



More At-Risk-of-Poverty despite Economic Growth: What is Going on?

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Rationale and Objectives

The proportion of individuals in material deprivation has almost halved to 8.7% in 2018 when compared to the year the indicator started being collected, 2009. Yet, with a few exceptions, the number of individuals at-risk-of-poverty increased at a yearly rate to reach 16.8% by 2018. At first glance, such divergent trends might appear anomalous, and highlight that poverty dynamics and related indicators warrant a deeper assessment.

There is no correct way to define poverty in a society: value judgements play an important role. A long-standing debate is whether poverty is absolute or relative. Some say that the poverty line should reflect the absolute poverty threshold i.e., the cost of purchasing a fixed basket of goods and services that allows people to meet their basic needs; the demarcation between the poor and the non-poor. Others contend that we should instead think of poverty as a relative threshold, i.e., relative to the country's living standard. Those who view poverty in relative terms would argue that the poorest members of society appear to have lagged behind the others; hence the term 'at-risk-of-poverty'. In the absence of an absolute poverty indicator, debates on poverty can easily reach an impasse, as a change in relative poverty may not necessarily reflect a change in absolute poverty.

The simplest poverty indicator is obtained by calculating the proportion of the total number of people below the poverty line in society. However, relying on the over-simplification argument that an increase in relative poverty is bad would be analogous to saying that an increase in taxes is bad. Such judgments should be complemented by other analysis such as the rate of taxation, whether the individual is in unemployment or in a high-paying job, and the ultimate purpose of taxation to finance government expenditure. For this reason, even if there is agreement about the appropriate poverty line to use when measuring poverty, various indicators of poverty must be considered besides the headcount ratio. Indeed, the same society may have the exact year-on-year poverty incidence, but the total cost of alleviating all the poor up to the poverty line might be very different each year depending on changes in the poverty gap. Furthermore, the extent to which the incomes of the poor are concentrated in particular income ranges might also vary: many poor might be close to the

poverty threshold, with only a few individuals being in extreme poverty, or vice-versa. Another aspect to consider in the poverty debate is the relative poverty threshold: today's living standard is unrecognisable from 2005.

In view of a dearth of information on the topic, this study complements existing studies on poverty incidence with other measures relating to poverty intensity and inequality amongst the poor. We also dig deeper in relative poverty headcount rates to identify the factors contributing to such changes over the years. For this purpose, we study poverty dynamics in Malta between 2005 and 2018, with special attention to household characteristics.

Data and Methodology

The study employs and analyses data collected between 2005 and 2018 by Malta's National Statistics Office, which conforms with the European Union Survey on Income and Living Conditions (EU-SILC).¹ EU-SILC is a survey that focuses mainly on personal and household income and material deprivation. Data have been collected consistently since 2005, and so it can be considered comparable and reconcilable over time. Around 4,000 households in Malta are interviewed every year for this survey. Respondents are asked to assess their income and living conditions.²

The Three Indicators of Poverty

We start the analysis with a set of computed poverty statistics for the period from 2005 to 2018. In doing so, we review three indicators of poverty. The first one relates to poverty incidence by counting the people in poverty and expressing this as a proportion of the total number of people in the society. The headcount poverty measure ignores the actual incomes of the poor, other than the fact that they fall below the poverty line. The second indicator, the poverty gap, relates to poverty intensity by computing the average difference between poor households' income and the poverty line. The 'gap' helps refine the poverty rate by providing an indication of the poverty level in Malta.

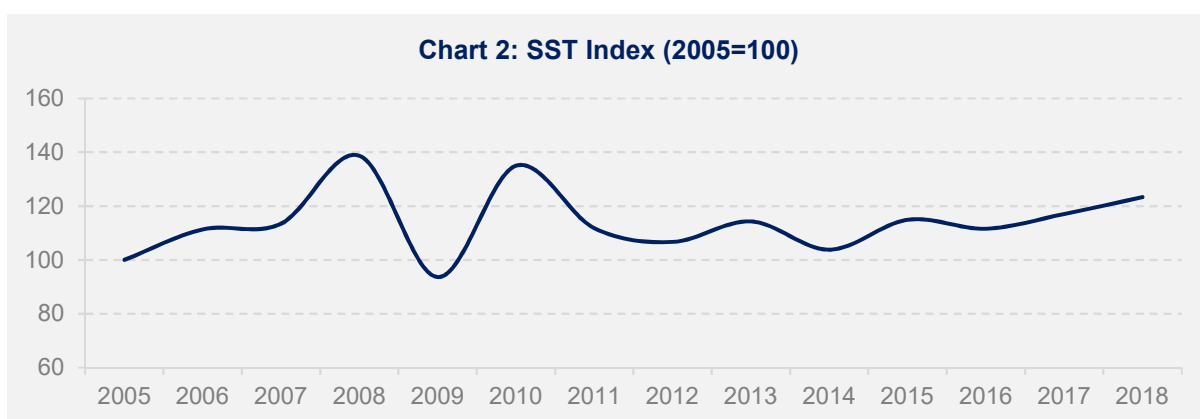
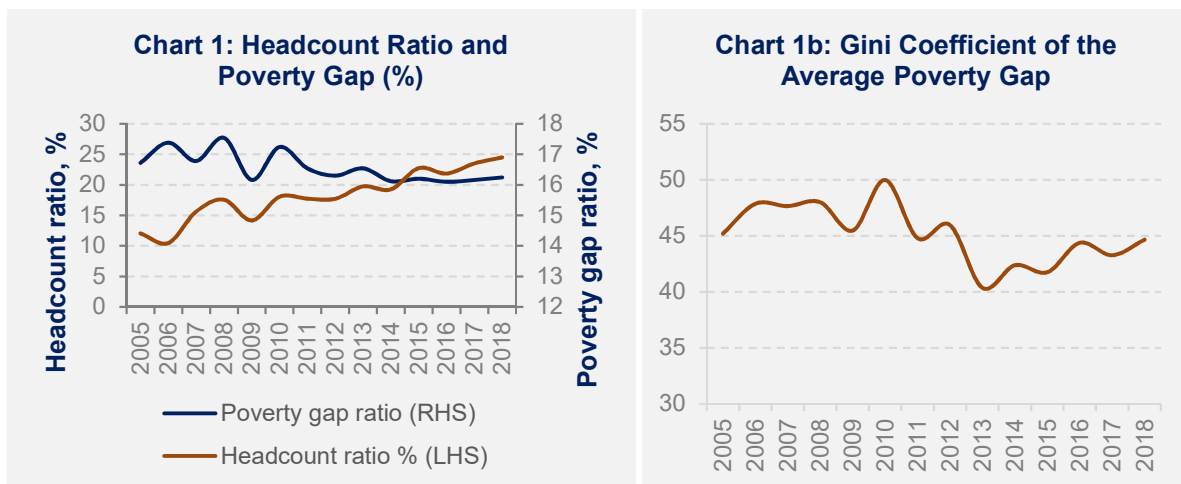
While the first two indicators measure the incidence and intensity of poverty, they do not necessarily elicit the degree of inequality found among the poor themselves. Poverty inequality is another important dimension because our attitudes towards poverty depend not only on the number of individuals below the poverty line and how far away they are from the threshold, but also on the extent to which the incomes of the poor are concentrated in particular income ranges.

¹ This survey is carried out under European Framework Regulation (EC) No 1177/2003.

² The present document has been produced using the EU-SILC 2005-2018 Data - National Statistics Office Malta. The calculations and conclusions with the document are the intellectual product of the present authors.

Between 2005 and 2018, the headcount ratio increased from 14.4% to 16.9% (Chart 1a). Concurrent to the increase in the incidence of relative poverty is a steady rise in the poverty threshold, defined as 60% of the median equivalised household disposable income. The increase in relative poverty does not mean that more people cannot live a decent life, but that more members of society appear to have lagged behind the others. With the consistent rise over the years, the Maltese headcount ratio converged with the EU average during 2018.

The amount of average income that the relatively poor require to make it over the poverty line declined over the years, although with notable variations in some years (Chart 1a). In 2005, the average shortfall was equivalent to 23.6% of average income. In 2018, it was closer to 21.2%. Malta ranks among the top European countries for the lowest relative poverty gap, using the median income of the poor. The shortfall of the poor’s income from the poverty line expressed as an average over the whole population (aggregate poverty gap) is more stable, hovering around 3.5%.

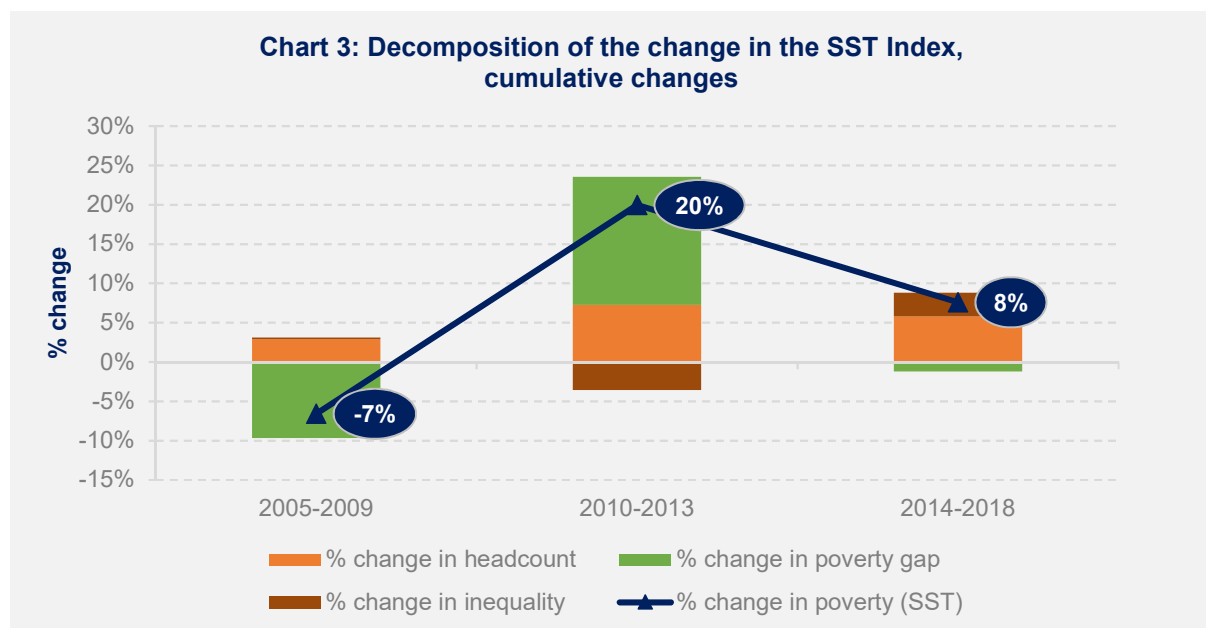


Interpreting poverty measures requires understanding the inequality among the poor as evaluated by an inequality measure like the Gini coefficient of inequality among the poor. The Gini coefficient can range from 0 (perfect equality among the poor) to 100 (perfect inequality among the poor). Chart 1b shows that although the Gini coefficient of the average poverty gap in 2018 remained at the same level as that recorded in 2005 (45), notable fluctuations

were observed during this period. Between 2010 and 2013, the Gini declined from 50 to 40, rising again to 45 by 2018. More inequality among the poor needs to be interpreted with caution. Because we find that the median income of the poor is greater than the average income of the poor, implying a higher concentration closer to the poverty line, an increase in inequality would mean that income is more disproportionately concentrated in the poorest households.

A comprehensive measure of the three indicators of poverty is the Sen-Shorrocks-Thon (SST) index which is the product of the poverty rate, the poverty gap, and poverty inequality (Chart 2). This index is particularly useful because it provides information on the contribution that each factor has on the overall poverty picture. The cumulative change in contributions to the index is produced in Chart 3. A value less than zero indicates that the factor contributes to lowering poverty, whereas a value greater than zero means that dimension has contributed to more poverty.

During 2005-2009, the SST index decreased by 7%. This decrease mainly reflects a drop of 10 percentage points in the poverty gap, which overshadowed the 3-percentage point increase in the headcount ratio. The contribution of inequality among the poor was negligible. Between 2010 and 2013, in the aftermath of the financial crisis, the average shortfall of the total population from the poverty line increased substantially with a contribution of 16 percentage points. The headcount ratio further fuelled poverty by 7 percentage points. However, the reduction in income inequality among the poor helped counteract some of the exacerbations in the SST index. The SST increased further in the last period but at a slower pace, characterised by a higher poverty rate and more inequality amongst the poor. Contrary to the previous period, there was some correction in the poverty gap, albeit small.

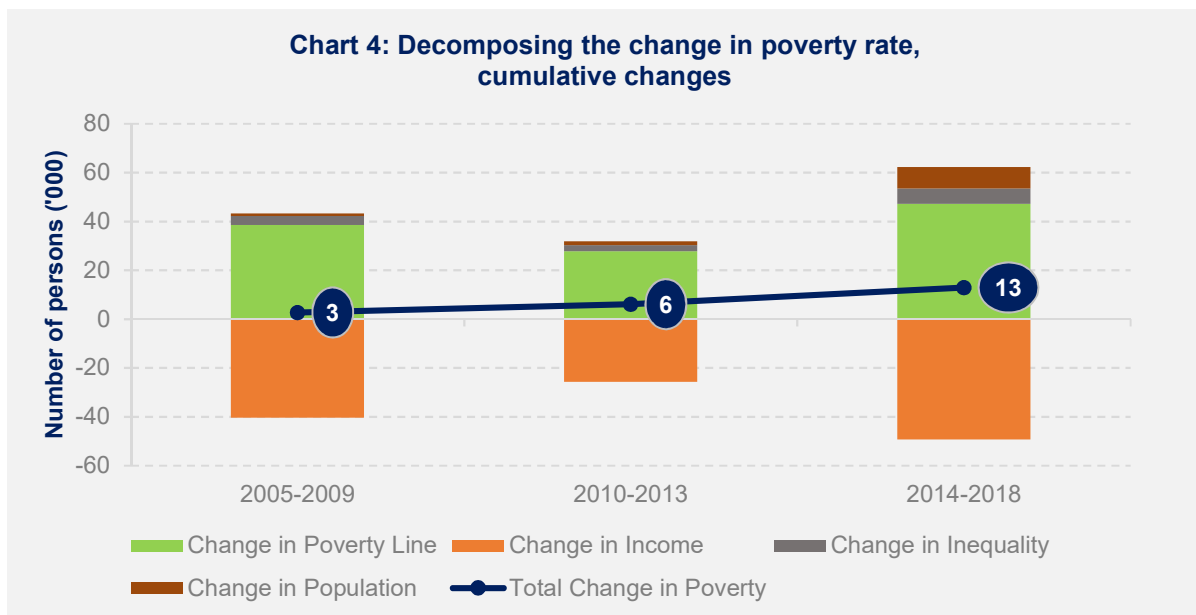


What do we know about the poverty rate?

The proportion of individuals below the poverty line increased substantially between 2005 and 2018. Because the poverty line is not fixed and is established as a percentage of the median income of the whole population in each year, this resulted into lack of transparency. Whether the increase in the poverty rate reflects an increase in the number of persons falling behind other affluent members of the society or simply the poverty line increasing by a higher rate than the income of other groups cannot be determined by the headcount poverty measure alone.

Deciphering changes in poverty rates is complex because it is not merely reflecting gross income change that echo labour market developments but also changes in tax and benefit regimes, changes in the underlying income distribution, and population growth. By way of example, if the poverty threshold falls at a faster pace than average income as the economy sinks into recession, the headcount poverty measure would decline. While it appears that the number of individuals previously located as slightly below the poverty line escaped poverty, poverty after factoring in the decline in the poverty line will be on the rise. Fixing the poverty threshold avoids counterintuitive results, but it comes at the cost of losing important information about poverty dynamics. By using the shift-share simulation approach, this study decomposes poverty change into four components: income growth, inequality change, poverty line change, and total population change. Failing to account for these four components will potentially lead to misinterpretation of the poverty change and even might produce unintuitive interpretations.

Chart 4 illustrates the cumulative change in the contribution of each factor to the headline indicator of poverty, as measured by the poverty rate. All years were characterised by income growth, save for 2010 due to the global financial crisis. Consequently, income growth exerted downward pressure on the poverty rate and outweighed the poverty line effect in all periods, bar the years between 2010 and 2013. Turning to the poverty line, because the poverty threshold depends on the median equivalised disposable income, we expect that in a growing economy the threshold rises rapidly, but conversely it precipitates in a recession. Again, with the exception of 2010, the poverty line exerted an upward pressure on poverty. Furthermore, the inequality change effect shows the degree to which poverty was affected by income inequality. The contributions move in tandem with changes in the Gini coefficient. Again, the effect swung from positive to negative, but on aggregate, the upward contribution size exceeded the negative contribution. This means that subdued rising inequality trends are leading to more poverty, all else being equal. Lastly, the impact of change in total population shows that the effect of economic growth on poverty is mitigated because of an increase in total population. The population effect was enhanced in recent years due to the reliance on foreign workers to meet labour shortages.



Turning to demographics, by estimating the relative poverty risk, this study shows that some households are more susceptible to poverty than others. Relative poverty risk is defined as the ratio of the poverty rate of a given group to the overall poverty rate. We find that zero-earner households are approximately 2.5 times more likely to be relatively poor, whereas single-earner and multi-earner households are less prone to live in relative poverty. The descriptive analysis also shows that single-earner households with 2 or more adults are likely to be twice as prone to relative poverty. Examining the difference between household type, we find that the transition from single-earner households, containing more than 1 adult to multi-earner households, pushed the poverty line through the roof. The increase in pensioners spurred poverty simply because they have a higher poverty risk relative to other groups.

Conclusion

This study demonstrated that a single poverty indicator on its own hides the complexity of measuring and interpreting poverty measures. We approach this discussion by computing more than one indicator and analysing the main drivers of poverty. In synthesis, we find that there are more relatively poor because a larger percentage of the population lives below the poverty line for every period. The decomposition also shows that in 2018, the relatively poor were poorer when compared to the situation in the 2005-2009 period. The shortfall in income mainly deteriorated in the 2010-2013 period. We also find that during the 14 years, inequality amongst the poor increased, reflecting a larger fraction of the poor closer to the poverty line. By decomposing the change in the number of people at-risk-of-poverty, the increase in the poverty line was the main driving force of poverty, and the mean income growth had a neutralising effect upon poverty. The recent increases in inequality have mildly affected poverty, with population change becoming more prominent, albeit modest.

Policies to combat poverty cannot neglect measurement issues. First, policy design needs to give special attention to the three dimensions of poverty: incidence, intensity, and inequality. From this study, it becomes clear that a holistic policy requires meeting three criteria: minimising the number of poor, helping the very poorest, and reducing the gap between the poorest and the poor.

Second, whilst important, economic growth is not the only key to reducing poverty. The focus on 'activation' policies, such as the provision of childcare and work-related spending, could have crowded out more traditional redistributive policy designs, such as minimum wage and direct taxation. The ambiguity of the activation policies refers to its distributional impact: those who will first benefit are those who already participate or can participate in the labour process in the hope that the others will follow. But evidence suggests that activity rates of low skilled persons remain significantly below that of their highly skilled counterparts. As long as the labour market remains socially stratified, poverty risk is likely to remain or intensify.

This research was conducted under the auspices of the Centre for Labour Studies (CLS), University of Malta. The project was initiated by former CLS director Dr Anna Borg, then taken forward under the directorship of Dr Luke Anthony Fiorini. The research was carried out in 2020 and is the second of two studies on income inequality and poverty in Malta. Funding for this research was made possible by the Centre for Labour Studies.

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