FEATURE

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Retail sales in the downturn: understanding patterns and trends

SUMMARY

This article considers the impact of the developing financial crisis on retail sales values up to 2008. It also examines the divergence between the official estimates of retail activity and the British Retail Consortium retailing indicator. It focuses on the value measure of retail sales and analyses recent trends in retailing activity by examining consumer behaviour and other economic factors affecting the value of retail sales.

It is the first of two articles on retailing activity in the UK over the last three years. The second will follow later in 2009 and focus on the volume measure of retail sales, including discussions on the impact of chain-linking on the volume series.

The Retail Sales Index (RSI) is a key indicator of changes in the UK economy. It has two main uses in economic statistics. It measures the output of retail services, as part of the wider service sector (7.4 per cent of total services). It also measures an important element of household spending, both of which are inputs into the compilation of the National Accounts. The results are used by the Bank of England and HM Treasury to inform decision making by government and in formulating financial policies.

The survey is based on sales turnover across retail organisations, from major high street and 'out of town' chains to small stores and catalogue and internet retailers. It is converted to a volume measure using the results of monthly Office for National Statistics (ONS) price surveys which feed into the Retail Prices Index, an ONS headline publication. The ONS headline publication for retail sales is the volume measure of RSI. In normal times this is the measure of main economic interest because it tracks the volume of retail services feeding into Gross Domestic Product (GDP), and it also measures the quantity of goods households buy and which contribute to their wellbeing.

Over the last six months of 2008, conditions in UK retailing have shown changes in structure, which differ across retail store types. These may have contributed to the divergence which has been seen between the ONS headline RSI measure and other industry measures. One of these, the British Retail Consortium (BRC), is a value measure, and has shown lower growth rates than the RSI. For instance, in November 2008, the BRC's measure of the total value of retail sales (month on corresponding month of previous year) showed a 0.4 per cent fall. In the same period, the RSI for the value of sales (not seasonally adjusted) reported a 2.7 per cent growth in the value of retail sales. The CBI Distributive Trades Survey has also shown lower growth.

This article is the first of a two-part analysis that will provide further insight into recent trends in retailing activity and explain some of the reasons for the divergence between the official estimates of retail activity and business surveys. As part of planned methodological changes to improve the RSI and bring it into line with other elements of GDP, ONS plans to introduce an annually chain-linked RSI referenced to 2005 in May 2009. This is expected to lead to somewhat larger revisions to the volume series than to the value series. This article therefore focuses on recent changes in the value of retail sales. The second article will include a discussion of the impact of chain-linking on the volume series for retail sales.

The Retail Sales Index

The RSI is the most comprehensive measure of retail activity in the UK. It is a Laspeyres base-weighted index (with a base year of 2000) that measures movements in the average weekly sales of retailers in Great Britain. In the National Accounts, the index feeds into the Index of Services, which is a

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major component of the output measure of GDP.

The RSI is based on data from the retail sales inquiry, a survey of about 5,000 retailers, including all large retailers and a representative sample of smaller businesses. The retail sales inquiry is sampled monthly from the Inter-Departmental Business Register (IDBR) so that it remains representative of the whole retail sector. This ensures that growth areas in retailing, such as that for specialist internet retailers, are reflected in the RSI results. The monthly retail sales First Release shows estimates of the volume (that is, after the estimated effects of prices have been removed) and value (total value of sales in current prices) indices of retail sales in three main categories: predominantly food stores, predominantly non-food stores and non-store retailing and repair. **Table 1** summarises the main categories that make up the RSI.

Although some food stores, for example large supermarkets, are increasingly diversifying into non-food sales, they continue to be recorded as food stores. This is because classification is based on the dominating retail activity of the company. For instance, supermarkets with internet shopping facility will be recorded as food stores as long as food store retailing continues to be the main activity of the company.

Retail trade covers the activities of businesses selling goods directly to consumers. All consumer goods are covered, except for motor vehicles which are recorded as a separate category within the Index of Services. **Figure 1** shows the yearly growth rates of retail sales values and its main components.

Figure 1 shows that, from May 2006 to early 2008, non-food stores were almost always the largest contributor to the growth in retailing activity in value terms. This trend changed in 2008 with three noticeable differences:

- Food stores became the key drivers of retail sales growth
- For the first time in over two years, non-store retailing contributed more to the growth of RSI than non-food stores, and
- In 2008Q4, non-food stores made a negative contribution to retail sales growth

The contraction of sales in non-food stores in the second half of 2008 is marked. In November 2008, the value of sales in non-food stores fell by 3.1 per cent compared with the same period in the previous year. This fall was the biggest since records began in 1986. It was driven by declining rates in all four main categories of this sector (non-specialised stores, textile, clothing and footwear stores, household goods stores and 'other' stores). **Figure 2** shows the growth rate of non-food stores and the contributions to growth of its main components. It shows that, from June to December 2008, household goods stores were consistently the largest contributor to the downward trend observed in non-food stores sales. It also indicates that the category that has displayed the most resilience in terms of turnover value is the 'other stores' category.

RSI in the context of the UK economy

Household consumption expenditure in the UK is mainly driven by changes in the financial position of households. Over the past decade, several factors have led to changes in household wealth. Some of them include:

- Steady rise in average earnings, with a high proportion of households benefiting from employment
- A housing market boom, with house prices rising relative to incomes
- Credit expansion related to the growth in equity and house prices

This changed with tightening in credit supply, starting in 2007, as the global financial crisis started to develop, followed by a fall in house prices.

These factors have subsequently affected the structure of retailing activity over the period. At the peak of the housing market expansion, housing market-related expenditure was the dominant factor driving retail sales activity. Figures 1 and 2 have shown that this is the case as non-food stores (notably household goods stores) have been a key driver of retail sales values. In 2008, there was a noticeable change in the structure of retailing activity as non-food stores recorded a contraction in retail sales values.

In addition to the financial position of households, changes in the value of retail sales are affected by price movements. In times of price inflation, sales values will increase by more than sales volumes, while in times of deflation, sales values will increase by less than sales volumes. Throughout the 18 months since May 2007, prices in non-food retailing have been falling. In non-store retailing they have fallen much faster, and for longer. In food stores, however, prices have risen, with inflation peaking in August 2008 at over 8 per cent.

There is little doubt that heavy discounting towards the end of 2008 affected the pattern of sales. The effect of prices on retailing activity in general will be discussed further in a second article to be published later in 2009. While price movements may cause the value of retailing activities to change, they are often a reflection of changes taking place in the economy.

The next section describes key economic factors that explain recent changes in the pattern of retailing activity.

Pre-2008

In the past decade, consumer spending has been a key driver of economic growth. In this period of expansion, households faced rising incomes as an increase in the

Table 1
RSI main categories

Publication category	Percentage of all retailing (base year 2000)
Predominantly food stores	*43.0*
Non-specialised stores with food, beverages or tobacco predominating, for example, supermarkets	
Specialist food stores	
Retail sales of alcoholic drinks, other beverages and tobacco	
Predominantly non-food stores	*51.3*
Non-specialised stores where sales of food, beverages and tobacco is not predominant, for example, department stores	
Textile, clothing and footwear stores	
Household goods stores, for example, furniture, electrical appliances and hardware stores	
Other non-food stores	
Non-store retailing and repair	*5.7*

Source: UK Standard Industrial Classification 2003

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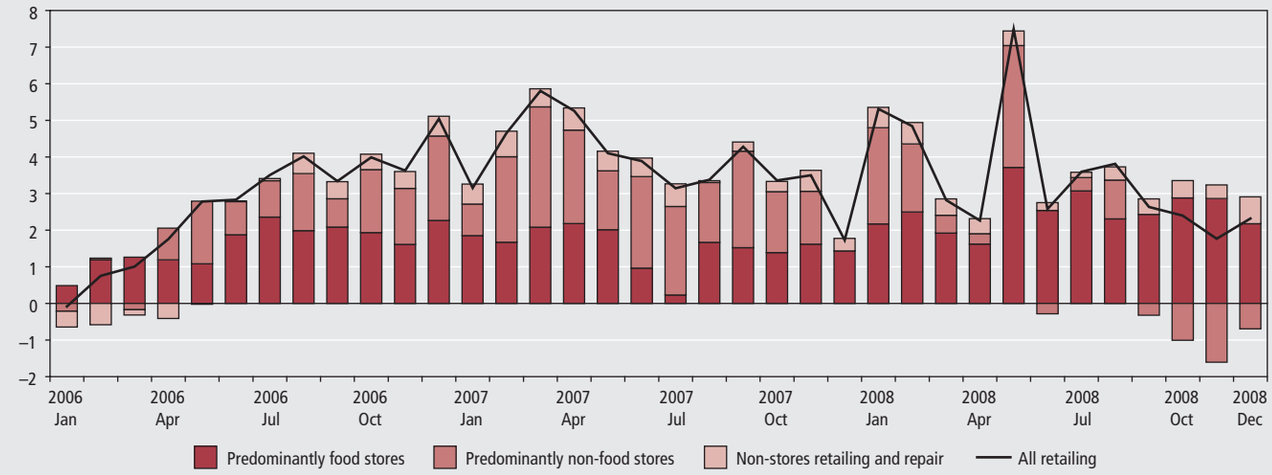
Figure 1
Total value of retail sales and the contributions to growth of its main components[1]

Percentage change, month on same month a year earlier,[2] seasonally adjusted

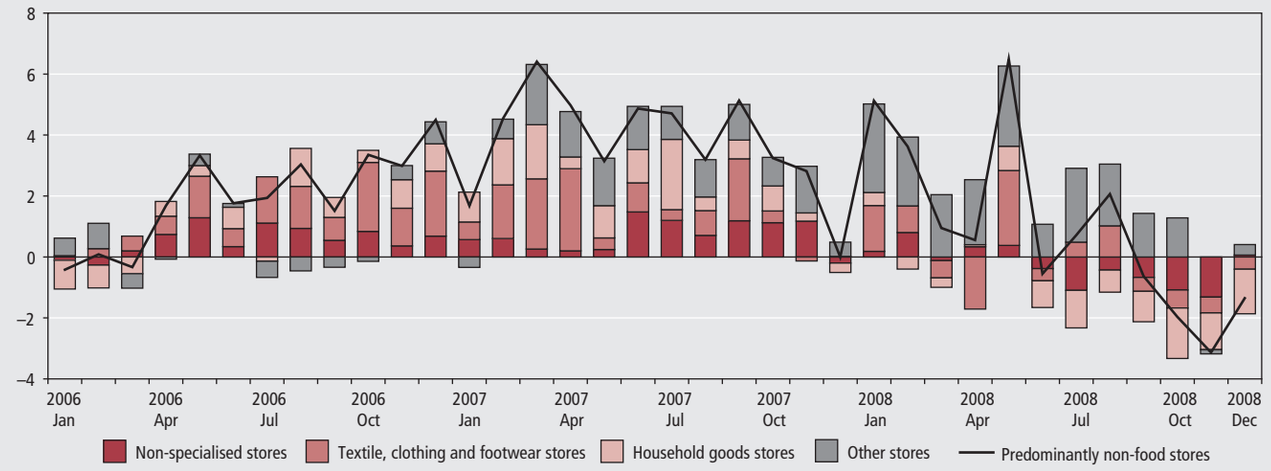


Notes: *Source: Office for National Statistics*

1 The bars on the graph show the weighted contributions of the components to the total growth rate. These contributions have been calculated as the growth rate of the components multiplied by their weights.
2 These are presented as yearly growth rates because one-monthly changes in retail sales can be volatile.

Figure 2
Total value of non-food retail sales and the contributions to growth of its main components[1]

Percentage change, month on same month a year earlier,[2] seasonally adjusted



Notes: *Source: Office for National Statistics*

1 Examples of household goods include furniture, lighting equipment, electrical household appliances, hardware, paints and glass. Examples of 'other' non-food stores include stores that sell books, stationery, office supplies and equipment, pharmaceutical and medical goods.
2 At this level of disaggregation, monthly data are more volatile.

demand for labour supported a rise in real earnings. The Average Earnings Index (AEI) shows that, between 1998 and 2008, average earnings increased by an annual average of 4.1 per cent (including bonuses) and 4.0 per cent (excluding bonuses). This has been reinforced by the growth in equity and house prices. For instance, at the peak of the housing market expansion in 2002, the 12-monthly growth in house prices (as reported by the Halifax and Nationwide) averaged 20 per cent. With the supply of houses limited relative to demand, this reinforced the increase in house prices which allowed households access to credit and increased their spending power. **Figure 3** shows the 12-monthly growth rates of the Bank of England's total net lending to households. It shows lending to the household sector (secured and unsecured) continuing to grow through 2006 and 2007, then a sudden decline from the middle of 2008.

As purchases from retail establishments account for about 73 per cent of household final consumption on goods and around one-third of total household final consumption, the retail sector has consequently benefited from 'wealthier' households; up until mid-2008, households' extra income was used to support additional debt and spending. Retail sales values and household expenditure on retail goods showed strong positive growth in 2006 and 2007 (see **Figure 4**).

The effect of the housing market on retail sales is evident from the pattern of household expenditure of items related to the housing market. For instance, while total consumer spending on retail goods displayed strong growth between 2006 and 2008 (average quarterly growth of 4.5 per cent), aspects of consumer spending such as expenditure on furnishings showed particularly strong growth, reflecting the

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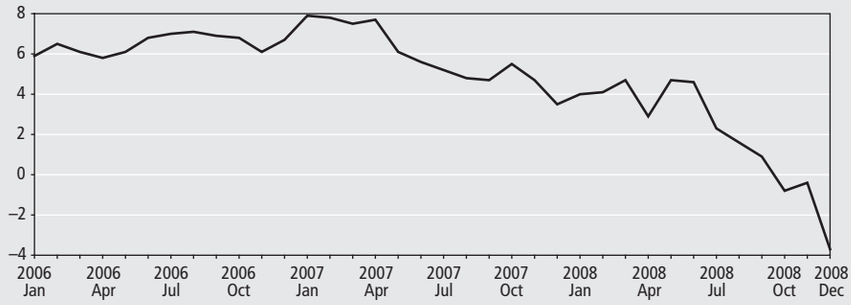
Figure 3
Bank of England's M4 lending to the household sector[1]

Percentage change, month on same month a year earlier, seasonally adjusted



Note: *Source: Bank of England*

1 M4 is a measure of the quantity of money supply. Lending to households comprises secured and unsecured lending.

Figure 4
Household final consumption expenditure[1,2] on retail goods and retail sales

Percentage change, quarter on same quarter a year earlier, seasonally adjusted, current prices

Notes: *Source: Office for National Statistics*

1 The retail expenditure series used in this article have been estimated based on ONS assumptions of what retail establishments are.
2 The above series are not expected to track each other precisely as there are major differences in coverage and definition (see Dolling *et al* 2005). While retail sales data are based on sampled data from the retail sales inquiry, consumer spending is based on sampled data from a number of sources, with the Expenditure and Food Survey being the most frequently used source (about 30 per cent weight in the main aggregate). Other sources include retail sales, trade sources and other government departments.

thriving housing market. In 2007Q3, total spending in retail establishments grew by 5.4 per cent compared with the same period in the previous year. In the same period, expenditure on household furniture and carpets and other floor coverings grew by 7.0 and 10.7 per cent, respectively. A similar story is seen from the RSI data, which show that retail sales growth in this period was mostly driven by retail sales in predominantly non-food stores that sell household items such as furniture, lighting equipment, electrical household appliances and television goods (note that these items are also sold in some predominantly food stores and non-stores).

2008

In 2008Q2, the ONS quarterly estimate of GDP remained flat, bringing to an end a sequence of 64 successive quarters of positive growth – the longest peace-time expansion of the UK economy on record. By 2008Q4, ONS had reported two successive quarters of contraction, the common understanding of a recession. The general consensus among economic commentators is that the source of the current recession is traceable to the 'unsustainable rises in lending, bond, equity and house prices and compression of risk premia that have been evident since the start of the decade across many developed economies' (Blanchflower 2009).

The collapse of financial institutions such as Lehman Brothers, the bailout of AIG (American Insurance Group) and the nationalisation of Bradford and Bingley led to direct economic effects through loss of savings. In addition, reduced business confidence was reflected in falling business investment and there was a sharp fall in consumer confidence (as shown by the GfK Consumer Confidence Index) in the second half of 2008. With the exposure of vulnerabilities in the banking system, 'banks began to deleverage, by securing injections of new capital, reducing lending, and by selling assets' (Bank of England 2008). This process contributed to a marked slowdown in money and credit growth. The Bank of England's net lending data show that the 12-monthly growth rate of net lending contracted from +4.6 per cent in June 2008 to –3.7 per cent in December 2008 (see Figure 3).

As access to credit became much tighter, it reinforced the decline of the housing market which had already begun in late 2006. **Figure 5** shows the growth in loans approved for house purchases. It shows a sharp deterioration in the loans approved for home purchases from 2007.

With the creditworthiness of households diminished by falling house and equity prices, households' access to lending (both secured and unsecured) has reduced from previous levels. A survey carried out on behalf of the Bank of England shows that, in the course of 2008, households reported that credit had become harder to access (see Hellebrandt and Young 2008). It also suggests that tighter credit conditions have restrained household spending: fewer households were reported to have taken out an additional secure loan to fund spending on household goods or home improvements compared with previous years. As households face declining wealth in the current economic climate, they have reacted by cutting down on credit-driven discretionary spending.

In addition to a contraction in credit in that period, households faced record levels of energy and food prices feeding through as steep increases in commodity prices were passed on to consumers. This had an adverse effect on real disposable income (see **Figure 6**) and further reinforced the slowdown in aggregate demand of non-discretionary items.

In 2008, the RSI continued to show positive growth rates of retail sales values. However, Figures 1 and 2 have shown that, in 2008, there was a noticeable shift in the pattern of retail sales consistent with a modification of consumer behaviour in response to the changing economic climate.

The slowdown of the housing market, banking crisis and loss of confidence has led to a marked slowdown in lending to households. This has led to a reduction in discretionary spending in general and, notably, credit-driven expenditure. One aspect of consumer spending that has seen a sharp fall is expenditure on motor vehicles. As most car purchases are financed through

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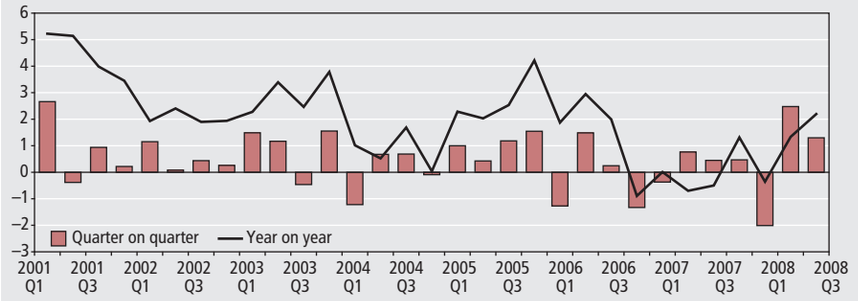
Figure 5
Number of loans approved for house purchases

Percentage change, month on same month a year earlier

Source: British Bankers Association

Figure 6
Real Household Disposable Income

Percentage change, seasonally adjusted, chained volume measure



Source: Office for National Statistics

credit, this aspect of spending has been hard-hit by the credit squeeze.

Figure 7 shows the 12-monthly growth rates of the output of the motor trades division. It shows that, in November 2008, the output of the sector fell by 19.6 per cent compared with November 2007. This is the largest fall since records began in 1995.

Note that the RSI does not cover car sales and so the sharp fall in this sector will not be reflected in the RSI. The RSI captures the fall in credit-driven expenditure associated with the housing market. In 2008Q4, there was a sharp contraction in non-food store sales that was largely driven by the contraction of sales in household goods stores. This is in contrast to previous years when the sector expanded rapidly as houses increased in value and households had easier access to credit. In addition, the declining rates of sales in non-specialised stores and textile, clothing and footwear stores also contributed to the negative growth of non-food stores (see Figure 2). Shops such as Woolworths, MFI, Adams and Viyella fall into these categories of non-food stores.

While non-food stores recorded negative growth in 2008Q4, food stores and non-store retailers continued to show positive growth, leading to positive growth of RSI values despite the economic downturn. The positive growth of food sales is partly a reflection of most food items being necessities and thus generally price inelastic. In 2008, food stores consistently recorded positive price inflation while heavy discounting was prevalent among non-food stores and non-store retailers. As the value measure does not take out the effect of prices, this may partly explain the strength of this category in relation the others. Furthermore, there is also evidence of food stores benefiting from stronger sales at the expense of restaurants. In most months of 2008, hotels and restaurants showed negative growth rates while food stores' sales values showed positive growth.

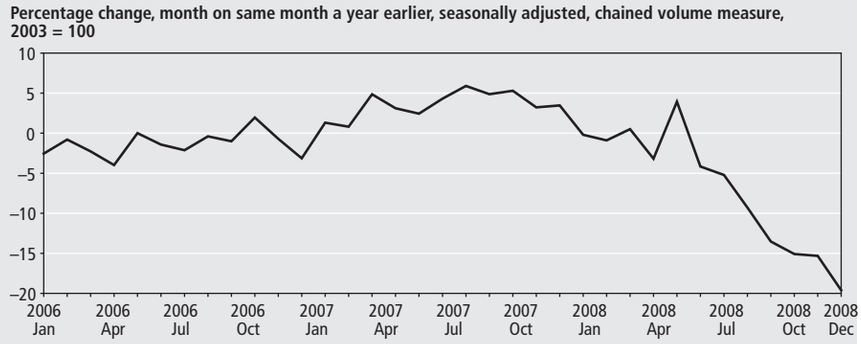
Non-store sales constitute approximately 5.7 per cent of total retail sales (based on 2000 weights). Among the three main categories of retail sales, this has historically been the smallest contributor to retail sales growth (in both volume and value terms). However, from September to December 2008, non-store retailing and repair, which include internet sales, was the second largest contributor to the growth in the value of retail sales. In that period, non-food stores contributed negatively to total retail sales growth. This perhaps suggests that consumers, in search of ways to maximise the utility of their limited resources, may be turning away from traditional stores to online retailers in search of bargains. Thus, non-store retailers may be benefiting from stronger sales at the expense of store retailers. Additionally, non-store retailers may be able to withstand the current economic climate better than store retailers, partly as a result of relatively low fixed costs. In 2008Q4, the performance of online retailing stores differed from what was observed in most high streets. Indeed, over the Christmas period, record internet sales were reported in the press by retailers such as Asos, which claimed a 118 per cent increase in year-on-year sales over the nine weeks to January 2009.

Do the RSI estimates of sales values fit other measures of the recession?

So far, this article has shown that the recent structure of retail sales fits well with overall household behaviour in the new economic climate. Households have faced declining wealth and higher utility bills simultaneously and they have reacted to this by cutting back on discretionary spending. There are a number of reasons why retail

Figure 7
Motor trades output

Percentage change, month on same month a year earlier, seasonally adjusted, chained volume measure, 2003 = 100



Source: Office for National Statistics

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sales values continued to grow in 2008 despite the recession.

The financial position of households is affected by labour market conditions and households' access to credit. While there has been a sharp contraction in lending to households, average earnings have continued to grow. In 2008, the average earnings of individuals maintained steady growth. The ONS AEI – excluding bonuses – registered a 12-monthly growth of 3.6 per cent to November 2008, unchanged from the growth reported in June. While the story is slightly different when bonuses are included in the AEI (the AEI including bonuses was 2.7 per cent in November, down from 3.4 per cent recorded in June), it nevertheless presents the picture in which the current value of household income had not fallen.

Another measure that provides an indication of how household behaviour could change in response to the current climate is the proportion of disposable income spent on retail consumption. **Figure 8** shows household final consumption expenditure on retail goods as a proportion of gross household disposable income.

Figure 8 shows that the proportion of disposable income spent on retail goods has increased from 31.9 per cent in 2006Q1 to 32.7 per cent in 2008Q3. It suggests that, under these circumstances, households might not view their current retail spending as profligate, which could explain why the slowdown in spending has not been more severe. When spending on retail goods is looked at as a proportion of total household final consumption expenditure, a similar story emerges. At 33.6 per cent in 2008Q3, the proportion is largely unchanged from its value of 33.4 per cent in 2006Q1.

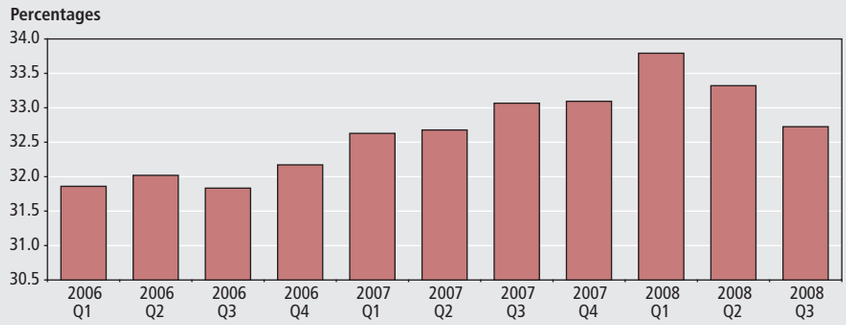
Another factor that could potentially explain why the RSI has not seen a sharper fall is the effect of external demand. In December 2008, the sterling effective exchange rate index averaged 78.1, 25.6 per cent below its August peak in July 2007. The fall in sterling is expected to create additional demand for UK retail goods. The ONS International Passenger Survey shows initial support for this as the expenditure of overseas visitors to the UK showed strong growth in 2008Q4. It shows that overseas expenditure in the UK increased by 10.1 per cent in November compared with the same month in 2007 (see **Figure 9**). Additionally, the weakening of sterling could also create a positive effect on domestic demand as fewer people are travelling abroad. This will be looked into in further detail as more tourism data become available.

Alternative measures of retail activity

In addition to official estimates of retail sales activity, alternative estimates of retail sales are available from business surveys conducted by trade industry groups. These surveys are often published ahead of the RSI and seen as a first indication of retail activity in the UK. Two highly respected surveys looked at by the Bank of England and city analysts are the BRC-KPMG retail sales monitor and the CBI Distributive Trades Survey. The former is a survey of retail values and the latter is a survey of retail volumes. The BRC survey will be discussed in this article.

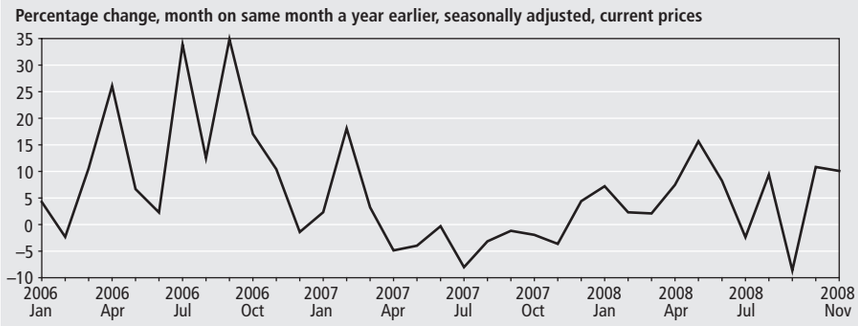
The BRC retail sales monitor measures changes in the value of retail sales from a sample of approximately 70 participants across the UK retail industry. The monitor measures the value of spending and does not adjust for price changes. BRC retail sales growth is reported both in total and on a 'like for like' basis. The former reports the growth in retail sales across the whole retail industry, while the latter only measures the

Figure 8
Total household consumption expenditure on retail goods as a proportion of gross household disposable income



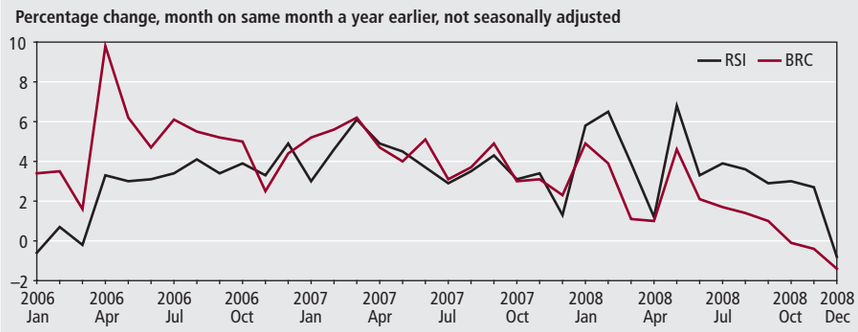
Source: Office for National Statistics

Figure 9
Expenditure of overseas visitors to the UK



Source: Office for National Statistics

Figure 10
BRC series and ONS value RSI for all retailers



Source: Office for National Statistics, British Retail Consortium

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Table 2
Main differences in convergence between the RSI and the BRC retail indicator

RSI	BRC
Survey of 5,000 retailers of all sizes, Great Britain only	A range of mainly large retailers accounting for some 60 per cent of total UK sales value
Covers all kinds of retailers, including mail order/internet retailers and market stores	A representative range of retailers across all sectors, but excluding market stalls
60 per cent response at first release, usually representing 90 per cent of the sales of those selected	100 per cent response every month
Sample updated each month, in accordance with the profile of the British retail industry	Converge as BRC membership

Source: Office for National Statistics, British Retail Consortium

change in comparable sales, excluding any spending in stores that opened or closed in the intervening year. The RSI measures sales across the whole economy including new stores. It does not report sales on a like for like basis and so valid comparisons between the RSI and BRC retail indicators must be done on a total sales basis. The RSI for the value of sales, not seasonally adjusted, is the most appropriate measure to compare with the BRC series. **Figure 10** shows that, over time, both series have a common trend. However, there is a divergence between the series in the second half of 2008, though the gap narrowed in December 2008.

Differences between the two indicators in coverage and the method of compilation can lead to apparent discrepancies in the published figures. Palmer and Hynard (2007) have highlighted the main methodological differences between the indicators. The main coverage differences are summarised in **Table 2**.

As a demonstration of how the methodological differences in the two surveys can lead to differences in reported growth rates, **Figure 11** shows a comparison between RSI figures (excluding the sales of small businesses) and the BRC. The correlation between both indicators increases from 0.70 to 0.77 when the sales of small businesses are excluded from the RSI.

Conclusions

Over the course of 2008, volatility in financial markets triggered what is considered by some to be the most serious banking crisis in modern economic history. With credit now highly rationed and households uncertain about future labour market prospects, spending behaviour has been modified accordingly. Spending on household goods that were supported by the thriving housing market has been cut back as house prices have fallen sharply. However, spending on food items and non-store goods has been more resilient, as household incomes have been sustained despite tighter credit conditions.

The RSI data show that retail sales in non-food stores (particularly those that sell household goods) have contracted sharply in the second half of 2008. Food store sales were the key driver of retail sales in that period followed by non-store retailing. Price movements can partly explain the changes in the growth rates towards the end of the year. This will be explored in a second article to be published later in 2009.

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Figure 11
BRC total sales and ONS value RSI for all large and total retailers

Percentage change, month on same month a year earlier, not seasonally adjusted

Source: Office for National Statistics, British Retail Consortium

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