

CHANGES IN THE COST OF A MESL IN COMPARISON TO CPI INFLATION

Introduction

This research note briefly summarises the changing cost of a Minimum Essential Standard of Living over recent years, and examines how the changing cost of a minimum differs from average changes in prices as measured by the CSO Consumer Price Index (CPI).

The research of the VPSJ tracks the change in the cost of a Minimum Essential Standard of Living (MESL) year on year. Between March 2012 and March 2013 the cost of a Minimum Essential Standard of Living rose by 2.8%, which is considerably higher than the overall CPI inflation rate of 0.5%. Furthermore, in the period from 2008 to 2013 the average cost of a Minimum Essential Standard of Living has increased by 3.25%, but the overall CPI rate for the same period showed a decline in prices of -0.15%.

This research note shall discuss

- Calculating the rate of change in the average cost of a Minimum Essential Standard of Living
- Explain the method used to adjust the Minimum Essential Standard of Living cost from year to year
- Highlight primary explanatory factors for the difference between the trend in the cost of a MESL and the trend of CPI inflation

Calculating the rate of change in the average cost of a Minimum Essential Standard of Living

The cost of a Minimum Essential Standard of Living varies by household type and household composition, e.g. the MESL cost for a single adult household is different from that of a Two Parent household with four children. The MESL expenditure data covers four categories of household type, and within each there are a range of permutations of household composition. The four household types covered represent approximately 75% of households in Ireland, and are:

- Two Parent households with one to four children
- One Parent households with one to four children
- Single Adults of Working Age, living alone
- Pensioner household types

A set of 10 household compositions which represent the primary variations of these household types were chosen, see list below. The core Minimum Essential Standard of Living expenditure needs (excluding housing and variable costs such as childcare) were compiled for each of these 10

household compositions using the 2013 data. The MESL cost for these 10 household compositions were then projected back for each of the preceding five years, and the percentage change tracked for each composition.

Two Parents – One Child	One Parent – One Child
Two Parents – Two Children	One Parent – Two Children
Two Parents – Three Children	One Parent – Three Children
Two Parents – Four Children	Pensioner Couple
Single Adult of Working Age	Pensioner, Living Alone

A weighted average MESL expenditure need was then calculated from these 10 household compositions, for each year. The weighting is based on the proportion of these household compositions in the population, using Census 2011 data. Examining the percentage change of this value for each year demonstrates the changing cost of an average Minimum Essential Standard of Living, and this may be compared to the rate of change in the CPI for the same 2008 to 2013 period.

Adjustment Methodology

The Minimum Essential Standard of Living expenditure data is adjusted for inflation annually, using a sub-set of CPI Detailed Sub-Indices from the CSO. This annual adjustment ensures the dataset maintains relevance and utility, keeping the expenditure data current as costs change.

The consumer price index (CPI) is calculated on the basis of a much broader basket of goods and services than that necessary for a minimum essential standard of living. It is desirable to exclude as much of the influence of price fluctuation from these extraneous items on the adjustment of the minimum essential standard baskets as is possible. The restriction of inflation adjustments to a subset of the entire CPI basket, i.e. the use of the CPI detailed sub-indices, allows for a greater level of refinement in the annual adjustment than would be achieved by using the broad commodity groups or headline CPI rate. The adjustment for inflation utilises the appropriate sub-index rates (21 sub-index rates are utilised, from a total of 205 narrowly defined sub-indices), and thereby excludes much of the influence of fluctuation in the price of goods not required for a minimum essential standard of living. This method facilitates as accurate a reflection of price fluctuations as possible, focusing on those items in the minimum essential standard expenditure baskets and excluding as many extraneous items as possible.

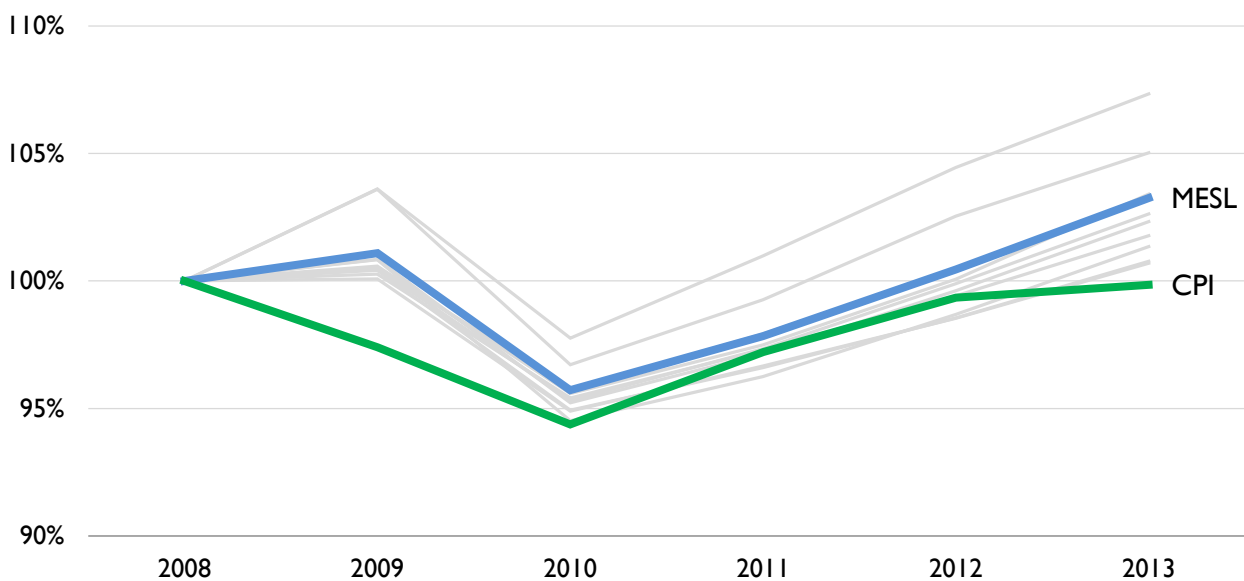
The expenditure baskets are divided into 15 categories, excluding housing¹. The contents of MESL expenditure basket categories generally follow CPI Sub-Index categories (The MESL basket category and corresponding CPI Detailed Sub-Index rate are listed in the appendix). For the majority of MESL

¹ When compiling the expenditure needs of a particular household type, a housing cost appropriate to the scenario under consideration is included. In the context of the MIS for Ireland study housing costs were based on households residing in local authority social housing, and the differential rent was calculated for each household type and income scenario.

categories a single CPI rate applies, e.g. Food. However, in some instances the contents of a category do not correspond to a single CPI Detailed Sub-Indices rate, but it was undesirable to divide the MESL category. In these cases the MESL Category has been split into several sub-totals, each corresponding to a particular CPI rate; each of these sub-totals is adjusted separately and the sub-totals re-combined to give an overall adjusted total for the category – this is the case for Education, Household Energy, and Insurance.

Analysis

Graph 1 Percentage Change in the cost of a Minimum Essential Standard of Living, 2008 to 2013



The graph above illustrates the rate of change in costs as tracked by the CPI and the average MESL. The percentage change in the weighted average MESL is illustrated by the blue line. The green line illustrates the percentage change in the CPI for the same 2008 to 2013 period. The light grey lines represent the percentage change for each of the 10 household compositions, the data for each household composition is provided in an appendix at the end of this paper.

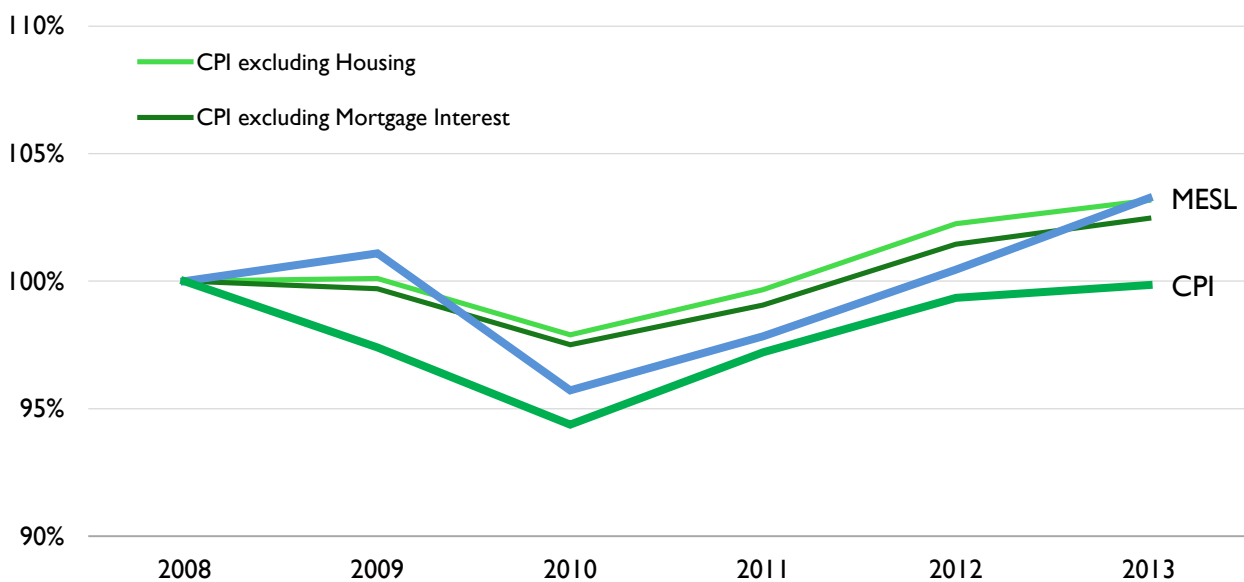
This clearly demonstrates that the overall CPI rate does not accurately reflect the changing cost of a Minimum Essential Standard of Living. The average cost of a Minimum Essential Standard of Living has increased by 3.25% in the five years from 2008 to 2013. However, if adjusted by the headline CPI rate a decrease of 0.15% is found in the same period. The difference is particularly notable between 2012 and 2013 where the CPI indicated a change of 0.5% but the average cost of a MESL actually increased by 2.79%. There are several factors which may go towards explaining this difference.

The CSO Household Budget Survey examines the average distribution of spending by households in Ireland. This distribution informs the CPI by determining the significance given to changes in prices of various goods and services. An analysis of the MESL data and the CSO Household Budget Survey

has found that the Minimum Essential Standard of Living weekly expenditure need is notably less than that of the national average expenditure for similar household types².

In addition to this, the proportional allocation of a household's expenditure is different for the minimum essential standard of living than the national average. A comparison of the distribution of average expenditure in the Household Budget Survey to the MESL data shows that in the minimum budgets household expenditure is more concentrated on basics such as food, electricity and home heating. Approximately one third of household expenditure is allocated to these categories in the MESL budgets, by comparison the Household Budget Survey shows that these areas account for a quarter of the average household's expenditure. These categories of expenditure have been subject to notable inflation in recent years, particularly the areas of electricity and home heating fuels.

Graph 2 Percentage change in MESL and CPI rates, 2008 to 2013



The overall CPI rate includes changes in the cost of housing (rent) and the effect of changes in the rate of mortgage interest. The graph above examines the CSO published CPI rates excluding these factors. As can be seen, these CPI rates are more in line with the changing rate of the cost of a MESL. However, it remains the case that the frugal consumption pattern represented by the MESL is not truly reflected in the CPI rates.

Conclusion

In conclusion, this research note has outlined how the headline CPI inflation rate under-estimates changes in the cost of a Minimum Essential Standard of Living. The primary factor underlying this is that the MESL basket of goods and services is notably more restrictive and more concentrated on areas subject to significant inflation (food, electricity and home heating fuel). As a result, the weighted average cost of a MESL is found to have increased by 3.25% while CPI inflation shows a decline of 0.15% in the same period.

² VPSJ (2013) [Comparison of the Household Budget Survey to MIS/MESL Data](#)

Appendix

Table 1 Percentage Change in the cost of a Minimum Essential Standard of Living, 2008 to 2013

	2008	2009	2010	2011	2012	2013
CPI	100.00%	97.40%	94.38%	97.21%	99.35%	99.85%
SA	100.00%	100.58%	95.59%	97.49%	100.07%	103.41%
TP+1	100.00%	100.49%	95.31%	97.35%	99.89%	102.63%
TP+2	100.00%	100.53%	95.76%	97.92%	100.47%	103.24%
TP+3	100.00%	100.26%	95.41%	97.30%	99.41%	101.78%
TP+4	100.00%	100.08%	94.89%	96.67%	98.53%	100.69%
OP+1	100.00%	100.84%	94.52%	96.25%	98.69%	101.35%
OP+2	100.00%	100.84%	95.22%	97.16%	99.62%	102.33%
OP+3	100.00%	100.42%	94.94%	96.60%	98.55%	100.78%
LP	100.00%	103.59%	96.72%	99.26%	102.54%	105.03%
PC	100.00%	103.61%	97.76%	100.98%	104.44%	107.34%
MESL	100.00%	101.09%	95.72%	97.84%	100.45%	103.25%

Table 2 CPI Detailed Sub-Indices rates used in annual MESL adjustment

MESL Category	CPI Detailed Sub-Indices	MESL Category	CPI Detailed Sub-Indices
Food	Food & Non-Alcoholic Beverages	Education, Other Costs	Education
Clothing	Clothing & Footwear	Transport	Transport
Personal Care	Personal Care	Household Energy – Electricity	Electricity
Health	Health	Household Energy – Gas	Natural Gas
Household Goods	Furnishings, household equipment and routine maintenance of the house	Household Energy – Oil	Liquid Fuels
Household Services	Water supply and miscellaneous services relating to the dwelling	Personal Costs	Other services n.e.c.
Communications	Communications	Childcare	Childcare
Social Inclusion & Participation	Recreation & Culture	Insurance, Home	Insurance connected with the dwelling
Education, Uniforms	Clothing & Footwear	Insurance, Health	Insurance connected with health
Education, Books, Stationery, etc.	Newspapers, books and stationery	Insurance, Car	Motor car insurance
Education, Computer	Information processing equipment	Savings & Contingencies	Financial services n.e.c.