

# INCOME OR CONSUMPTION: WHICH BEING

**An Executive Summary of Motu Working Paper 16-12** Thomas Carver and Arthur Grimes

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#### INTRODUCTION

How should we predict wellbeing? Use consumption rather than income.

The positive relationship between income and subjective wellbeing has been well documented. However, there hasn't been much empirical research into the relationship between alternative material wellbeing metrics and subjective wellbeing. The central research question of this paper is to ascertain which of two measures of material wellbeing – household income or household consumption – better predicts subjective wellbeing.

The 'permanent income hypothesis' theorises that current consumption is determined by lifetime resources, which makes current consumption a better indicator of lifetime living standards than current income.

Our results demonstrate that a measure of consumption adds considerable information to evaluations of subjective wellbeing over and above merely focusing on income.

# **METHODOLOGY**

Our approach has been shaped by the recommendations of Stiglitz, Sen and Fitoussi (2009) for the measurement of wellbeing. Three of their key recommendations are to:

- concentrate on consumption and wealth over production;
- emphasise the household perspective rather than the individual; and
- utilise subjective measures of wellbeing.

We follow much of the literature in focusing on evaluative wellbeing (life satisfaction) as our measure of subjective wellbeing.

We obtain our result using household-level data from Statistics New Zealand's 'New Zealand General Social Survey' of 2012, which surveyed around 8,500 individuals. This survey contains a measure of material wellbeing called the 'Economic Living Standard Index' (ELSI). ELSI assesses a household's level of consumption and, to a lesser extent, wealth via a combination of objective and self-rated questions. To measure income we use the natural log of equalised household income.

We control for variations in ethnicity, age, upbringing, employment status, region, health, housing and community support.

## **RESULTS**

When life satisfaction is regressed on either ELSI or income, their coefficients are always positive and significant. That is, higher levels of consumption and income are each associated with higher levels of wellbeing. In every case, the regressions with only ELSI included were a better predictor of subjective wellbeing than those with only income included.

We tested our central hypothesis by including both ELSI and income in the same regression. The coefficient on ELSI is always positive and significant at the 1% level, whilst income is never positive and significant. We concluded that, once ELSI is included as a measure of material wellbeing, household income tells us nothing more about life satisfaction. This is the central result of the paper, and is obtained regardless of which modelling methodology or split sample is employed.

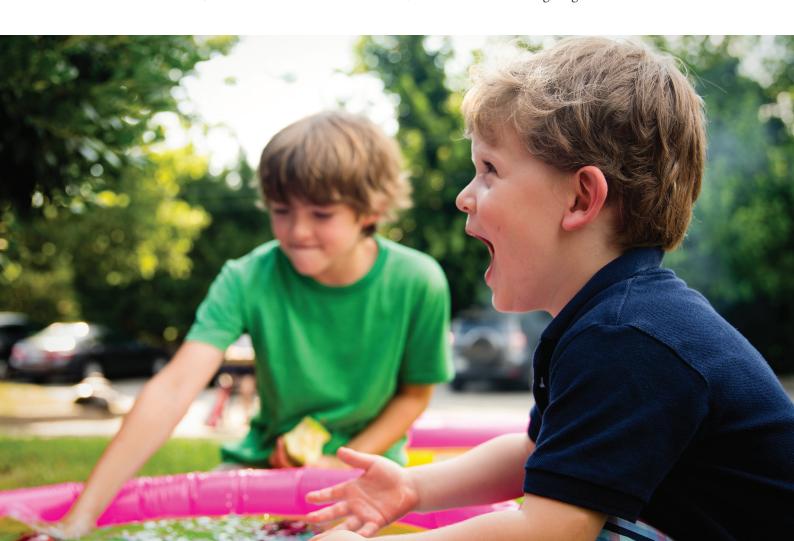
When life satisfaction is regressed on income and the 'objective' elements of ELSI (those with the self-assessments removed), both consumption and income are positive and significant for the aggregate sample. In this regression, the impact of income on happiness roughly halves (relative to when ELSI is excluded) for the aggregate sample. However, for some critical sub-samples (Māori, people aged under 30, and those on the lowest incomes), our central result still holds, i.e. that income adds nothing to ELSI in explaining subjective wellbeing.

We conclude that consumption adds considerable information to evaluations of wellbeing over and above merely focusing on income. If the objective level of consumption for Māori, people aged under 30, and those on the lowest incomes is known, income tells us nothing further about their wellbeing.

One other result is also worth highlighting. Using a measure of regional deprivation, we find that once other factors are controlled for, living in a poorer community is correlated with higher levels of life satisfaction. This result is consistent with the common finding that an individual's income relative to their neighbours is positively correlated with life satisfaction. This means that both absolute and relative material wellbeing are seen to contribute to subjective wellbeing.

The other results we find are consistent with the bulk of the subjective wellbeing literature, including:

- Being unemployed, not having children, and being single are all negatively correlated with life satisfaction, as are being the victim of crime, having no support in a crisis, and smoking.
- Higher levels of self-assessed health and being female correlate with higher levels of life satisfaction.
- There is a U-shaped relationship between age and life satisfaction
- People in urban areas on average have lower levels of life satisfaction than those in rural regions.
- People who identify as Māori or of Pacific Island heritage are on average less happy than Pākehā (European) New Zealanders. However, once other factors are controlled for, this difference is no longer significant.





#### **POLICY IMPLICATIONS**

If policymakers are interested in raising material wellbeing, they will have to consider the means to enable this end. In many cases, the means will be through raising income in some way. However, our results show that income measures may sometimes be poor proxies for assessing poverty or subjective wellbeing. Better material wellbeing proxies based on household consumption - that are more closely related to subjective wellbeing outcomes - can be constructed and used. ELSI (and its recent replacement, the Material Wellbeing Index) is one such tool, the EU-13 (a similar index used in Europe) is another.

#### **CONCLUSION**

In all our samples and testing methods, we found that ELSI was a more reliable and informative predictor of life satisfaction than income. When both were included in the same regression, income was almost always insignificant, whilst ELSI was always significant.

Use of material wellbeing measures such as ELSI can be seen as unifying two parts of the material wellbeing literature. The first is Friedman's permanent income hypothesis which postulates that current consumption is determined by lifetime resources. The second is the philosophical approach (championed by 2015 Nobel Prize winner Angus Deaton amongst others) which postulates that people are the best judges of their own circumstances. This paper is the first to unify these theories through empirical work.

Our research finds that, when objective measures of consumption are combined with self-assessments of a household's standard of living, income is insignificant in predicting an individual's life satisfaction. Thus a consumption-based indicator such as ELSI should be preferred to an income indicator when assessing need and designing policy.

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