JRF programme paper: Globalisation

# Global influences on the cost of a minimum standard of living in the UK

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This paper:

- Explores how trends in price rises will affect the ability of UK households to afford an acceptable standard of living in the future;
- reviews how global factors have affected the prices of goods and services; and
- outlines what policies are needed to ensure that households can afford a minimum acceptable standard of living.

The Joseph Rowntree Foundation (JRF) commissioned this paper as part of its programme on Globalisation, which explores and promotes awareness of the impacts of globalisation on the UK and focuses particularly on communities and people in poverty

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## Summary

In recent years, relatively large increases in the price of food, domestic energy and some other essentials have caused the minimum cost of living to rise faster than the general inflation rate. This creates an important domestic issue: how to prevent a fall in living standards for disadvantaged groups whose incomes are often linked to general inflation but whose living costs are rising faster than this. But it also raises questions about the role of global influences on economic disadvantage in the United Kingdom. The global cost of commodities and of imported consumer goods today have important impacts on the price of essentials. This paper explores ways in which this might affect the future ability of households in the UK to afford a minimum acceptable standard of living.

This question can be addressed through the Minimum Income Standard (MIS), a measure of how much money households in the UK need in order to reach a minimum acceptable standard of living, based on what members of the public think. An examination of the main areas of spending that comprise this standard shows which have been the main drivers in recent years of rises in essential living costs, susceptible to global influences on price. This analysis identifies three such categories in particular: food, domestic fuel and clothing.

The price of these items in the UK is being influenced by a long-term rise in world demand for commodities, and by limits to global energy use related to the supply of fuels and efforts to contain their impact on the environment. These factors have driven a general increase in food and fuel prices, especially since 2007, and are likely to push these prices higher in the future. However, world commodity prices are also highly volatile, partly because of fluctuations in world demand but also because the prospect of large price hikes has attracted speculation, which can sometimes accentuate price movements. UK consumers have been protected from the extremes of commodity price movements, but nevertheless could in future face uncertainty over the price of essentials that makes it harder for those on low incomes to budget.

One long-term uncertainty is the cost of the labour used to produce the imported goods consumed as part of a UK minimum living standard. In recent years, the growth in imports from low labour-cost countries such as China has helped drive down the price of manufactured goods, especially clothing. Today, clothes prices are rising again, largely because of a surge in the price of cotton. As China and other emerging economies grow more prosperous, their labour costs could rise.

While the future remains highly unpredictable, the *potential* effect of these influences on the worst-off families in Britain is severe. Under one scenario, the minimum cost of living could rise by 34 per cent by 2020, and by between 9 and 18 per cent after adjusting for general inflation. Combined with a similar trend over the past ten years, this would greatly lower the living standards of households on low incomes who depend heavily on government transfers pegged to the Consumer Prices Index.

Future governments therefore need to consider their options in countering the potential effects of global price rises on the standards of living of the worst-off groups in the UK. The scope for influencing these prices may be limited, although

governments can potentially address uncompetitive practices that cause the cost of basics to rise. A second type of intervention is to help people on low incomes to afford to buy certain things that are rising in price – such as assisting them with home insulation to contain energy costs. However, the only sure way of addressing the effect of rising prices on the incomes of the worst-off is to take them into account in measures that influence the incomes of these groups. In particular, adjustments in benefits, tax credits, the minimum wage and public sector pay could take more account of how the real cost of the minimum cost of living is rising.

## Introduction

How much are global economic trends affecting the ability of people in the UK to sustain a minimum acceptable living standard?

This is potentially a huge question, raising long-term issues about the structure of our economy and the sustainability of our economic expectations as well as more immediate ones such as the impact on low-income families of recent sharp rises in food and energy prices.

The present analysis considers a specific aspect of the question: to what extent could global influences affect the prices of goods and services in ways that will impact the ability of people in the UK to afford a minimum standard of living, as measured by the Minimum Income Standard? It does so principally by reviewing recent price rises and their effects on the minimum cost of living, and by considering how global factors have affected some of these prices, and could do in the future. It also sets these specific price issues in the wider context of relative living standards in richer and poorer countries, and the relationship between a 'minimum' in the UK and our trade with the rest of the world.

We have based this discussion on evidence from our work on the Minimum Income Standard (Davis, Hirsch and Smith, 2010); on an examination of UK price data from the Office for National Statistics; on interviews with experts on current global trends; and on selected sources describing these trends and their drivers. We do not attempt here to provide a full economic analysis of what drives UK prices, but rather consider in broad terms how the main recognised global trends could have a bearing on the adequacy of minimum incomes in the UK in the future. This paper should be seen as an initial contribution to the discussion of these issues, aiming to open up debate and further analysis rather than providing a detailed review of the evidence.

First, we set this topic in the wider context of the overall relationship between global economic trends and UK living standards.

## The context

For many years, western countries have seen steady rises in their standards of living. In the process, the citizens of these countries have come to expect that, as a minimum, we will be able to enjoy material living standards that many of our grandparents might only have dreamed of. This was made possible in large part by the production of food and manufactured goods at prices that steadily declined relative to our earning power. This progress owed much to rising productivity, but has also been possible partly because of a plentiful supply, around the world, of cheap raw materials and of labour paid at a much lower rate than in the UK.

In the current century, these favourable conditions are rapidly changing. There are several reasons for thinking that the cost of raw materials and the 'world' price of labour will stop becoming more favourable relative to UK incomes.

The cost of commodities is being squeezed in the long term by growing world demand fed by the growth of emerging economies, by potential limits to the supply of minerals, oils and other raw materials and by environmental constraints that lead us to limit the use of carbon fuels and various other damaging economic activities.

At the same time, the relative price of labour in the UK and in the parts of the world from which we buy many of our goods and services could become less favourable. The gap between the two widened sharply in the 1990s as the initial impact of globalisation was to expand trade with East Asia and elsewhere, from where a large amount of our clothes, household goods and other manufactured items are now produced by people earning a small fraction of UK wages. This contributed to falling prices in many commodities including clothing and electronic goods, effectively raising the material well-being of many people in the UK. As the countries producing these goods now reap the benefits of their economic success, labour costs there are expected to rise, although it is uncertain to what extent new entrants to the market will continue to bid them down.

The *relative* price of UK labour, and hence the buying power of UK earnings on world markets, depends on the strength of our export industries. For many years, we were able to trade our manufactured goods on favourable terms with countries producing cheap food and raw materials. As manufacturing has strengthened in emerging economies, we have relied on trading higher-value goods and services for more basic manufactured goods and food. Increasingly, however, western countries will face competition from places like China at the higher end of production too, as these countries become global innovators with increasingly well-educated populations. While the future remains highly uncertain, it seems unlikely that we will be able to maintain the favourable terms of trade that have, until recently, contributed to our growing living standards.

Such issues of relative living standards in different parts of the world cannot just be seen through a prism of national gross domestic product (GDP). Another perspective is to look at *global* inequalities that cross national frontiers. It is possible, for example, that the buying power of the earnings of one part of the UK population, relative to what they consume, rises, while for another groups it falls. British workers with different skill levels compete in different areas of the global labour market, while

people with different living standards within the UK consume different baskets of goods and services, some more sensitive than others to certain global price trends such as the cost of commodities. However, neither international competition nor the world distribution of income is necessarily a 'zero-sum game'. Much depends on the development of technology and productivity. This will affect all of the above factors, including the ability to extract scarce raw materials, to deploy these materials without causing unacceptable environmental damage, and the labour cost both in the UK and in other parts of the world of producing a given value of goods and services.

## The Minimum Income Standard, inflation and global drivers

A Minimum Income Standard for the UK (MIS) is a measure of how much money households need in order to reach a minimum acceptable standard of living. It is based on lists of items that households need to buy, grouped into categories of goods and services with a money value attached to each. These lists are drawn up from discussions with members of the public about what needs to be included in order to reach a socially acceptable minimum (Bradshaw *et al.*, 2008).

The standard varies over time, according both to the list of items that the public define as a socially acceptable minimum and to the cost of these items. In the long term, we can expect that prevailing living standards in the UK, which will be influenced by the factors discussed above, will in turn influence attitudes about what is an acceptable minimum. The present analysis looks at the other source of variation, the prices of the included items.

A general rise in world prices (expressed in sterling values, and hence also influenced by sterling exchange rates) could affect overall living standards in the UK if it is not matched by equivalent improvements in UK wages. How in particular will such trends affect people's ability to maintain a *minimum* living standard? An important issue is whether the cost of achieving this standard goes up relative to general UK prices. This question is particularly significant for people on low incomes because the overall prices index is used as a benchmark affecting their incomes, whether through the uprating of benefits and tax credits or as a basis for pay rises. If incomes rise in line with general inflation, but the cost of the minimum rises faster than this, the number of people who can afford the minimum will fall.

In fact, the estimated total cost of the items presently included in the standard has risen significantly faster than either the Retail Prices Index (RPI) or the Consumer Prices Index (CPI) over the past decade. This estimate is derived from the 2008 MIS budgets, adjusted for inflation in each year, using different inflation rates for each category of spending. For example, estimated minimum spending on food in 2000 is calculated by dividing the food budget in 2008 by the amount of food inflation shown in the Retail Prices Index between 2000 and 2008. On this basis, the change in the cost of the same 'minimum' basket of goods and services rose by 38 per cent between 2000 and 2010, while the RPI rose by 31 per cent and the CPI by 23 per cent. This means that someone able to afford the minimum in 2000, whose income rose exactly in line with an inflation index over the following decade, would fall significantly short of being able to afford a minimum standard of living in 2010, by 5 per cent if their income had risen by RPI and by 11 per cent if by CPI (Davis, Hirsch and Smith, 2010).

This higher rate of inflation in the minimum basket than in the general indices has been caused by higher than average inflation rates in certain items that make up relatively large proportions of a minimum budget (including food, domestic energy, council tax, water charges and public transport). In exploring the future effect of global factors on the ability of people on low incomes to afford an adequate minimum, we need to explore (a) the extent to which recent trends in prices are likely to continue and (b) the extent to which they are linked to global rather than domestic forces. In doing so, we are looking in particular for two phenomena which could have an impact on economically disadvantaged groups in Britain.

First, the extent to which external forces are causing *price rises in essentials above and beyond a general rise in prices*. When general prices rise, the uprating of benefits and tax credits provides a degree of protection to those who receive a substantial amount of their income from the state. (Indeed in the past two years, unusually, the incomes of some people in these groups is likely to have risen faster than for many better-off people whose salaries have been frozen in nominal terms.) However, this protection relates to indices that describe a basket derived from spending patterns across the population, rather than from the cost of meeting basic needs.

A wide range of influences, both domestic and international, could cause relative increases in the price of 'essentials'. For example, domestic policies that reduce subsidies to transport and local government have, over the past two decades, raised public transport fares and council tax well above general inflation rates. There is therefore nothing unique about global forces in terms of their capacity to raise the relative cost of a minimum basket; however, such external forces risk being unpredictable and unsusceptible to UK policy influences, including the use of monetary policy to control domestic demand.

This unpredictability gives rise to a second phenomenon that could have an important impact for people on lower incomes: *price volatility*. Regardless of longer-term trends and their effect on the level of a household's living standards, sudden fluctuations in prices can be particularly difficult for a low-income family to cope with. Such families may have limited flexibility in accessing affordable credit or drawing on savings to see them through periods when their household expenses rise. In the past two years, fluctuations in food and energy prices have made budgeting more difficult.

Volatility may also be damaging by causing people to develop consumption patterns that cannot subsequently be sustained. In the MIS research itself in 2010, there was a strong sense of things getting more expensive that went beyond what one might expect from the long-term movement in prices. One hypothesis is that someone whose income is inadequate to meet their perceived needs will notice price reductions less than price rises. Reductions will be absorbed by slightly higher levels of consumption, to a level that falls less far short of aspirations than previously, but this relative improvement is noticed less than when a new price rise requires cutbacks or greater indebtedness.

## Price movements over the past decade – interesting trends

While the past does not predict the future, the movement of prices between 2000 and 2010 can help us to think about possible ways in which global influences may impact on the relative cost of a minimum basket of goods and services. First of all, it can help to distinguish the drivers of the long-term rise in the cost of this basket referred to above. Secondly, the experience of an unstable world economy in the past two to three years can help us identify which categories of goods and services are vulnerable to changes in world economic conditions, including in particular the effects of higher demand for commodities linked to growth in emerging economies.

The graphs in Appendix 1 consider price trends over the past decade for various commodities within the Minimum Income Standard budgets. This shows a wide range of experiences in price movements, ranging from domestic fuel, whose price rose by nearly 90 per cent relative to the Consumer Prices Index over the decade, to clothing whose prices fell over 40 per cent in relative terms. Table 1 considers the magnitude and consistency of changes over the period, the level of price volatility from year to year, how important the category is in an MIS budget and in general terms whether its price is likely to be subject to global influences.

# Table 1: Price changes of categories of goods and services within MIS

KEY:						
Strong	Medium	Weak	None			

Category	Importance in MIS (% of budget)	Change relative to CPI (2000– 2010)	Consistency	Volatility	Global forces?
Food	25%	+14%	Biggest change since 07	High for sub- categories	World commodity prices
Leisure	24%	+15%	No v clear trend	Some rises some falls	Heterogeneous category
Pub transport	11%	+29%	Consistently upwards	Speed of rise varies	Fuel costs – but pay, subsidy etc., are local
Council tax	8%	+44%	Upward trend, but slowing	None evident	Very indirect
Domestic fuel	6%	+87%	Includes up, steady and down	Recent volatility high	World energy prices
Household goods	6%	-5%	Consistently quite flat	No big swings	Imported manufactured goods
Personal goods and services	5%	+5%			Heterogeneous category
Clothes	4%	-42%	General trend downwards	Recent swings	Imported clothing
Water	3%	+40%	General trend upwards	Recent swings	Very indirect
Household services	3%	+16%	Moves just above CPI	None evident	Heterogeneous category
Alcohol	3%	+8%	Moves just above CPI	None evident	Some import prices

Considering each column, the table considers:

- The importance of each category of spending in the MIS budget. This shows the percentage of spending accounted for by each item in the 'headline' budgets (i.e. excluding rent) for a single person. The importance of an item such as food, which takes up a quarter of the budgets, makes rising prices more significant than an equivalent rise for smaller item; however, we must also take account of the long-term potential for an item to grow as a component of the budgets as a result of its relative price rising (this has happened, for example, with public transport and council tax). On the other hand, categories with very small shares, less than 2 per cent of the total, are excluded from the table.
- The magnitude of change over the past decade. While the past does not determine the future, where a category has seen large changes in price relative to the Consumer Prices Index, this would appear to signal that there are specific factors that have influenced the price in the past and could do so again in the future.
- The consistency of this trend. Where there has been a consistent movement in one direction, this would reinforce the idea that there are some powerful influences that might continue to work in that direction.
- The degree of volatility. Where prices have moved sharply from going up in one year to down in another, this suggests a degree of instability in underlying influences on price that could make budgeting difficult in the future for people on low incomes. Issues of in-year volatility are considered further below.
- The extent to which global forces seem likely to influence the price. This is categorised according to some self-evident observations, such as the fact that we import much of our food, so global forces will have at least some influence on food prices. The actual impact of global forces is considered further below.

Looking at the table as a whole suggests three obvious candidates where analysis of global influences would be of greatest interest:

- **Food** has high importance in MIS, high link to global forces and a significant deviation from CPI.
- **Domestic fuel** has a high link to global forces, moderate importance in MIS, and big cost changes and swings. Even though fuel comprises only a quarter as much as food in a minimum budget for a single person, it has risen six times as fast, relative to CPI and thus has contributed even more than food to the increased cost of MIS.
- **Clothes**, while lower in importance in MIS, has big and potentially volatile price changes and a high link to global forces. It is interesting to note that while a single person now only has to spend 5 per cent of their minimum budget on clothes, this has fallen from 8 per cent of the same basket of goods and services in 2000, due to the sharp fall in its price. A move the other way could have significant implications for families.

While household goods have not shown such fluctuations, there remains considerable potential for global forces, especially labour costs in emerging economies, to influence their prices in the future. In considering clothing below, we make some points that also apply to other manufactured imports.

## **In-year volatility**

Appendix 2 charts examples of items whose prices saw greater or lesser volatility, measured in terms of monthly price movements in the three years to April 2010. The most volatile items are defined as those that saw both steep rises and steep falls (by at least 5 per cent in three months or less) during this period. Table 2 is a summary of the volatility observed in all the main subcategories in the RPI.

Most volatile	Some volatility	Non volatile
Pork	Bread	Fresh fish
Other meat	Cereals	Soft drinks
Butter	Biscuits and cakes	Sweets and chocolates
Oils and fats	Beef	Restaurant meals
Теа	Lamb	Canteen meals
Potatoes	Bacon	Takeaways and snacks
Unprocessed potatoes	Poultry	Beer
Vegetables	Fish	Wines and spirits
Fruit	Cheese	Cigarettes
Gas	Eggs	Furnishings
Oil	Fresh milk	'Other household equipment'
Furniture	Milk products	Household consumables
Men's outer clothing	Coffee	Pet care
Women's outer clothing	Sugar	Postage stamps
Footwear	Imported lamb	Telephones and telemessages
Petrol	Processed fish	Domestic services
CDs records and tapes	Potato products	'Other clothing'
	Processed vegetables	Personal articles
	Processed fruit	Chemists goods
	Coal and solid fuel	Personal services
	Electricity	Rail fares
	Electrical appliances	Bus and coach fares
	Fees and subscriptions	Books and newspapers
	Children's outer clothing	Televisions licenses
	Vehicle tax and insurance	Foreign holidays
	Audio-visual equipment	UK holidays

#### Table 2: Goods and services by volatility, April 2007–April 2010

This shows a picture of widespread price volatility over a range of main categories of goods in the past few years. Some types of food have at times been highly volatile; most have experienced some degree of volatility. The same is true of energy and most forms of clothing, so items in each of the three main categories identified for further investigation in the above analysis have all witnessed both upward and downward movements recently. Indeed, most of the items in the first column come from one of these three categories, a notable exception being furniture. The middle column, on the other hand, those items showing moderate volatility, includes a much wider range of items. The tentative conclusion is that we can expect to see volatile

price movements in food, energy and clothing, but should not rule out this affecting other spending categories too.

This does not necessarily mean that the overall cost of living will become very volatile. On the contrary, it is possible that if many different types of item are moving around in price in ways that are not closely connected, the changes will to some extent balance each other out, as there will always be some items whose price is rising and others that are falling. This will be less true to the extent that some strong influences have widespread impacts, such as the international price of energy (which can feed into the production cost of many types of goods and services) and labour costs or exchange rates in China and other large emerging economies (which could simultaneously affect the price of clothing, technological products and other manufactured goods). So far, however, the 'balancing' theory seems to have applied at least to food as a broad category. Since 2008, while many individual foodstuffs have seen periods of falls as well as rises in prices, food overall has only fallen significantly once, by less than 2 per cent over a four-month period in summer 2009.

# **Global drivers 1: Food prices**

The cost of food is subject to growing worldwide pressures and influences. Prices are being influenced by the following interacting factors:

• The capacity of food production to meet growing world demand. As countries with huge populations such as China and India grow more affluent, worldwide food consumption grows substantially, and so do pressures on land for food. Two decades of growth averaging above 9 per cent a year in the world's most populous country, China, on its own puts an unprecedented pressure on global food resources. Perhaps the only historic precedent for comparable growth in one of the world's largest economies came in the USA's 'gilded age' in the last three decades of the nineteenth century. (There were twice as many Americans in 1900, each consuming about twice as much GDP, as in 1870). The fact that this growth was in large part fuelled by the opening up of vast new lands yielding food and other natural resources, and that even at the end of the period the US population was only about 6 per cent of China's now, puts into perspective the resource pressures now being created.

For two centuries, expanding world consumption of food has partly been enabled by rises in crop yields, but the rate of increase in yield appears to have slowed greatly. Analysis of the long-term growth in production of grains and oil seeds shows that this has historically been driven more by increasing yields than by increasing the amount of land given over to agriculture. Since 1990, yields have been only half as great as in the previous two decades – just above 1 per cent per year, and this growth is projected to slow further (Trostle, 2008). It is possible that the long-term stability of food prices prior to 2000 may have discouraged governments from funding agricultural research that could maximise yields, but renewed research seems to a large extent to be privately funded and focused on reducing costs. Higher prices cause more land to be given over to farming, but in the long-term this is obviously a finite resource.

• **Competing pressures on the use of land** that might otherwise be used for food production. On the one hand, there is a growing worldwide awareness of the need to protect the environment in ways (such as the preservation of rainforest) that can limit the amount of land available for food. On the other, there have been important new uses for land including the production of biofuels, which affect potential food supply.

Biofuels include ethanol (mainly made from sugarcane or corn) and biodiesel (mainly rapeseed). In 2008, the EU legislated for biofuels to make up 10 per cent of transport fuel use by 2020 as part of its plans to limit greenhouse gas emissions. This will require more feedstocks or the biofuel itself to be imported. The rapid rise in demand for biofuel is driving up the price of feedstuffs and reducing the amount of grain available for human consumption and animal feed. While the production of both ethanol and biodiesel has been rising steadily, this trend is set to level off in the next three to five years (Trostle, 2008).

• The increasing involvement of multinational companies in large-scale and often highly-specialised food production. This has been influenced by the

growing demand and consequent rise in the price of foodstuffs as commodities, which has made large-scale commercial production an attractive investment for these companies. The associated growth in specialisation of food production by geographical area has contributed greatly to the volatility of food prices, as localised crop failures can influence world prices of a food commodity much more strongly than in a more diversified production model where lower production in one part of the world could be offset by increased production elsewhere. Big crop failures such as the failure of the 2010 Russian wheat harvest have had more serious impacts on the world economy than they might have in the past.

- **Increased speculation**, which is both a product of and a contributor to volatility, ٠ and is also linked to the prospective general growth in demand relative to supply. Speculators have become very active in food markets because they see large potential short-term gains, linked to fluctuations and the possibility of periods of rapid price rises where shortages manifest themselves. This has helped drive recent wild fluctuations in the prices of food commodities such as wheat. Recent analysis of the 2007–8 food crisis by the United Nations Special Rapporteur on the Right to Food acknowledges the initial influence of market fundamentals, but identifies 'the emergence of a speculative bubble' as a significant additional driver (De Schutter, 2010). There is certainly room for debate about the extent of speculation compared to pure supply and demand factors in influencing price levels and price fluctuations; however, the two of these are closely interlinked. It is higher long-term prices caused by demand pressures and supply limitations that attract speculators, who then accentuate the supply and demand effects.
- The knock-on effect of **high and fluctuating energy costs** on food prices. There is evidence to suggest that energy costs are the single most important factor in changes in the price of food (Defra, 2009). In particular the price of oil can affect both the production and distribution of food. Production costs are heavily influenced by the cost of oil-based fertilisers and pesticides. Distribution costs are influenced by the cost of transport fuels.
- Exchange rate influences. Rises in world food prices affect different countries more or less according to what is happening to their exchange rates. In 2008, the year of most rapid food price inflation in recent times, Sterling fell by around 20 per cent on average against other currencies. In the long term, part of the reduction in the buying power of UK incomes when purchasing commodities at a world price could come through the lower exchange rates that are required for us to sell our goods competitively in world markets.

The combination of the above factors is likely to lead, not to a steady rise in food prices, but to increased volatility with potentially a long-term upward trend. Projections for the future (OECD, 2010) suggest that while the recent food crisis has now passed, food prices are likely to remain at higher levels than in the recent past, and there is continued scope for volatile periods.

We need to be cautious about how we interpret and project the link between the above influences and the price that UK consumers pay for food. It is not at all clear

that recent fluctuations in retail food prices can be fully explained by such global factors. The 'farm price' paid for food remains a very low percentage of the retail price, and the rise of production prices, even when combined with higher fuel costs in distribution, cannot explain in a very systematic way the rise in the store prices.

Figure 1 takes as an example the relationship between the price of wheat and those of bread and meat. Note that grain prices can affect not just direct grain products but also the price of animal feeds which represent a key driver of meat prices.





Sources: Index Mundi/IMF, Retail Prices Index

Comparing first the relationship between world wheat prices and UK bread prices, we can observe that while both have risen significantly in the past four years, the overall movement in wheat prices has been much greater. This is not surprising, given that only a relatively small component of the price of a loaf of bread represents the purchase of wheat. A second observation is that the wheat price is clearly far more volatile than the bread price. One may speculate that the doubling in the price of wheat in early 2007 contributed to a 20 per cent rise in the price of bread later that year, subsequent falling wheat prices helped bread prices to stabilise, and that a recent small rise in bread price. There is clearly no automatic or immediate price response, even though – other things being equal – a long-term rise in wheat prices seems likely to cause bread to cost more in the long term.

Similarly, there seems to be an upward trend in the price of meat, but not the volatility of commodities markets. Grain prices can have an important effect on the price of meat in the long term, because of the importance of animal feed costs.

The picture is complicated by the complex ways in which supermarkets structure their prices in competition with one another. At any one time, a complex array of factors related to pricing strategies as well as supply costs will affect the actual price of any one product. Supermarkets appear to have cut their margins to very low levels on some products, and sometimes create 'loss leaders'. Rising general commodity prices may sometimes be seen as an opportunity to restore greater margins, by raising prices more than the rise in supply costs might merit. Certainly the rise in the cost of a white sliced loaf, shown for illustration on the above graph, by almost the same percentage as the rise in the wheat price in the past four years, can only be explained in small part by the passing on of higher commodity costs to the consumer, given that only a small part of the price represents the cost of raw materials.

In talking to experts while researching this paper, we could find no clear-cut explanation of how exactly rising and fluctuating commodity prices feed through to what UK consumers pay for food at the supermarket till. Retailers' behaviour does not seem to follow any systematic rules in this respect. We can conclude by projecting the following for the future:

- Long-term pressures are likely to cause world food prices to rise, and to experience periods of volatility.
- This is likely to cause higher retail food prices in the UK, but the magnitude and timing of such rises are highly unpredictable.
- Some periods of volatility in UK retail food prices are also likely, but such volatility could be relatively mild compared to the wild fluctuations of some global commodity prices.

# **Global drivers 2: Domestic fuel**

Like food, energy prices are subject to long-term upward demand pressures, to unpredictable influences on supply costs, to the growing priority given to environmental controls and to the effects of speculation. Unlike food, however:

- Environmental controls have more of a direct impact, since in the case of fossil fuels there is an objective directly to restrict global consumption (whereas with food the effect on supply is a by-product rather than an objective of environmental regulation).
- The UK government plays a direct role in influencing prices, over and above the price paid for fuels on world markets.

The following factors could influence the price of domestically consumed energy, with significant effects for the minimum household budget. (The most direct international influence on the cost of domestic energy is the price of natural gas, which is used not only as a direct power source but also, more than in the past, in generating electricity, with coal now accounting for less than half as much domestic energy consumption as gas.<sup>1</sup>

- The level of global demand for energy. This has fluctuated greatly over the past few years. Growth in emerging economies has created a long-term upward pressure on prices. The global recession has created the reverse pressure, creating significant drops in the price of fossil fuels.
- Speculation, which like for food is triggered by the possibility of fluctuations and short-term spikes in price. This helps for example to explain the spectacular but unsustained surge in the price of oil to around £150 a barrel in 2008<sup>2</sup>.
- On the supply side, a highly uncertain future. Since the 1970s, the world has been wondering when its supply of oil will run out, yet new sources of fossil fuels continue to be identified. Most recently, unconventional gas, unconventional oil and coal-bed methane are starting to enter the market. There remains a large level of uncertainty about the technological possibilities and costs of extraction.
- OPEC decisions about rates of extraction, which continue to have an impact on price fluctuations.
- Unpredictable events such as wars and pipeline disputes that affect supply. The 2009 dispute between Ukraine and Russia threatened to have a huge impact on European gas supplies and hence prices<sup>3</sup>.
- International agreements on limiting carbon emissions, in parallel with actions within the UK to do so. Here it is impossible to distinguish 'global' from 'domestic' influences, since they are explicitly part of the same process. Much of the cost of the UK government's carbon reduction/renewable energies policies is to be recovered through a levy attached to customers' gas and electricity bills. It is estimated that, by 2020, the 'policy levy' will be equivalent to four pence on the basic rate of tax today (Less, 2010). The government expects to offset costs by subsidising home insulation, thereby reducing future energy usage and exerting downward pressure on bills. The Minimum Income Standard calculations, however, already include a considerable degree of home insulation, and future definitions of minimum fuel budgets will need to consider carefully the extent to which we can assume further advances in energy efficiency as part of a 'norm'.

As with food, we can ask to what extent a given international gas or oil price feeds into retail prices in the UK. Here again, the relationship is not a simple one. On the one hand, the commodity price is likely to make up a larger part of the retail price than the price of food. On the other, the purchase of, say, natural gas by UK distribution companies is a highly complex process, involving constant trading on futures markets, so the price paid for gas on any one day is linked to market conditions for months or years in the past<sup>4</sup>. This makes the accusations of unfair prices and excess profits, presently being investigated by Ofgem, difficult to establish. It is interesting in this light to compare the trend in gas prices paid by UK consumers to the spot price being paid wholesale at UK delivery points, over recent months and years. The following graph looks at this relationship since 2007:



Figure 2: Natural gas prices in the UK 2007–2010

At first glance this graph seems to support the idea that retailers are profiting excessively from changes in gas prices, since in mid-2010 they were charging more than they had four years ago, even though wholesale prices were lower. However, it also appears that the retail price 'dampens' fluctuations in the wholesale price, and the failure to bring prices back down in the later part of the period shown could be seen as part of this. Such an interpretation is also consistent with longer term trends:

Source: BIS quarterly energy prices





Source: BIS quarterly energy prices

**NOTE**: Most of the graphs in this section of the paper cover the period since 2007, when commodity prices have been rising across the board. The above graph for natural gas takes a longer period, since the upward trend in energy prices began earlier.

Whatever the precise situation at present, in relation to pricing and competition, this graph shows that a more than doubling of the retail price of gas in the past decade corresponds with a more than doubling of the wholesale price, and that UK consumers have seen fewer fluctuations in their bills than if the two prices had been exactly linked.

More clearly than for food, the combination of global and UK influences point to a steady rise in the price paid by UK consumers for domestic energy over the next decade. Government policy seeks to offset the difficulties that this will cause households by improving home insulation and in particular to help keep fuel bills affordable for low-income families (DECC, 2010). Thus, the effect that these trends have on minimum living standards in future will depend in part on standards of home insulation and other factors related to energy conservation.

# **Global drivers 3: Clothing**

By April 2009, clothes cost UK consumers only three-quarters of what they did in 2000, and 13 per cent less than in 1987, since when the Retail Prices Index has more than doubled; however, in the year and a half since then the clothing price has risen by 11 per cent, and there are forecasts of further rises on the way.

Both the long-term trend towards cheaper clothing and the possible reversal of this trend are driven to a large extent by global factors. The accessing of global sources of production of cheap clothing and, more recently, the development of new retail models pioneered by shops like Primark based on selling clothes at extremely low prices, are behind the fall. The recent and prospective rise are being driven by:

- First and foremost a sharp rise in the price of cotton. Retailers report that about 60 per cent of the price at which they buy clothes comes from the materials costs.<sup>5</sup> Cotton prices are being hit by disappointing harvests in China and elsewhere, as well as by speculation. The same long-term pressures on resources that feed food price rises could feed cotton price rises in future.
- Rises in labour costs in some producer countries, which is likely to be a continuing trend. For example, in Bangladesh, trade union pressure has resulted in an 80 per cent rise in the monthly wage for the 'lowest grade' worker over the last four years. This kind of change could affect the price we pay for all manufactured goods, not just clothing.<sup>6</sup>
- Higher freight rates, for which the cost of fuel is a contributing factor.

Again, the rate at which these influences impact retail prices in the UK depends on a variety of factors including the strategies of retailers. A sharp rise in prices in recent months is partly due to summer sales strategies previously having limited the effect of the rising cotton price. The VAT increases are also part of the recent rise. The graph below shows that, as with food, commodity prices might be having a small, lagged effect on clothing prices, but with much smaller fluctuations. Over the long term it seems highly likely that global factors will ensure that the 20-year decline in clothing prices has reached its limit, and has now gone into reverse.



#### Figure 4: Price of cotton and clothes 2007–2010

# Conclusion

This paper has considered the degree to which global drivers of price rises could increase the minimum cost of living in the UK. How serious an overall effect on this minimum cost could these factors have, and how (if at all) might public policy respond?

It is impossible to predict what will happen to prices in the future; however, to illustrate the *potential* magnitude of the effects considered above, consider the following scenario for 2020:

- Driven by global imbalances between demand and supply, food prices have continued to increase at the same average rate as between January 2007 and November 2010. This projects a period of volatile but rising global commodity prices in future.
- Driven by pressures on world energy prices and UK regulation, gas prices increase by a further 150 per cent from 2010 to 2020 the same amount as they did between 2000 and 2010.
- Clothing prices return to the level, relative to RPI, that they were in 2000. This implies an increase of 72 per cent, over and above future RPI price changes.

These three changes would between them put up the cost of the current MIS basket by 34 per cent, not taking account of other price rises. Considering only the price increases in these commodities net of a 2 per cent a year general price rise (the government's target for CPI), the overall increase would be 18 per cent. This exaggerates the actual relative rise in the cost of a MIS basket because in order for inflation to be 2 per cent on average while gas, clothes and food prices rise by more than 2 per cent, other prices would need to rise by less than 2 per cent, and some of these can be expected to be represented in MIS too. But even if all these other categories rose equally, MIS would rise by 9 per cent above CPI and this could be seen as a 'lower limit' estimate for this scenario. And as the relative cost of 'basics' go up, they can be expected to be an ever-increasing proportion of the minimum.

Over the long term, general inflation is always less than the product of individual commodity price rises, because the general public tends to shift their spending towards things that are becoming relatively cheaper, causing the weights in the index to change. This 'price-sensitive behaviour' is, however, less likely to be important for a minimum basket of goods and services than for people spending above the minimum. For example, it is unlikely that a rise in the price of gas will cause the public to redefine how much a home needs to be heated as a minimum, deciding on the basis of price signals that a colder home will be acceptable because it is better to spend money elsewhere.

Overall, then, we must conclude that in the next decade, global influences on UK prices could have a significant impact on the ability of people in the UK to afford a minimum acceptable standard of living. What, if anything, should public policy do about this?

Three types of response might be:

• to try to influence prices;

- to try to help people on low incomes to afford to buy certain things that are rising in price;
- to try to ensure that the incomes of the worst-off keep up with the rising cost of living for these groups.

UK policy can only ever have limited influence on world prices in the long term, although there is pressure on the UK and EU to follow the USA's example in taking regulatory measures to curb speculation on commodities on the stock market (De Schutter, 2010), and this could reduce volatility.

At the domestic level, there is scope to intervene to contain any undue rises in retail prices due to uncompetitive practices. For example, the Competition Commission has sought to ensure that supermarkets do not collude in fixing prices, and Ofgem has recently launched an investigation into gas prices. These efforts to preserve fair competition are a fixed part of UK policy, but become all the more important in areas where rising and fluctuating prices are making it difficult for people with modest means.

The affordability of items by UK consumers is only one of a number of influences on UK policy. Indeed, the Government's response to food price spikes has been dominated by concerns about global food security and world hunger (DFID/Defra, 2010; HMG, 2010). Efforts to stabilise commodity prices can nevertheless have beneficial effects for the price that UK consumers pay for food as well as for people in the developing world. Food policy can also seek to promote healthy, ethical and sustainable choices in purchasing food. In some cases this may involve paying higher, not lower prices. Similarly, sustainable energy policies may require prices to increase. It is thus unrealistic to expect that government policy will specifically seek to keep the cost of essentials down, and in some cases the reverse will occur.

In the case of energy in particular, an alternative approach can be to help consumers, especially those on low incomes, to afford to pay higher prices by containing the amount consumed. Thus, the Coalition Government, as the previous one, is putting great emphasis on implementing energy conservation measures, with subsidies for people on lower incomes (DECC, 2010). The Minimum Income Standard has been calculated on the basis of reasonably sustainable forms of consumption, including properly insulated homes and limits to appliance use (e.g. no tumble dryers). In reality, many households will not be in a position to use energy resources economically and sustainably; helping them to do so will have the double benefit of reducing emissions and making rising energy prices less damaging to people's ability to afford a minimum acceptable living standard.

Ultimately, the only sure way of preventing rising prices from making a minimum standard of living less affordable is to take them into account in setting people's incomes. Households largely or wholly dependent on government transfers such as tax credits and benefits have recently received the bad news that their incomes will go up more slowly than in the past, because they will be pegged to the slower-rising CPI rather than (as in some cases at present) to RPI. In practice, as has been shown above, neither of these indices accurately reflects the rate at which the minimum cost of living is rising.

In principle, it would be possible to peg benefits, tax credits, the minimum wage and the wages of lower-paid public sector workers to an alternative index, derived from a minimum basket of goods and services. In practice, such a policy is unlikely; however, without actually making it the index for the 'default' rise in benefits, Governments can still look from time to time at whether benefits are keeping up with such an index, and make appropriate adjustments where they are not. If they ignore the phenomena described in this paper, the consequences could be severe for households who, as a result, will have to accept standards of living well short of the minimum acceptable level for the UK today.

## Endnotes

- <sup>1</sup> <u>http://www.compareandsave.com/news/where-does-our-gas-and-electricity-come-from/</u>
- <sup>2</sup> www.businessweek.com/investor/content/jul2009/pi20090729\_264394.htm
- <sup>3</sup> nytimes.com/2010/01/04/world/europe/04belarus.html
- <sup>4</sup> http://www.bbc.co.uk/news/business-11767544
- <sup>5</sup> http://www.guardian.co.uk/business/2010/sep/14/uk-inflation-stays-stubbornly-high
- <sup>6</sup> http://www.fashionunited.co.uk/fashion-news/fashion/rising-costs-hit-uk-retailers-201010219902,
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# Appendix 1

# Price rises 2000–2010, by commodity category

The following graphs show those categories where change has been markedly different from that of the Consumer Prices Index. The key indicator in each case is the green line. Where this shows a positive value, it indicates a faster inflation rate than the CPI.

## Steady Riser (CPI+2% in seven years)

#### Figure 5: Price of water year on year



Figure 6: Cumulative price of water 2000–2010



Water (cumulative)

## Steady-ish risers (CPI+2% in six years, CPI-2% less than 3 years





Council tax (year on year)





## Steady-ish risers (CPI+2% in six years, CPI-2% less than 3 years

Figure 9: Price of fuel year on year 2000–2010



Figure 10: Cumulative price of fuel 2000–2010



## Steady-ish risers (CPI+2% in six years, CPI-2% less than 3 years

Figure 11: Price of food and catering year on year



Food and catering (year on year)

Figure 12: Cumulative price of food and catering 2000–2010



## Steady-ish risers (CPI+2% in six years, CPI-2% less than 3 years) Figure 13: Cost of social and cultural participation



Social and cultural participation (year on year)

Figure 14: Cumulative cost of social participation 2000–2010



## Overwhelmingly lower: 7+ years 2+pp below CPI



#### Figure 15: Price of clothing year on year 2000–2010

## **Substantial fluctuations**





Other travel costs (year on year)





# Appendix 2 Examples of in-year volatility

Below are some examples of volatile and non-volatile sub-categories of goods in 2007–2009. We could not find a single precise criterion to distinguish volatile from non-volatile categories, but defined volatility broadly as a combination of rises and falls in prices occurring within single years, excluding cases with small fluctuations within a relatively small range (see e.g. 'furnishings' below). The contrast between highly-volatile and non-volatile categories that we show below is obvious.

We have used a single scale to show magnitude of change consistently, meaning that in cases with more than 10 per cent cumulative change within a year the lines disappear off the graph.

Example of categories showing greatest volatility (combined some rises of at least 5 per cent and some falls of at least 5 per cent within any quarter in the three-year period)



#### Figure 18: RPI price of pork 2007–2009

Figure 19: RPI price of butter 2007–2009



Figure 20: RPI price of oil and other fuel 2007–2009





Figure 21: RPI price of furniture 2007–2009

Figure 22: RPI price of petrol 2007–2009







Figure 24: RPI price of oil and other fuel 2007–2009



RPI: fuel & light: oil & other fuel April=100

## **Examples of non-volatile categories**





Figure 26: RPI price of sweets and chocolates 2007–2009



RPI: food: sweets & chocolates April=100



Figure 27: RPI price of furnishings 2007–2009







