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Food purchases and nutrition over the recession

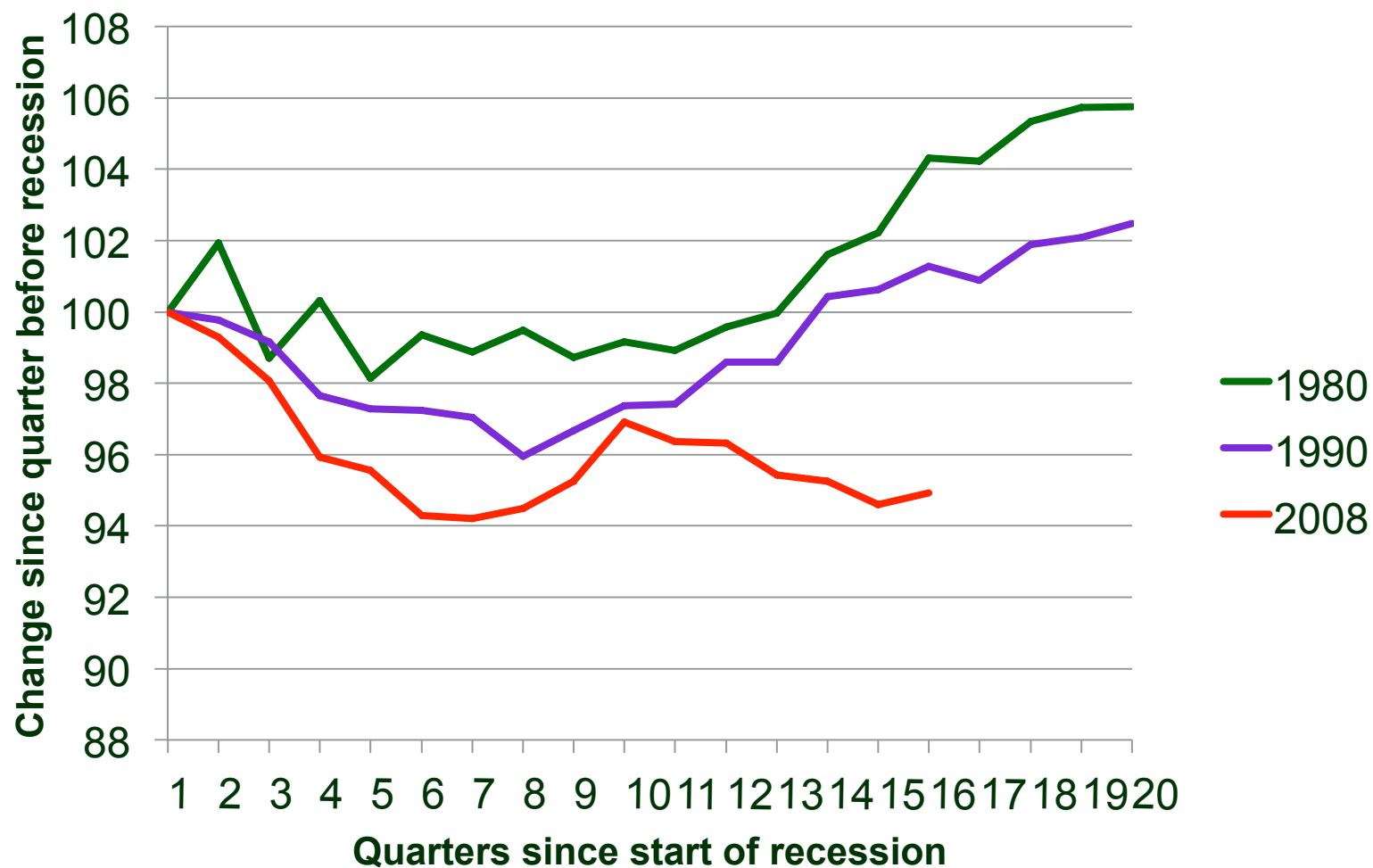
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Introduction

- The recent recession led to large declines in household income
 - Employment rates declined
 - Real wages stagnated
 - Asset prices fell
- What happened to household spending?
 - Food spending declined
 - Households bought less food
 - Did households substitute to more calorie dense foods?
 - What impact did this have on the nutritional content of diets?

Change in nondurable consumption



Source: Crossley, Low and O'Dea (2011) "Household consumption through recent recessions" IFS Working Papers , W11/18

Components of non-durable consumption that declined in a consistent way in each recession

- Annual percentage point deviation from expansionary trend growth of consumption component

| | 1980 | 1990 | 2008 |
|------------------|--------|--------|--------|
| Household goods | -13.2* | -13.1* | -10.2* |
| Catering | -7.2* | -7.4* | -7.4* |
| Alcohol | -5.8* | -5.1* | -8.3* |
| Leisure services | -6.4 | -9.6* | -6.2* |

* Statistically significant change

Source: Crossley, Low and O'Dea (2011) "Household consumption through recent recessions" IFS Working Papers , W11/18

Components of non-durable consumption that declined differently in the most recent recession

- Annual percentage point deviation from expansionary trend growth of consumption component

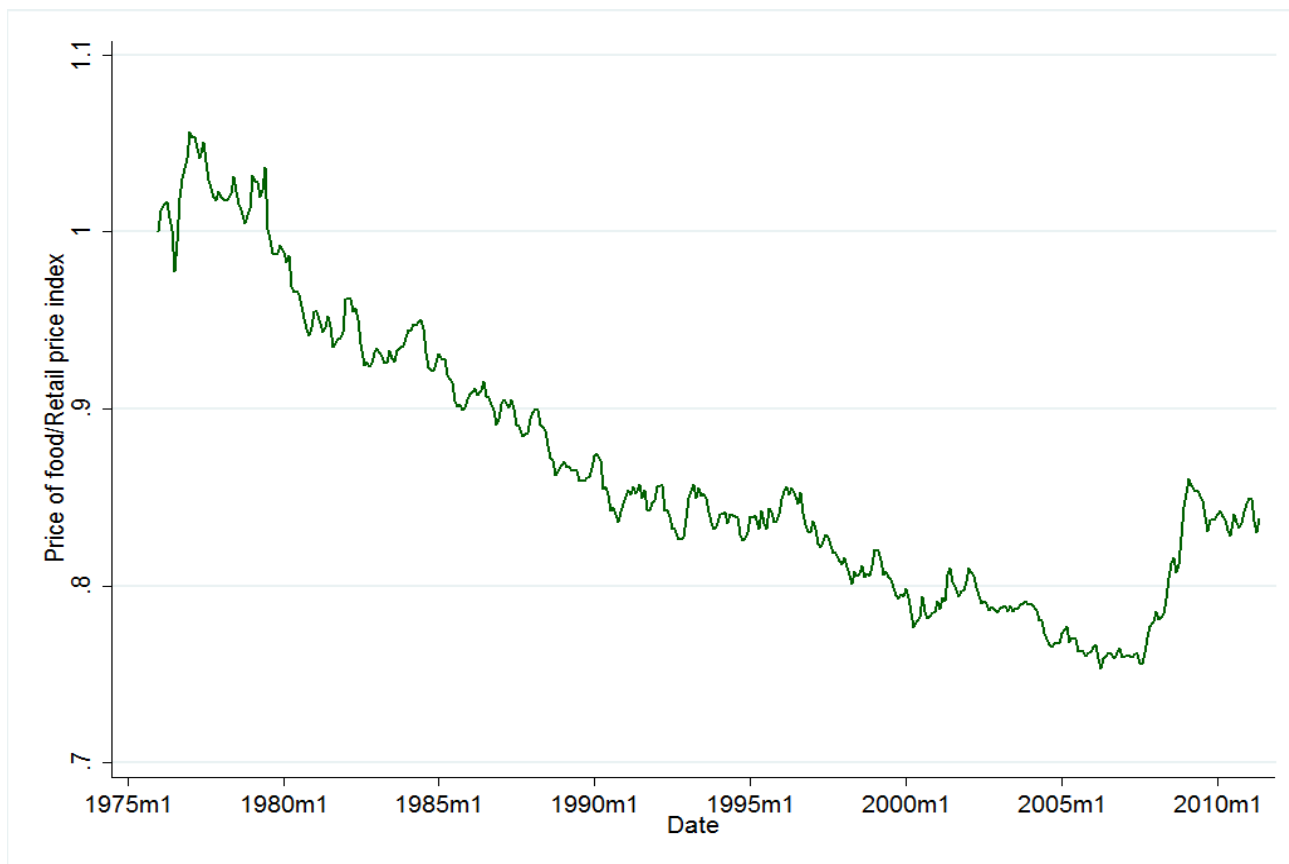
| | 1980 | 1990 | 2008 |
|---------------------|-------------|-------------|--------------|
| Food at home | -0.2 | -2.5 | -6.1* |
| Motoring | -11.3* | -9.8* | -3.6* |
| Leisure goods | -12.5* | -11.8* | -1.9 |
| Clothes and shoes | -4.4* | -4.1* | -2.9 |

* Statistically significant change

Food prices

- Substantial decline in amount of food purchased
 - Different in this recession to past recessions
- The recession was contemporaneous with a large increase in the price of food
 - Depreciation of sterling led to increase in price of imported goods
 - World commodity prices rose
 - RPI food basket increased by 10% between Oct. 2007 and Oct. 2008
 - UK price increase larger in UK and persisted
- There were also big changes in relative food prices
 - Meat, poultry, eggs, dairy, cereals saw large price increases
 - Price of prepared foods rose by less

Food prices in the UK declined substantially from 1975 to 2007



Food price rose dramatically from mid-2007



From BN-GOS

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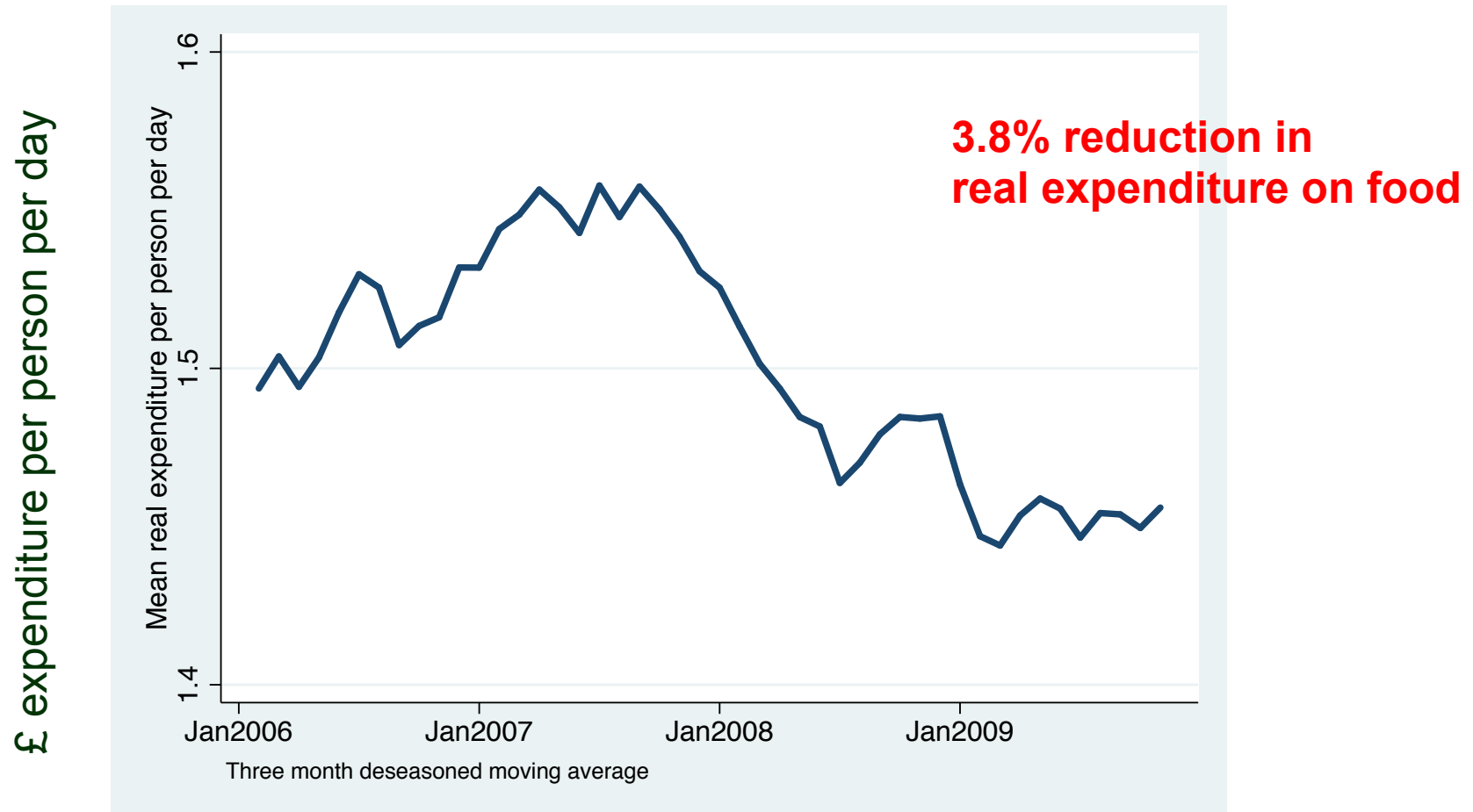
Increase in food prices higher in the UK and persisted



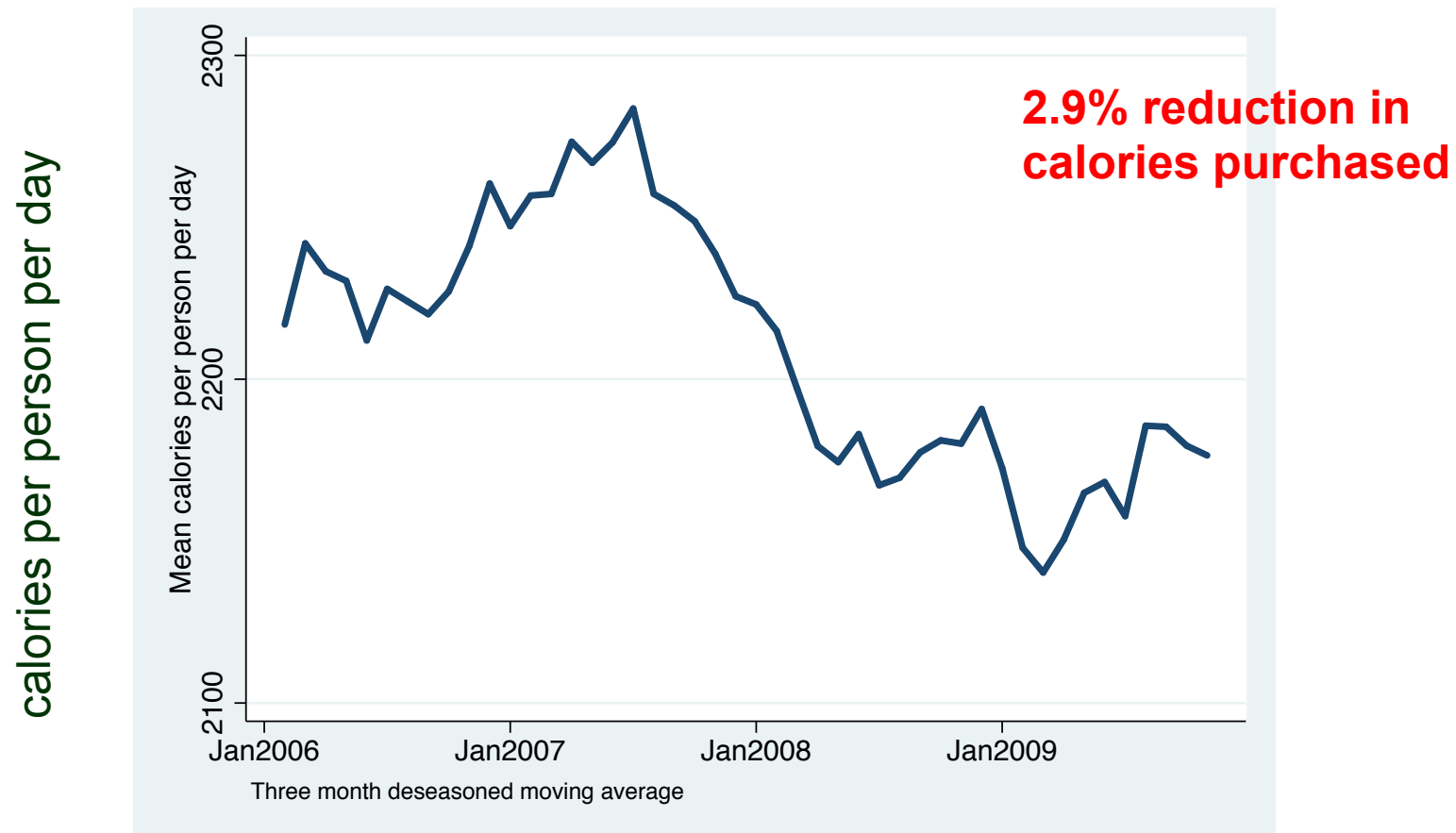
Food expenditure

- Substantial decline in amount of food purchased
 - due to a reduction in real income and changes in relative price of foods
- What impact did this have on types of foods purchased
 - as households reduced expenditure did they substitute to cheaper calories, what impact did this have on nutrition
- Use data on food purchases made by over 3000 UK households observed over the period 2006-2009
 - data from Kantar Worldpanel, households record information on all foods purchased and brought into the home
 - detailed information on individual products and nutrients

Real expenditure on food per person per day

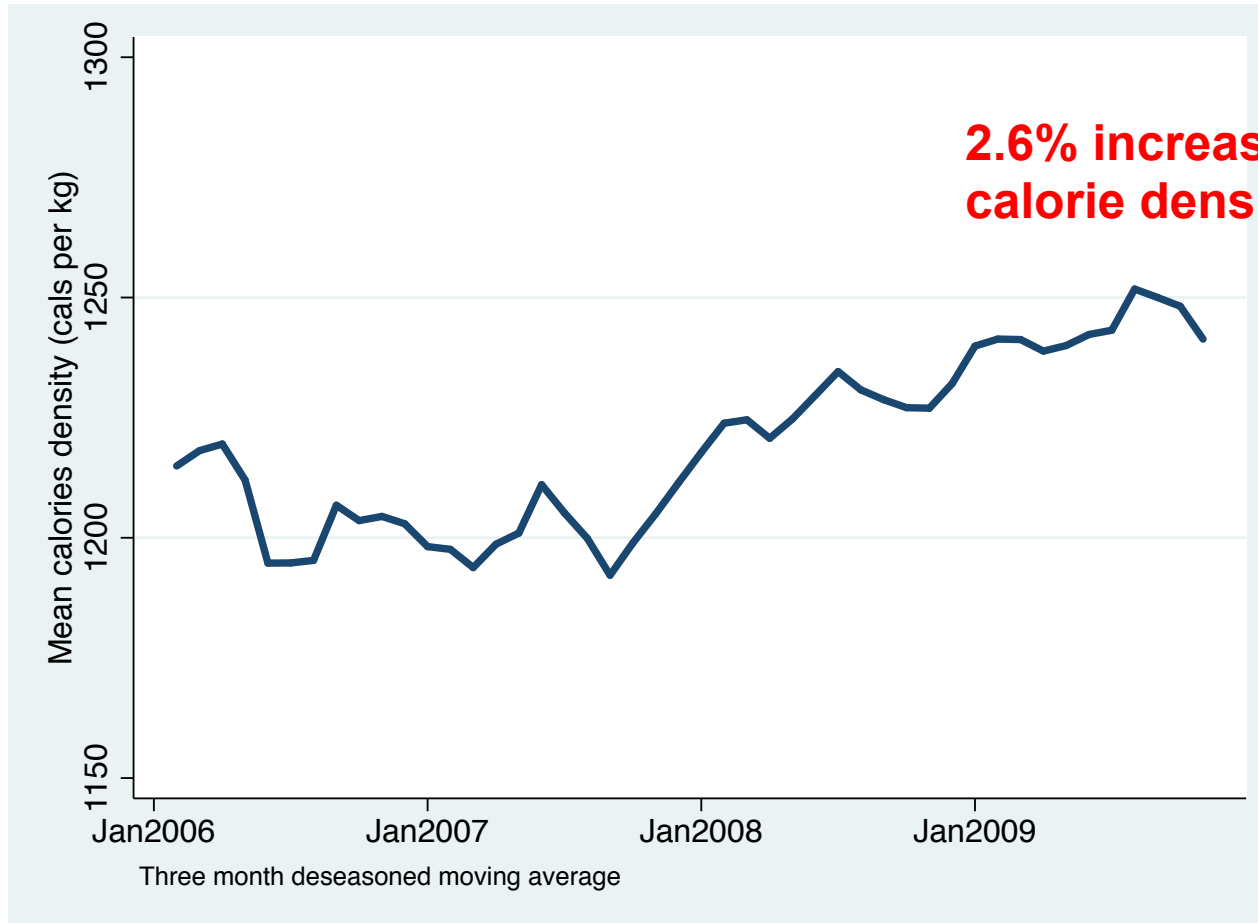


Calories purchased per person per day



Calorie density of foods purchased

calories per 1 kg of food purchased

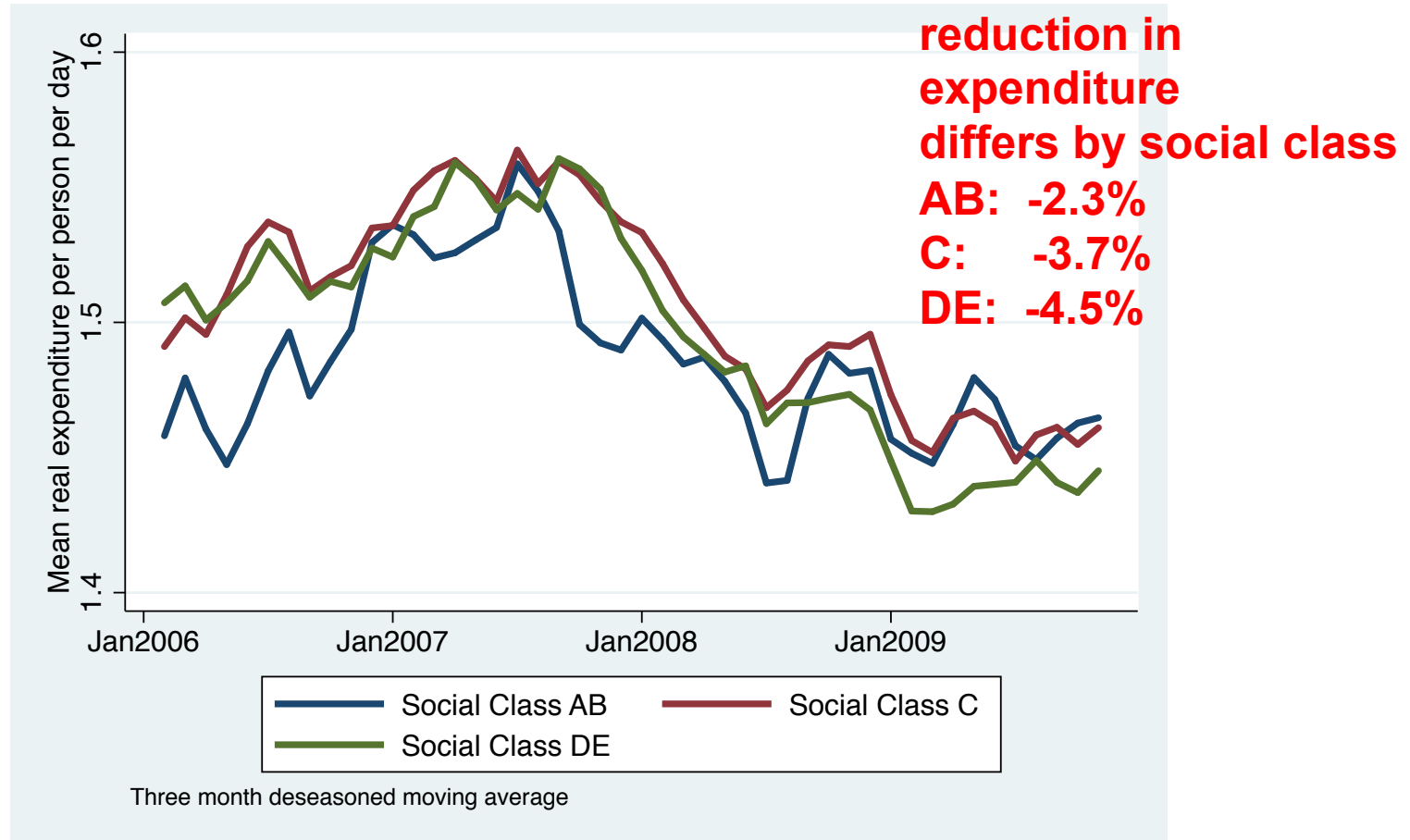


Change in calories by food type

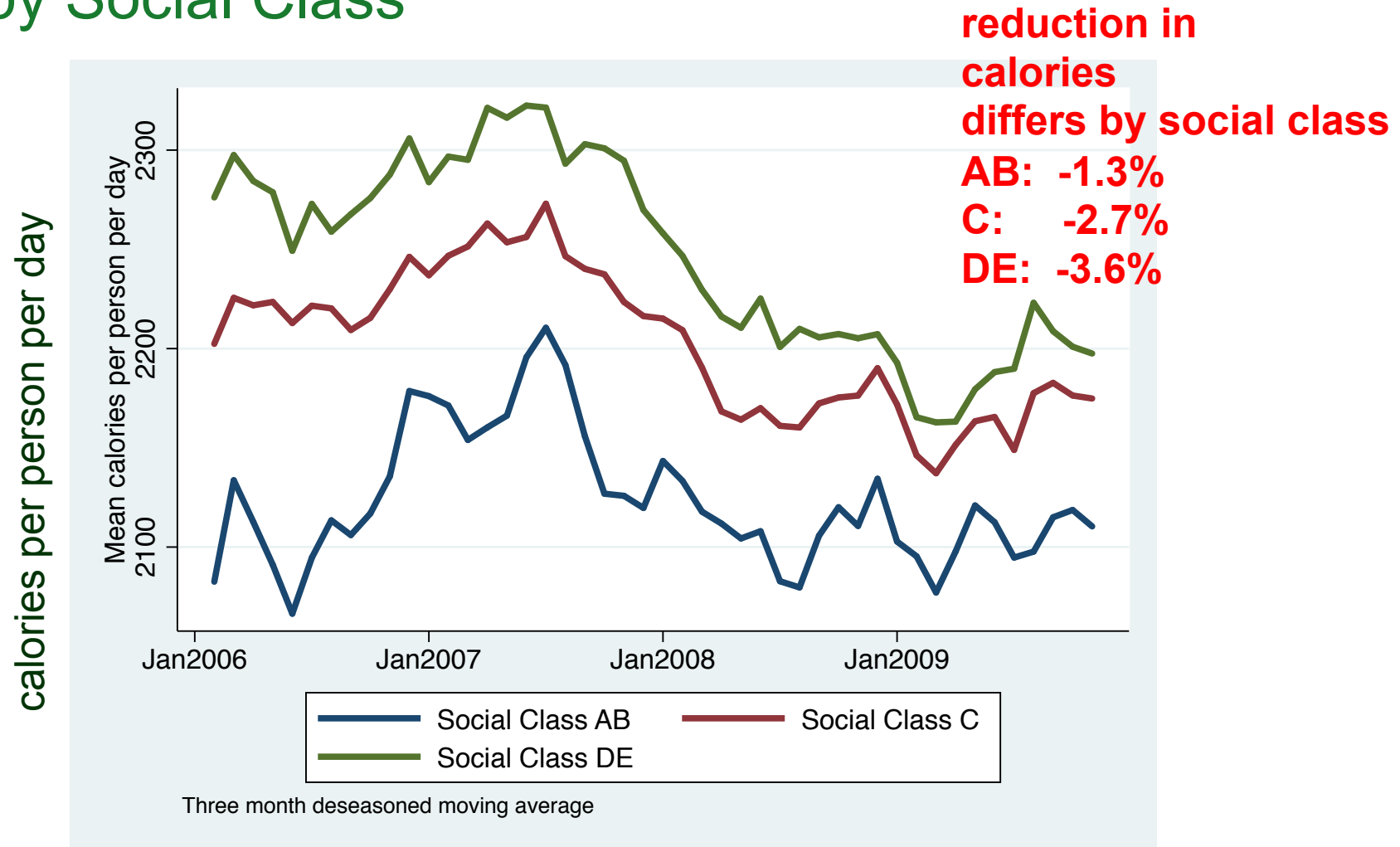
| Food Category | Change in calories | % change in calories | % change in density |
|------------------|--------------------|----------------------|---------------------|
| Dairy | -17 | -8.0% | 2.0% |
| Meat | -16 | -7.9% | -2.3% |
| Fruit | -14 | -11.0% | 3.6% |
| Poultry | -8 | -1.7% | -2.5% |
| Prepared Sweet | -7 | -1.7% | 0.4% |
| Prepared Savoury | -6 | -1.7% | 0.2% |
| Drinks | -6 | -11.8% | -5.8% |
| Vegetables | -5 | -3.1% | 2.0% |
| Cheese | 1 | -0.5% | 1.2% |
| Grains | 9 | -2.1% | 3.6% |

Real expenditure on food per person per day, by Social Class

£ expenditure per person per day

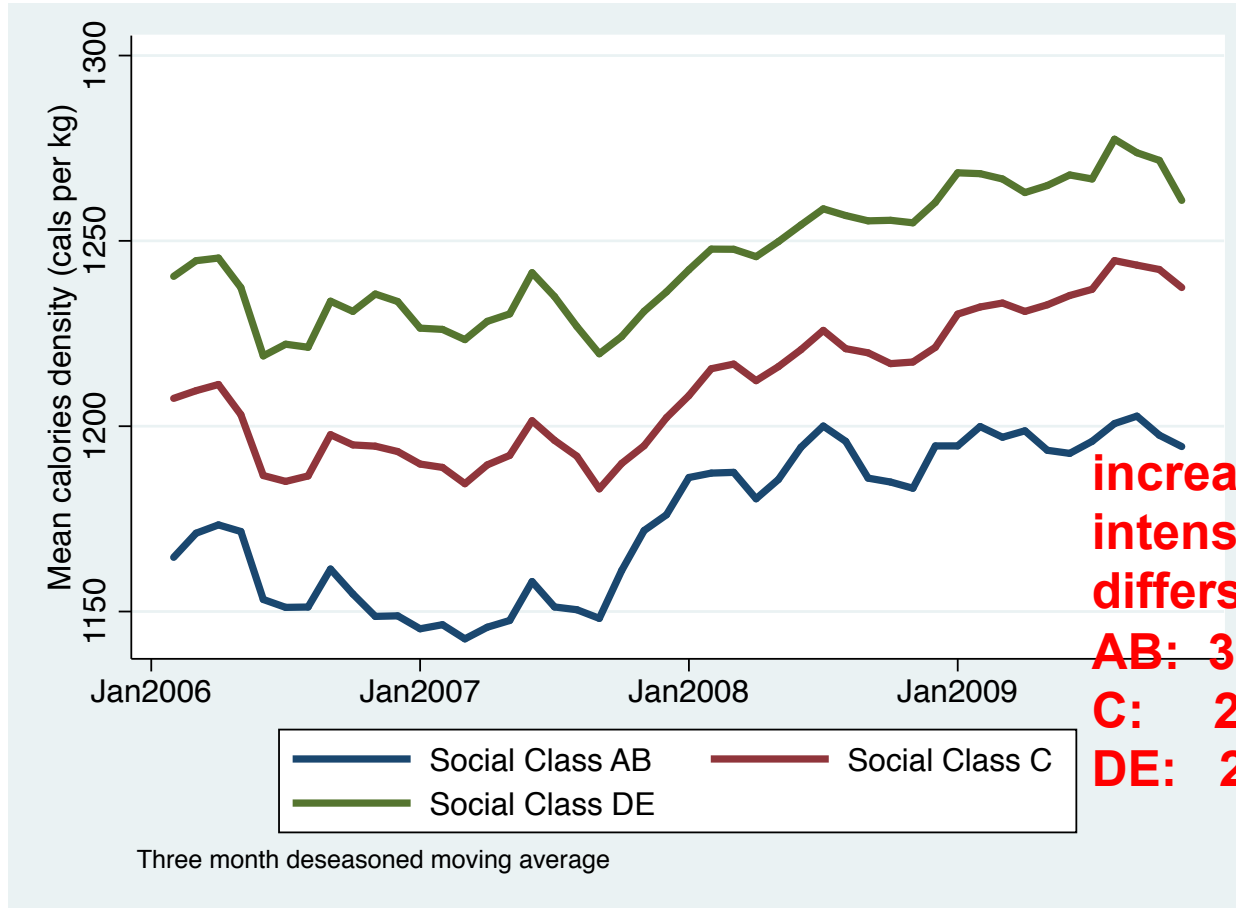


Calories purchased per person per day, by Social Class



Calorie density of foods purchased, by Social Class

calories per 1 kg of food purchased



increase in intensity differs by social class
AB: 3.1%
C: 2.6%
DE: 2.3%

Change in nutrients by Social Class

| Nutrient | AB | C | DE | All |
|------------------|------------|--------|--------|---------------|
| Real expenditure | -2.3% | -3.7% | -4.5% | -3.8% |
| Calories | -1.3% | -2.7% | -3.6% | -2.9% |
| Fats | -1.8% | -2.9% | -3.8% | -3.2% |
| Fibres | -0.8% | -1.7% | -1.8% | -1.7% |
| Salt | -11.5 % | -12.2% | -12.2% | -12.4% |
| Sugar | -1.8% | -3.5% | -3.8% | -2.5% |

From RG_talk_24May2012.do

Change in nutrient intensity by Social Class

| Nutrient | AB | C | DE | All |
|----------|-------|-------|-------|--------------|
| Calories | 3.1% | 2.6% | 2.3% | 2.6% |
| Fats | 2.9% | 2.5% | 2.1% | 2.4% |
| Fibres | 3.8% | 3.9% | 4.5% | 4.1% |
| Salt | -7.6% | -7.3% | -7.6% | -7.5% |
| Sugar | 2.3% | 1.8% | 2.4% | 2.1% |

From RG_talk_24May2012.do

Summary

- Households experienced a decline in income and a contemporaneous large increase in the price of food and changes in relative food prices
- There was a substantial decline in the amount of food purchased
 - this was higher for social class DE households and less for AB
- Households compensated by purchasing cheaper more calorie dense foods
 - AB households did this more than DE
- Nutrition improved in some dimensions
 - lower salt, higher fibre, reduction in “bads” from decline in quantity
- Nutrition declined in other dimensions
 - Households shifted towards higher fat and higher sugar foods