There is also tentative evidence that the relationship between capacity utilisation and output price inflation has become weaker since the height of the financial crisis. CVS data can be used to explore this at a company level, as the data set includes capacity utilisation scores and corresponding output price scores, matched by firm. This kind of analysis is not possible with existing published surveys. **Chart 8** shows the average change in prices set by firms, grouped by their capacity utilisation scores. The area of the bubbles indicates the proportion of firms reporting each capacity score. The chart shows that in the period from 2010 to 2012, firms, on average, changed their prices less at a given level of spare capacity than was the case in the earlier period from 2007 to 2009.

This apparent shift in the relationship between capacity utilisation and output prices may explain why spare capacity has not pulled down on inflation to such an extent over the recent past. Even firms reporting a large degree of spare capacity (shown by a score of -3 to -4) are now, on average, likely to have raised output prices, whereas in the earlier period of 2007–09, those firms would, on average, have reduced prices.

Chart 8 Average score for output prices for a given capacity utilisation score^{(a)(b)}



Source: Bank calculations.

- (a) The area of each bubble indicates the proportion of firms reporting the corresponding capacity score.
- (b) All scores collected over these calendar years.

Conclusion

The Bank's network of Agencies gathers intelligence across all regions of the United Kingdom. This information is qualitative in nature. In their assessment of economic conditions, the MPC routinely considers the descriptive information from Agents about companies' behaviour and expectations in addition to official data. Since 1997, the Agents have assigned scores to capture their judgements about various macroeconomic factors. And since 2007, they have also assigned individual company visit scores. These are anonymised to respect the confidentiality of the firms on which they are based.

The Agents' company-level data offer three distinct advantages over existing sources. First, they are updated continuously, offering the MPC access to more timely data than available elsewhere. Second, they shed light on a wide distribution of companies, allowing the MPC to consider differences in business conditions across firms and sectors. And third, the scores cover some variables where official data are unavailable.

Recent analysis within the Bank has used the CVS data to try to explain recent trends in employment and capacity utilisation within companies. In both cases, the disaggregated nature of the company data makes it possible to analyse relationships between several variables at a firm level.

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