

# **Open Access Repository**

www.ssoar.info

# Being Working Poor or Feeling Working Poor? The Role of Work Intensity and Job Stability for Subjective Poverty

Filandri, Marianna; Pasqua, Silvia; Struffolino, Emanuela

Postprint / Postprint Zeitschriftenartikel / journal article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

Wissenschaftszentrum Berlin für Sozialforschung (WZB)

## **Empfohlene Zitierung / Suggested Citation:**

Filandri, M., Pasqua, S., & Struffolino, E. (2020). Being Working Poor or Feeling Working Poor? The Role of Work Intensity and Job Stability for Subjective Poverty. *Social Indicators Research*, *147*(3), 781-803. <a href="https://doi.org/10.1007/s11205-019-02174-0">https://doi.org/10.1007/s11205-019-02174-0</a>

### Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.



#### Terms of use:

This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.

By using this particular document, you accept the above-stated conditions of use.



#### **ORIGINAL RESEARCH**



# Being Working Poor or Feeling Working Poor? The Role of Work Intensity and Job Stability for Subjective Poverty

Marianna Filandri<sup>1</sup> · Silvia Pasqua<sup>2</sup> · Emanuela Struffolino<sup>3</sup>

Accepted: 6 August 2019 / Published online: 10 September 2019 © Springer Nature B.V. 2019

#### Abstract

Low work intensity and high job instability are crucial micro-determinants of in-work poverty. Importantly, they might also affect subjective poverty in households that are above the poverty threshold. We contribute to the literature by studying the relationship between subjective and objective in-work poverty and how this relationship is affected by household members' job characteristics. We use data from the 2014 wave of the Italian module of the EU-SILC survey. Italy is an interesting case as—similarly to other Southern European countries—the share of individuals and households reporting subjective hardship is strikingly high compared to the levels reported in other EU areas. We find no statistically significant differences in the association between subjective poverty and different degrees of objective poverty by different levels of work intensity. Conversely, subjective poverty is positively associated with the instability of household members' job contracts. We argue that policies aimed at increasing work intensity rather than work stability might not help to reduce subjective poverty as well as its (negative) spillover effects on other life domains—such as well-being, adequate levels of consumption, and social integration.

**Keywords** In-work poverty · Work intensity · Job instability · Subjective poverty · Italy

Marianna Filandri marianna.filandri@unito.it

Silvia Pasqua @unito.it

WZB Berlin Social Science Center, Reichpietschufer 50, 10785 Berlin, Germany



Emanuela Struffolino emanuela.struffolino@wzb.eu

Department of Cultures, Politics and Society, University of Turin, Lungo Dora Siena 100, 10153 Turin, Italy

Department of Economics and Statistics "Cognetti de Martiis", University of Turin, Lungo Dora Siena 100, 10153 Turin, Italy

#### 1 Introduction

In Europe, in-work poverty is a widespread and troubling phenomenon (Lohmann and Marx 2018). The non-negligible share of workers living in poor households—around 10% on average (Eurofound 2017)—proves that having a job does not protect families from the risk of poverty. While poverty has been widely studied using different approaches, in-work poverty has mainly been analysed based on an objective definition of monetary poverty. In particular, little attention has been devoted to the subjective dimensions of in-work poverty. Subjective poverty, i.e. the individual perception of deprivation, may result from objective poverty, but it can also go beyond it. The finding that the populations identified by measures of objective and subjective poverty imperfectly overlap is a well-established one (Castilla 2011; Ravallion and Chen 2009; Strengmann-Kuhn 2000). We expect this imperfect overlap to characterise the working poor population as well.

Feeling poor can negatively affect different dimensions of well-being and it can reduce consumption levels regardless of actual household income (Guagnano et al. 2016; Nandori 2011; Ravallion 2014). In fact, the permanent income hypothesis suggests that decisions on household consumptions are based on the expected income in the long run (permanent income) rather than on the current income. Moreover, because most households have high levels of risk aversion (Alderman and Paxson 1994; Hall 1978), the characteristics of the jobs held by household members may affect subjective poverty beyond the actual economic situation measured by the disposable income. Uncertainty about the future income, in fact, might decrease the levels of consumption and increase the feelings of poverty among risk-averse families because might have greater consequences for households that are characterised by low work intensity and high job instability. This is expected to be especially the case at times of economic crises or exogenous shocks—such as job loss, union dissolution, or the death of a household's working member.

Previous results have shown that low work intensity and job instability are crucial micro-determinants of in-work poverty (Lohmann and Marx 2018). However, to the best of our knowledge, no study has analysed so far if and to what extent work intensity and job instability shape the relationship between subjective and objective in-work poverty. We fill this gap by analysing the experience of subjective poverty in households that are above the poverty threshold as well of those who are below it.

The analyses focus on Italy and are based on the 2014 Italian wave of the EU-SILC survey. Interestingly, the poverty rate in Italy has always been higher than the average rate for the EU-27 countries, and this holds true irrespective of the poverty measure adopted (in-work poverty, objective poverty, or subjective poverty). Two facts are particularly striking about the Italian case. First, although most EU countries have experienced an increase in the number of (working) poor households in the last few decades (Eurofound 2017; Filandri and Struffolino 2013), the working poor rate in Italy increased by 34% (from 8.8 to 11.8%) between 2005 and 2014, while in the EU average rose only by 18% (from 8.1 to 9.6%). Second, the share of households reporting subjective economic hardship is much higher in Italy and other Southern European countries compared to most EU countries (Eurostat 2013). In the Nordic countries, in fact, less than 3% of households report

<sup>&</sup>lt;sup>1</sup> The literature also identifies low wages as a cause of in-work poverty. However, we do not consider this aspect here because low wages are associated with low levels of household work intensity and less stable jobs (Eurofound 2017), that is the employment characteristics that we consider directly in our analysis. Moreover, hourly wages are not available in EU-SILC.



subjective poverty and the corresponding figure is 7% for the North-Western European countries, increasing to 26% and 33% respectively for Southern and Eastern countries. In Italy in 2014 about 40% of the households were poor according to a subjective indicator.

This scenario is arguably a consequence of a weaker welfare state system and of the labour market deregulation "at the margins", which generated a highly differentiated opportunity structure for workers (Barbieri et al. 2018). In Italy, in fact, a massive labour market deregulation process has been promoted since the mid-1990s as the key instrument for removing or softening rigidities, thus increasing labour productivity and fostering employment participation among specific categories of workers (women, older workers, young people, and immigrants, see Vesan 2009). The employment protection legislation for newly hired workers were weakened (Fana et al. 2015) and several new types of temporary contracts were introduced, along with reduced penalties for companies that did not convert temporary contracts into open-ended contracts under specific circumstances (Law 196/1997 "Treu package", Legislative Decree 368/2001, and Law 30/2003 "Biagi law").<sup>2</sup> One of the main outcomes of these reforms was the growth in the incidence of temporary employment, which increased from 9 (in 2005) to 14% (in 2014) of total employment. These temporary arrangements are involuntary in most cases (Fana et al. 2015). The labour market reforms of the early 2010s (Law 92/2012 known as the "Fornero law" and Law 183/2014 known as "Jobs act")<sup>3</sup> reinforced the dualisation of the Italian labour market, resulting in a high incidence of involuntary part-time contracts, reduced contractual guarantees, and low wages (Barbieri et al. 2018).

The low work intensity and the high job instability produced by these labour market reforms possibly explain the large number of Italian households reporting subjective poverty. Our findings show that work intensity does not play a role for the association between subjective poverty and different degrees of monetary poverty. Conversely, subjective poverty is prevalent especially among families in which household members experience high levels of job instability: the presence of family members employed on temporary contracts increases the probability of feeling poor for all levels of household income (except for well-off families).

<sup>&</sup>lt;sup>3</sup> Law 92/2012: 28th June 2012, n. 92 "Disposizioni in materia di riforma del mercato del lavoro in una prospettiva di crescita" published on *Gazzetta Ufficiale* Serie Generale n.153, 3rd July 2012, Suppl. Ordinario n. 136. Law 183/2014: 10th December 2014, n. 183 "Deleghe al Governo in materia di riforma degli ammortizzatori sociali, dei servizi per il lavoro e delle politiche attive, nonché in materia di riordino della disciplina dei rapporti di lavoro e dell'attività ispettiva e di tutela e conciliazione delle esigenze di cura, di vita e di lavoro" published on *Gazzetta Ufficiale* Serie Generale n.290, 15th December 2014.



<sup>&</sup>lt;sup>2</sup> Law196/1997: 24th June 1997, n. 196 "Norme in materia di promozione dell'occupazione" Published on *Gazzetta Ufficiale* n. 154, 4th July 1997—Supplemento Ordinario n. 136. Legislative Decree 368/2001: 6th September 2001, n. 368 "Attuazione della direttiva 1999/70/CE relativa all'accordo quadro sul lavoro a tempo determinato concluso dall'UNICE, dal CEEP e dal CES" published on *Gazzetta Ufficiale* n. 235, 9th October 2001. Law 30/2003: 14th February 2003, n. 30 "Delega al Governo in materia di occupazione e mercato del lavoro" published on *Gazzetta Ufficiale* n. 47, 26th February 2003.

Approach	Monetary	Non-monetary
Objective	Low income level	Deprivation of material goods
Subjective (feeling poor)	Inability to make ends meet	General assessment

**Table 1** Classification of poverty indicators

# 2 Objective and Subjective (In-work) Poverty

The most common indicators of poverty can be classified along two dimensions: objective *versus* subjective and monetary *versus* non-monetary (Table 1). Each of these measures has advantages and disadvantages, and there is a broad debate about the most appropriate indicator to be used (e.g., Kim 2016; Meyer and Sullivan 2012).

A great part of the literature on poverty focuses on objective poverty, which is measured by monetary or non-monetary indicators, such as household income or access to material goods respectively (Atkinson 1987; Mahmood et al. 2019; Nolan and Whelan 2000). The subjective indicators emerged from the development literature and refer to individuals' perception of their own situation with respect to poverty (Kuivalainen 2014; Ravallion 2012; Ravallion and Lokshin 2001). This self-perception can denote either a general assessment that comprises a wider range of components, or the ability to "make ends meet", which typically encompasses the monetary aspects (Hagenaars and de Vos 1988). With respect to this last monetary definition, subjective poverty differs across socio-economic contexts (Buttler 2013; Lucchini and Sarti 2005; Nolan and Whelan 2009; Strengmann-Kuhn 2000; Tentschert et al. 2000; Van Praag et al. 1980) depending on household types—i.e., number of family members—and individual socioeconomic characteristics—i.e. gender, age, education, job tenure and income—(Castilla 2011; Ravallion and Lokshin 2002; Verbič and Stanovnik 2006).

In this contribution, we focus on monetary indicators of both objective and subjective poverty only. Specifically, households are considered objectively poor if their equivalised income lies below the 60% of the median value. By contrast, the subjective poverty measure is based on the answer to the question assessing the subjective perception of the ability to "make ends meet" (Nolan and Whelan 2000).<sup>5</sup> It is worth noting that the ability to "make ends meet" refers to a *subjective* understanding of what *usual necessary expenses* are. Those regarded as *usual necessary expenses* can vary depending on individual and household characteristics

<sup>&</sup>lt;sup>5</sup> An alternative indicator used in the literature relies on a subjective assessment of the quantity of monetary resources needed to ensure a minimum living standard for the household, implicitly defining a subjective poverty threshold. For a detailed discussion see Van Praag and Ferrer-i-Carbonell (2008).



<sup>&</sup>lt;sup>4</sup> Comparative research on Western countries generally adopts a relative approach to objective monetary poverty, defining poverty as the inability to achieve the minimum acceptable standard of living. This latter is computed by adopting specific thresholds (usually 50%, 60%, or 66% of mean or median income). Absolute measures, instead, refer to the minimum level of income that is necessary to maintain basic living standards (food, shelter, and housing). Households are considered poor when their income lies below the threshold adopted.

as well as on the socio-economic context. We suggest that this operationalization is better suited to capturing subjective poverty compared to the one proposed by Eurostat (2018), which points out to economic strain. In fact, the Eurostat's operationalization relies on a composite measure based on a set of questions about the ability to afford eight different types of expenses defined *ex-ante*. In other words, economic strain does not take into account what expenses are subjectively identified as necessary by the respondents when they assess whether they are poor or not. Additionally, it overlooks that some respondents may be able to afford some of the expenses listed thanks to, for example, intergenerational transfers. In this case, the economic strain would be low, but individuals can still report high levels of subjective poverty, because some expenses were paid only through an external help.

The discrepancy between the populations identified as poor when using the (monetary) objective or subjective indicators is a well-established finding in the literature. This finding leads to two possible types of inconsistencies (Atkinson et al. 2017; Berthoud and Bryan 2011; Castilla 2011; Filandri et al. 2013; Muffels and Fouarge 2003; Negri and Saraceno 2003; Pradhan and Ravallion 2000; Ravallion and Chen 2009; Strengmann-Kuhn 2000). First, poor individuals may not feel poor, and, second, non-poor individuals may feel that they have less than what they need depending on their perceptions of current and future socio-economic conditions. As outlined above, we argue that the latter is influenced by differences in work intensity and job instability at the household level.

We advance three hypotheses. First, we expect households characterised by a high work intensity to be less likely to feel poor at all levels of objective poverty (H1). In fact, a high work intensity resulting from working full-time and/or living in a dual earner household might mitigate the feeling of vulnerability. As an example, individuals in households whose labour income comes from two full-time jobs might feel less poor than a single person relying only on his/her our wage from a full-time job, although their equivalised household income is the same.

Second, we hypothesise a positive relationship between subjective in-work poverty and instability of household members' jobs at all levels of objective poverty (H2). In this case, we expect that household members would consider their expected future income in addition to their current economic condition (measured in available economic resources) when declaring subjective poverty. Therefore, the presence of at least one worker with a permanent contract in the household represents a safety net that might prevent individuals from feeling poor.

Finally, the household consumption level might be adjusted to the level of income regarded as secure/stable. As a result, we expect a higher share of stable income to be negatively associated with the probability of feeling subjectively poor (H3).

#### 3 Data and Methods

#### 3.1 Data and Sample

The analyses are based on the Italian module of the *European Union Survey on Income* and *Living Conditions* (EU-SILC) dataset. EU-SILC provides information on income, education, employment, health, housing conditions, material deprivation, social exclusion, and living conditions at the individual and household level for a representative sample of the

<sup>&</sup>lt;sup>6</sup> Moreover, there is no general agreement on whether the composite indicator of subjective financial stress proposed by Eurostat can be considered fully subjective (Blekesaune 2013). As an example, Fahey (2007) defines objective financial problems as being in arrears on bills.



population in 31 countries. We use data from the 2014 cross-sectional wave for Italy on a sample of 19,663 households. Our units of analysis are the households with at least one worker. Specifically, to ensure the sample homogeneity needed to investigate in-work poverty, we select only households with at least one adult worker between 25 and 59 years old either employed or self-employed and working either part-time or full-time at the time of the interview. We further restrict our sample to households with a maximum of two adult workers. We also exclude households with income from pensions. The final analytical sample comprises 7922 households.

As required by our research questions, we opt for cross-sectional data because we are not interested in studying either the effect of the transitions in/out of in-work poverty or its persistency. Therefore, our results have to be interpreted as robust partial correlations rather than as causal effects.

#### 3.2 Variables

#### 3.2.1 Dependent Variable

The main dependent variable is subjective (in-work) poverty, defined by using the answer to the question: "Thinking of your household's total income, is your household able to make ends meet, namely, to pay for its usual necessary expenses?" and measured in the EU-SILC dataset with a six-point scale indicator. The variable has been dichotomised to distinguish households that can make ends meet either "very easily", "easily", "fairly easily", or "with some difficulty", from those that make ends meet "with great difficulty" or "with difficulty". Acknowledging the debate on the use of composite measures of subjective economic difficulty, we also test the robustness of our results by considering an alternative measure that accounts for the inability to afford two out of three of the following items available in our data: (1) a 1-week annual holiday away from home; (2) a meal with meat, chicken, or fish every second day; and (3) unexpected financial expenses (see Models 2 in Tables A1, A2, and A3 in the Appendix). These three items are among the eight used by Eurostat to measure economic strain (as discussed in Sect. 2) that refer somehow to a more subjective assessment of economic difficulty.

#### 3.2.2 Main Independent Variable

The main independent variable is objective monetary poverty. Following the most common definition, we identify the working poor as workers living in a household in which the net disposable household income (computed using the modified OECD equivalence scale<sup>9</sup>) is below 60% of the population median household income (i.e. the relative poverty line, see Eurofound 2017, 2018). We then distinguish between five groups of households according to the distance of their income from the relative poverty line. Specifically, we define as *severely poor* those households whose income is less than 50% of the median

<sup>&</sup>lt;sup>9</sup> The modified OECD equivalence scale assigns a value of 1 to the household head, of 0.5 to each additional adult member and of 0.3 to each individuals younger than 14.



 $<sup>^{7}\,</sup>$  The two adult workers can be a couple or one parent and one adult–child.

<sup>8</sup> As a robustness check, we considered a different dichotomization, distinguishing between those who have difficulties and those who do not. This classification does not change the results.

income; as *poor* those with an annual income between 50 and 60% of the median one; as *vulnerable* those with an annual income between 60 and 70% of the median income. *Non-poor* households are those with an annual income between 70% of the median income and the median income, and the last category includes households with an income *above the median income*.

Other independent variables. We use two indicators of household members' working conditions: work intensity and job instability. We define work intensity as the number of full-time equivalent workers within the household. This measure clearly depends on both the number of earners and on the number of part-time workers in the household. We opt for an operationalisation that refers to individual's labour market position (employed/not employed, part-time/full-time) and therefore reflects better our interest in work intensity compare to measures based on employment continuity, which relate more closely to job instability instead (Lohmann and Crettaz 2018). Because our sample includes households with one or two workers only, the variable for work intensity can take value 0.5 when there is only one part-time worker (479 cases), value 1 when there is one full-time worker (4075 cases) or in the very few cases with two part-time workers (1121 cases), value 1.5 when there is one full-time worker and one part-time worker (1121 cases), and value 2 when there are two full-time workers (2276 cases). As a robustness check, we also estimate the models using a more conservative and parsimonious definition of work intensity based on the number of workers in the household (see Model 3 in Table A1 in the Appendix).

Two measures of job instability are used: (1) the share of working household members with a temporary contract and (2) the share of household labour income from temporary jobs. When work instability is defined as the ratio of workers with temporary contracts to the total number of workers within the household, the variable can take value 0 if all working members are employed on permanent contracts (6808 cases), value 0.5 if one out of the two household's working members is employed on a temporary contract (601 cases), or value 1 if one out of one or two out of the two household's working members have a temporary contract (598 cases). The second measure of work instability accounts for the share of labour income that comes from temporary jobs and it is defined as a continuous variable that ranges between 0 and 100%.

Control variables. The models are controlled for several potential confounders: the highest educational level among the household's members (primary, lower secondary, upper secondary, or tertiary education); age of the oldest member (up to 34, 35–44, or 45–64 years old); household composition with respect to the adult members (single or couple); number of members (from 1 to 5); number of children below the age of 15 (0, 1, or 2 or more); number of workers in the household (1 or 2), number of self-employed (0, 1, or 2); home ownership (yes or no), high degree of urbanisation (yes or no), geographical area of residence (North, Centre, or South and Islands), foreign born (whether at least one of the adult member in the household is born in a country other than Italy). Table 2 shows the distribution of all variables in the final sample.

<sup>&</sup>lt;sup>13</sup> Only 71 households have two out of two workers are temporary. As a robustness check, we estimated the models by removing these cases and the results do not change (results not showed, available upon request).



<sup>&</sup>lt;sup>10</sup> Alternative definitions of work intensity considering the number of months worked in the year can be found in the literature. See, for example, Berloffa et al. (2015) or Ayllón and Gábos (2017).

<sup>&</sup>lt;sup>11</sup> As a robustness check, we estimated the models by removing these cases and the results are unchanged (not showed, available upon request).

<sup>12</sup> The measure we use is implicitly a relative one, as the maximum number of workers in the household is two by construction.

 Table 2
 Sample distribution across the variables used in the models

	%—mean
Objective poverty	
Severely poor	10.8
Poor	5.7
Vulnerable	7.0
Non-poor	22.0
Above the median income	54.6
High degree of urbanization	
Low	60.6
High	39.4
Presence of children < 15	
No	51.9
Yes, one	30.7
Yes, two or more	17.4
Household members	
1	23.6
2	18.4
3	25.5
4	27.0
5	5.5
Nr. of self-employed	
None	71.4
One	24.8
Two	3.8
Household composition, adult members	
Single	33.2
Couple	66.8
Highest educational level	
Up to lower secondary	13.9
Upper secondary	53.4
Tertiary	32.7
Age of the oldest household member	
<35	9.0
35–44	32.5
45–64	58.5
At least one foreign born household member	
No	84.5
Yes	15.5
Home-ownership	
No	30.9
Yes	69.1
Geographical area of residence	
North	52.3
Center	23.4
South and Islands	24.3



Table 2 (continued)

	%—mean
Nr. of workers in the household	
1	57.0
2	43.0
Work intensity: number of full/part-time workers	
1 part-time	6.0
1 full-time	51.6
1 full-time, 1 part-time	14.0
2 full-time	28.4
Share of workers with unstable job	
0%	85.1
50%	7.5
100%	7.4
Share of labor income that comes from temporary jobs	10
N	7922

Source: EU-SILC 2014, Italian module. Authors' calculations

#### 3.3 Methods

The association between subjective and objective in-work poverty is estimated by a set of binomial logistic regression models, which is the method commonly used for binary categorical dependent variables (Long and Freese 2014). Objective poverty, as defined above, is considered in interaction with work intensity and job instability. In Tables A1, A2 and A3 in the Appendix, models 1a and 1b display the full results without and with interaction terms respectively. In the next section, the results for the interactions of interest as estimated from the models 1b are shown as predicted probabilities of objective poverty at different levels of work intensity and job instability for each category of the interactions (Bartus 2005; Long and Freese 2014) keeping all control variables at their mean values. Finally, all models include household cross-sectional weights provided by EU-SILC.

#### 4 Results

#### 4.1 Descriptive Findings

Table 3 provides descriptive evidence of the distribution of several income-related variables across different levels of objective (in-work) poverty. These first results confirm that having a job is not a sufficient condition to avoid household poverty. In fact, 16.5% of the households in which at least one member is employed are poor according to the monetary indicator, i.e. they have an equivalent disposable total income that is below the 60% of the median income of the whole population in the country. The majority of these households (10.8% of the total sample) experience severe poverty, having an average equivalised household income of 466.5 Euros.

In line with previous findings, subjective in-work poverty is positively correlated with objective poverty, but the two indicators do not fully overlap. In our sample,



Table 3 Summary statistics of income-related variables by level of objective in-work poverty

	Upper threshold (Euros)	Average income (Euros)	Standard deviation of income (Euros)	% of household	% of subjective in-work poverty	N
Objective in-work	poverty			,		
Severely poor	705.8	466.5	184.4	10.8	65.9	853
Poor	846.3	780.1	38.6	5.7	58.0	448
Vulnerable	988.0	919.1	39.7	7.0	47.4	555
Non-poor	1411.4	1198.4	122.8	22.0	41.1	1740
Above the median income	>1411.4	2206.5	794.0	54.6	17.1	4326
Total sample		1626.9	892.1	100	32.2	7922

Note: "Income" refers to equalized monthly income (Euros) Source: EU-SILC 2014, Italian module. Authors' calculations

 Table 4
 Summary statistics of work intensity and job instability intensity by level of objective in-work poverty

	Objective (in-work) poverty					Total
	Severely poor	Poor	Vulnerable	Non-poor	Above the median income	
Work intensity						
One parttime worker	41.1	12.8	9.4	23.1	13.6	100.0
One fulltime worker*	13.5	7.9	9.1	24.4	45.1	100.0
One fulltime and one parttime	3.9	2.8	6.0	24.9	62.5	100.0
Two fulltime workers	2.7	1.5	3.2	15.9	76.8	100.0
Job instability as the share of worker	s with temporary	contra	ct			
None	9.7	5.3	6.5	21.4	57.1	100.0
50% (one out of two)	6.1	4.0	7.9	25.7	56.3	100.0
100% (one out of one or two out of two)	27.7	11.6	12.4	24.3	24.0	100.0
Job instability as the percentage of labour income that comes from temporary jobs	42.4	35.7	34.8	25.2	14.3	22.4

<sup>\*</sup>This group (N. 4135) includes 56 households in which two members work part-time, see Sect. 3

Note: Income is shown as equalized monthly income

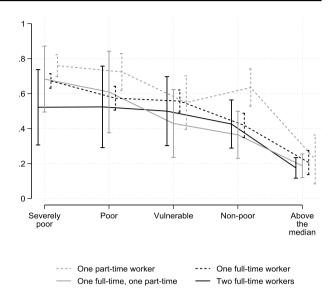
Source: EU-SILC 2014, Italian module. Authors' calculations

around 65.9% of (severely) poor families feel poor. At the same time, a non-negligible share of vulnerable and non-poor households (47.4 and 41.1% respectively) experience subjective poverty.

Table 4 shows the association between the indicators of work intensity and job instability and objective in-work poverty. Overall, the probability of experiencing monetary poverty decreases as the number of employed members increases. Households with two full-time workers have a 76.8% probability of having an income above the median value,



Fig. 1 Predicted probabilities for subjective (in-work) poverty by objective (in-work) poverty at different levels of household's work intensity. *Note*: Predictions from Model 1b in Table A1 in the Appendix. *Source*: EU-SILC 2014, Italian module. Authors' calculations (weighted)



while for households with only one part-time worker the probability decreases to 13.6%. This latter group has 53.9% probability of being poor or severely poor.

For what job instability is concerned, households in which none of the workers or one out of two has a temporary contract are less likely to be poor. When one out of one or two out of two workers in the household hold unstable jobs, the probability of being severely poor or poor is 39.3%. This percentage rises up to 51.7% when we consider severely poor and poor together with vulnerable households. Looking at the second indicator of job stability at the household level, we observe that the average share of labour income that comes from temporary jobs is positively associated with the severity of poverty: the poorest households are also those that have a higher level of income from unstable jobs.

These descriptive results may be affected by compositional differences and confounders: in the next section, we present a set of multivariate analyses that account for it.

#### 4.2 Subjective Poverty: The Role of Household Work Intensity

The first set of logistic regression models estimates the association between feeling poor and objective monetary poverty by household work intensity. Figure 1 shows the predicted average probability of feeling poor by levels of objective poverty keeping all other variables at their mean values. Each line refers to a different degree of work intensity: the dashed black and grey lines are for one part-time and one full-time worker respectively; the grey solid line for one full-time and one part-time worker, while the solid black line for two full-time workers. The difference between the probabilities of subjective poverty by levels of objective poverty is not statistically significant across varying degrees of work intensity (95% confidence intervals). In other words, the strong relationship between objective poverty and work intensity shown in Table 4 does not influence differently the feeling of poverty across working households. These results do not support our hypothesis 1: in Italy, work intensity does not affect the relationship between objective and subjective poverty. Our estimates are robust to the use: (1) of a more conservative indicator of work intensity, i.e. the total number of employed household members with no distinction between full-time



and part-time contracts (see Model 3 in Table A1 in the Appendix); and (2) of the alternative measure subjective economic difficulty (see Model 2 in Table A1 in the Appendix).

### 4.3 Subjective Poverty: the Role of Household's Job Instability

Figure 2 displays the results for the effect of work instability on the relationship between subjective and objective poverty. In this case, we compare households in which none of the working members has a temporary contract (solid black line) to households where either one out of two has an unstable job (grey solid line) or all working members have a temporary contract (black dashed line). The difference between the two extreme groups is significant at all levels of objective poverty. Households where all working members have precarious jobs are more likely to feel poor (subjective in-work poverty) compare to households with the same level of income (objective in-work poverty) but where all working members have permanent jobs. Households in which 50% of the members are employed on a temporary contract lie in between.

Interestingly, the probability of feeling poor for the non-poor households where all working members hold a temporary job is significantly higher compare to the probability of subjective poverty for poor and vulnerable households where all workers have a permanent contract. These results support our second hypothesis (H2) and suggest that households might better plan consumption and maintain a constant standard of living when they have a stable source of labour income.

Therefore, having (at least) one stable source of labour income seems to be more important for households to feel able to make ends meet than having high levels of household work intensity. The results are robust to the use of the alternative measure subjective economic difficulty (see Model 2 in Table A2 in the Appendix).

Finally, Fig. shows that these results remain consistent when we use a different definition of work instability, i.e. the share of household labour income that comes from

Fig. 2 Predicted probabilities for subjective (in-work) poverty by objective (in-work) poverty at different levels of household job instability. *Note*: predictions from Model 1b in Table A2 in the Appendix. *Source*: EU-SILC 2014, Italian module. Authors' calculations (weighted)

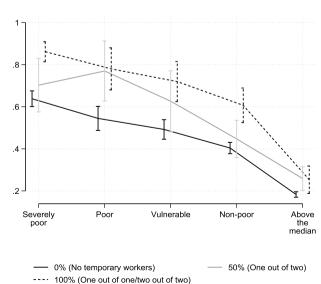


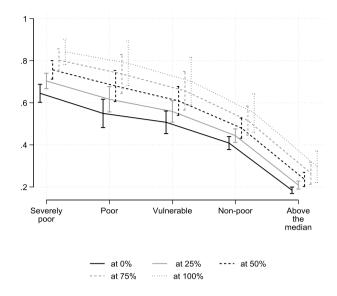




Fig. 3 Predicted probabilities for subjective (in-work) poverty by objective (in-work) poverty by share of labour income that comes from temporary jobs.

Note: Predictions from Model 1b in Table A3 in the Appendix.

Source: EU-SILC 2014, Italian module. Authors' calculations, weighted



t3emporary jobs. The black solid line connects the estimates for subjective in-work poverty as a function of different levels of objective poverty for households whose income is generated only through permanent jobs. By contrast, the two grey dotted lines connect the estimates for households that earn 75% and 100% of their income from temporary jobs. Households where the labour income comes entirely from permanent contracts are significantly less likely to experience subjective poverty than households where 75% of it comes from temporary work. The differences between household types that lie in between are not statistically significant, but this result is likely to be driven by the small size of these subgroups. Also in this case, models are robust to the use of the alternative measure of subjective economic difficulty (see Model 2 in Table A3 in the Appendix). <sup>14</sup>

In sum, results reported in Figs. 2 and 3 support our last hypothesis (H3): a higher share of income from stable jobs decreases the probability of feeling poor. Hence, the feeling of subjective in-work poverty decreases at all levels of objective in-work poverty as a function of job instability at household level. This finding suggests that when most of their income comes from stable sources, households can better manage their consumption and are more likely to report being able to make ends meet.

#### 5 Conclusions

In this paper, we analysed the relationship between subjective and objective in-work poverty and explored if this relationship changes at different levels of household work intensity and job stability. Our results confirm that in Italy having a job is not a sufficient condition to avoid poverty, either in terms of (monetary) objective or subjective poverty. Moreover, workers in poor households do not always feel poor, and non-poor workers in some

<sup>&</sup>lt;sup>14</sup> The predicted average probabilities estimated from Models 2 and Models 3 in Tables A1, A2, and A3 in the Appendix are highly consistent with those shown in Figs. 1, 2, and 3 respectively.



instances feel that they have less than what they would need. We find that these discrepancies do not depend on the households' work intensity, but they are rather associated with the job stability of household members. This finding points out implicitly to the importance of the stability of labour income. Accordingly, we interpret this evidence in light of the permanent income hypothesis: households can better plan consumption and maintain a constant standard of living when they have a stable labour income.

We acknowledge that our results reflect partial correlations and not causal effects, as they are based on cross-sectional analyses. Notwithstanding this *caveat*, our findings contribute to the existing evidence on the correlation between work stability and subjective well-being by suggesting that one of the mechanisms is likely to work via the complex association between objective and subjective poverty. The fact that individuals judge their household's economic situation in relation to both the actual monetary income and income stability can affect not just for households' consumption levels in the present, but also choices about fertility (e.g. Modena et al. 2014; Scherer 2009; Vignoli et al. 2012) and about investment in children's education (Carvalho et al. 2016; Dalton et al. 2016). Future research should indeed address how these crucial processes may reinforce inequality and trigger cumulative disadvantage over individuals' life courses.

Overall, these findings have general implications for policy makers in a country like Italy, where the incidence of in-work poverty and the share of temporary contracts have increased over the last decades. We argue that policies aiming at improving the population's well-being need to focus primarily on providing secure employment rather than employment *tout court*. Increasing job stability at the household level will eventually decrease not just objective, but also subjective poverty. This is likely to have positive implications for present and future consumption and, arguably, for investments in education in favour of the younger family members.

# Compliance with Ethical Standards

**Conflict of interest** The authors declare that they have no conflict of interests.

Ethical approval Ethics approval is not required for this paper.

# **Appendix**

See Tables A1, A2 and A3.



**Table A1** Logistic regression models for the likelihood of subjective (in-work) poverty by different levels of objective (in-work) poverty at different levels of work intensity

	Model 1a	Model 1b	Model 2	Model 3
	Coeff. (no interaction terms)	Coeff. (Figure 1)	Coeff. (robustness check subj. poverty)	Coeff. (robustness check nr. workers)
Objective poverty (ref.: severely po	oor)			
Poor	-0.392**	0.009	-1.926**	-0.382**
	[0.163]	[0.554]	[0.657]	[0.176]
Vulnerable	-0.522**	-0.011	-0.128	-0.590**
	[0.147]	[0.483]	[0.503]	[0.162]
Non-poor	-0.779**	-0.146	-1.097**	-0.882**
	[0.121]	[0.388]	[0.418]	[0.133]
Above the median income	-1.506**	-1.041**	-1.632**	-1.654**
	[0.126]	[0.372]	[0.405]	[0.136]
Work intensity: number of full/par	t-time workers (ref: 1 par	t-time)		
1 full-time	-0.016	0.744	0.602	
	[0.123]	[0.508]	[0.544]	
1 full-time. 1 part-time	0.168	0.69	0.04	
	[0.516]	[0.623]	[0.633]	
2 full-time	0.687	1.157*	0.673	
	[0.538]	[0.659]	[0.678]	
Nr. of workers in the household (re	ef.: One)			
Two	-0.121	-0.121	-0.223	-0.484*
	[0.515]	[0.508]	[0.500]	[0.265]
Nr. of self-employed (ref.: none)				
One	-0.349**	-0.355**	-0.260**	-0.370**
	[0.084]	[0.084]	[0.093]	[0.084]
Two	-0.575**	-0.515**	-0.279	-0.557**
	[0.222]	[0.218]	[0.221]	[0.223]
Household members (ref.: one)				
2	0.647**	0.665**	0.854**	0.670**
	[0.140]	[0.141]	[0.148]	[0.140]
3	0.928**	0.947**	0.928**	0.935**
	[0.178]	[0.179]	[0.189]	[0.178]
4	1.061**	1.077**	1.099**	1.052**
	[0.210]	[0.210]	[0.221]	[0.211]
5	1.270**	1.281**	1.243**	1.255**
	[0.248]	[0.248]	[0.262]	[0.248]
Household composition, adult men	nbers (ref.: single)			
Couple	-0.244*	-0.264**	-0.287**	-0.302**
	[0.129]	[0.131]	[0.137]	[0.129]
Presence of children < 15 (ref.: no	o)			
Yes. One	-0.224**	-0.224**	-0.248**	-0.220**
	[0.104]	[0.103]	[0.113]	[0.104]



Table A1 (continued)

	Model 1a	Model 1b	Model 2	Model 3
	Coeff. (no interaction terms)	Coeff. (Figure 1)	Coeff. (robustness check subj. poverty)	Coeff. (robustness check nr. workers)
Yes. two or more	-0.388**	-0.396**	-0.342**	-0.375**
	[0.146]	[0.146]	[0.160]	[0.147]
Number of foreign born household me	ember (ref.: none)			
At least one	0.238**	0.247**	0.697**	0.218**
	[0.098]	[0.098]	[0.099]	[0.098]
Age of the oldest household member (	ref.: < 35)			
35–44	0.074	0.075	-0.004	0.077
	[0.129]	[0.130]	[0.144]	[0.129]
45–64	0.036	0.037	0.034	0.045
	[0.128]	[0.129]	[0.141]	[0.128]
Highest educational level (ref.: up to le	ower secondary)			
Upper secondary	-0.435**	-0.443**	-0.619**	-0.431**
	[0.098]	[0.098]	[0.100]	[0.098]
Tertiary	-1.008**	-1.018**	-1.366**	-1.003**
	[0.113]	[0.113]	[0.119]	[0.113]
Home-ownership (ref.: no)				
Yes	-0.467**	-0.463**	-0.776**	-0.484**
	[0.076]	[0.076]	[0.081]	[0.076]
Geographical area of residence (ref.: N	North)			
Center	0.270**	0.277**	0.094	0.271**
	[0.086]	[0.086]	[0.097]	[0.086]
South and Islands	0.535**	0.536**	0.580**	0.538**
	[0.083]	[0.083]	[0.090]	[0.083]
Degree of urbanization (ref.: low)				
High	0.119*	0.122*	-0.027	0.113
	[0.069]	[0.069]	[0.076]	[0.069]
Interaction terms				
Objective poverty * Work intensity(1)				
Poor * 1 full-time		-0.370	1.629*	
		[0.816]	[0.916]	
Vulnerable * 1 full-time		-0.474	1.475**	
		[0.588]	[0.687]	
Non-poor * 1 full-time		-0.225	1.243	
		[0.681]	[0.778]	
Above the median * 1 full-time		-1.047	-1.273*	
		[0.687]	[0.720]	
Poor * 1 full-time. 1 part-time		-0.443	-0.347	
		[0.514]	[0.535]	
Vulnerable * 1 full-time. 1 part-time		-0.947	-0.772	
		[0.655]	[0.677]	



Table A1 (continued)

	Model 1a	Model 1b	Model 2	Model 3
	Coeff. (no interaction terms)	Coeff. (Figure 1)	Coeff. (robustness check subj. poverty)	Coeff. (robustness check nr. workers)
Non-poor * 1 full-time. 1 part-time		-1.020*	0.057	
		[0.557]	[0.594]	
Above the median * 1 full-time. 1		-0.724*	0.226	
part-time		[0.414]	[0.445]	
Poor * 2 full-time		-0.247	0.472	
		[0.505]	[0.553]	
Vulnerable * 2 full-time		-0.66	-0.571	
		[0.534]	[0.576]	
Non-poor * 2 full-time		-0.483	0.152	
		[0.394]	[0.429]	
Above the median * 2 full-time		-0.839	0.398	
		[0.617]	[0.589]	
Objective poverty * Work intensity (2)				
Poor * 2 workers				-0.231
				[0.491]
Vulnerable * 2 workers				0.177
				[0.368]
Non-poor * 2 workers				0.204
-				[0.297]
Above the median * 2 workers				0.24
				[0.283]
Constant	0.400	-0.089	0.532	0.742**
	[0.565]	[0.647]	[0.660]	[0.181]
N	7922	7922	7922	7922

Notes: coefficients and standard errors (in parentheses): model 2 uses an alternative measure of subjective poverty, defined as not to be able to afford two out of three of the following items: 1 week annual holiday away from home; a meal with meat, chicken, fish every second day; to face unexpected financial expenses. Model 3 uses number of workers in the household as an alternative measure of work intensity

Source: EU-SILC 2014, Italian module. Authors' calculations (weighted)

P-value: \* = 0.10, \*\* = 0.05



**Table A2** Logistic regression models for the likelihood of subjective (in-work) poverty by different levels of objective (in-work) poverty at different levels of job instability (as share of workers with unstable job)

	Model 1a Coeff. (no interaction terms)	Model 1b Coeff. (Figure 2)	Model 2 Coeff. (robustness check subj. poverty)
Objective poverty (ref.: severely poor)			
Poor	-0.396**	-0.405**	-0.570**
	[0.164]	[0.184]	[0.188]
Vulnerable	-0.547**	-0.523**	-0.588**
	[0.144]	[0.163]	[0.166]
Non-poor	-0.776**	-0.692**	-0.888**
	[0.120]	[0.133]	[0.138]
Above the median income	-1.484**	-1.391**	-1.584**
	[0.124]	[0.135]	[0.147]
Share of workers with unstable job (ref.: 0%)			
Instability: 50%	0.407**	0.317	-0.418
	[0.144]	[0.415]	[0.420]
Instability: 100%	0.890**	1.353**	0.872**
	[0.121]	[0.279]	[0.282]
Nr. of workers in the household (ref.: One)			
Two	-0.379**	-0.401**	-0.358**
	[0.099]	[0.100]	[0.113]
Nr. of self-employed (ref.: none)			
One	-0.244**	-0.228**	-0.165*
	[0.085]	[0.084]	[0.094]
Two	-0.429*	-0.406*	-0.193
	[0.225]	[0.223]	[0.220]
Household members (ref.: one)			
2	0.686**	0.689**	0.883**
	[0.140]	[0.140]	[0.148]
3	0.967**	0.974**	0.970**
	[0.179]	[0.179]	[0.191]
4	1.077**	1.095**	1.131**
	[0.212]	[0.211]	[0.223]
5	1.256**	1.271**	1.227**
	[0.251]	[0.251]	[0.260]
Household composition. adult members (ref.: single)			
Couple	-0.283**	-0.281**	-0.345**
	[0.128]	[0.129]	[0.135]
Presence of children < 15 (ref.: no)			
Yes. one	-0.173*	-0.177*	-0.201*
	[0.105]	[0.105]	[0.113]
Yes. two or more	-0.318**	-0.332**	-0.280*
	[0.146]	[0.146]	[0.160]
Number of foreign born household member (ref.: none)			
At least one	0.173*	0.184*	0.637**
	[0.099]	[0.099]	[0.100]
Age of the oldest household member (ref.: <35)			



Table A2 (continued)

Table A2 (Collamacu)	Model 1a Coeff. (no interaction terms)	Model 1b Coeff. (Figure 2)	Model 2 Coeff. (robustness check subj. poverty)
35–44	0.100	0.100	0.012
	[0.130]	[0.130]	[0.147]
45–64	0.11	0.107	0.11
	[0.129]	[0.129]	[0.145]
Highest educational level (ref.: up to lower secondary)			
Upper secondary	-0.433**	-0.441**	-0.605**
	[0.098]	[0.098]	[0.100]
Tertiary	-1.020**	-1.026**	-1.360**
	[0.112]	[0.113]	[0.120]
Home-ownership (ref.: no)	1		
Yes	-0.469**	-0.477**	-0.785**
	[0.076]	[0.076]	[0.081]
Geographical area of residence (ref.: North)	[4.4.4]	[******]	[*****]
Center	0.256**	0.260**	0.063
	[0.087]	[0.087]	[0.097]
South and Islands	0.505**	0.506**	0.543**
	[0.083]	[0.083]	[0.091]
Degree of urbanization (ref.: low)	[0.005]	[0.002]	[0.051]
High	0.133*	0.134*	-0.021
	[0.069]	[0.069]	[0.076]
Interaction terms	[0.005]	[0.007]	[0.070]
Objective poverty * Share of workers with unstable job			
Poor * 50%		0.784	1.327*
1001 0070		[0.672]	[0.713]
Poor * 100%		-0.191	-0.229
1001 100%		[0.489]	[0.452]
Vulnerable * 50%		0.27	0.999*
vulnerable 30%		[0.580]	[0.586]
Vulnerable * 100%		-0.312	-0.221
vuniciable 100%		[0.427]	[0.469]
Non-poor * 50%		-0.127	0.455
Non-pool 30%		[0.470]	[0.478]
Non-poor * 100%		-0.473	0.187
Non-pool · 100 //		[0.361]	
Above the median * 50%		0.147	[0.369] 0.812*
Above the medial · 30/6			
Above the median * 100%		[0.449] -0.920**	[0.455] -0.175
Above the median * 100%			
Constant	0.442**	[0.356]	[0.371]
Constant	0.442**	0.384**	0.547**
N.	[0.184]	[0.189]	[0.199]
N	7922	7922	7922

Notes: coefficients and standard errors (in parentheses): model 2 uses an alternative measure of subjective poverty, defined as not to be able to afford two out of three of the following items: 1 week annual holiday away from home; a meal with meat, chicken, fish every second day; to face unexpected financial expenses

Source: EU-SILC 2014, Italian module. Authors' calculations (weighted)

P-value: \* = 0.10, \*\* = 0.05



**Table A3** Logistic regression models for the likelihood of subjective (in-work) poverty by different levels of objective (in-work) poverty at different levels of job instability (as share of labour income from temporary jobs)

	Model 1a	Model 1a Model 1b			
	Coeff. (no interaction terms)	Coeff. (Figure 3)	Model 2 Coeff. (robustness check subj. poverty)		
Objective poverty (ref.: severely poor)			- Posterity)		
Poor	-0.420**	-0.425**	0.562**		
POOI			-0.563**		
Vulnerable	[0.164] -0.544**	[0.181] -0.505**	[0.185] -0.544**		
vuinerable					
Non moon	[0.145] -0.799**	[0.158] -0.725**	[0.162]		
Non-poor			-0.888**		
Al d 1° °	[0.120]	[0.130]	[0.135]		
Above the median income	-1.512**	-1.444**	-1.601**		
	[0.123]	[0.133]	[0.144]		
Share of labour income that comes from temporary jobs (ref.:0%)					
	0.810**	1.161**	0.658**		
	[0.113]	[0.267]	[0.272]		
Nr. of workers in the household (ref.: One)					
Two	-0.376**	-0.384**	-0.378**		
	[0.092]	[0.092]	[0.103]		
Nr. of self-employed (ref.: none)					
One	-0.305**	-0.289**	-0.229**		
	[0.084]	[0.084]	[0.093]		
Two	-0.464**	-0.453**	-0.212		
	[0.224]	[0.222]	[0.217]		
Household members (ref.: one)					
2	0.686**	0.691**	0.872**		
	[0.140]	[0.140]	[0.147]		
3	0.955**	0.963**	0.942**		
	[0.178]	[0.178]	[0.190]		
4	1.072**	1.085**	1.103**		
	[0.212]	[0.211]	[0.223]		
5	1.257**	1.270**	1.206**		
	[0.251]	[0.251]	[0.261]		
Household composition. adult members (ref.: single)					
Couple	-0.282**	-0.282**	-0.340**		
	[0.128]	[0.128]	[0.134]		
Presence of children < 15(ref.: no)		-	-		
Yes. one	-0.180*	-0.185*	-0.209*		
	[0.105]	[0.104]	[0.113]		
Yes. two or more	-0.325**	-0.336**	-0.287*		
	[0.146]	[0.146]	[0.161]		
Number of foreign born household member (ref.: none)					
At least one	0.176*	0.181*	0.635**		



Table A3 (continued)

	Model 1a Coeff. (no interaction terms)	Model 1b Coeff. (Figure 3)	Model 2 Coeff. (robustness check subj. poverty)
	[0.099]	[0.099]	[0.100]
Age of the oldest household member (ref.: < 35)			
35–44	0.100	0.099	0.014
	[0.129]	[0.130]	[0.146]
45–64	0.095	0.089	0.087
	[0.129]	[0.130]	[0.144]
Highest educational level (ref.: up to lower second	ary)		
Upper secondary	-0.441**	-0.445**	-0.606**
	[0.098]	[0.098]	[0.100]
Tertiary	-1.019**	-1.020**	-1.347**
	[0.112]	[0.112]	[0.120]
Home-ownership (ref.: no)			
Yes	-0.460**	-0.464**	-0.771**
	[0.077]	[0.077]	[0.081]
Geographical area of residence (ref.: North)			
Center	0.256**	0.257**	0.065
	[0.086]	[0.086]	[0.097]
South and Islands	0.496**	0.494**	0.535**
	[0.084]	[0.084]	[0.090]
Degree of urbanization (ref.: low)			
High	0.130*	0.130*	-0.028
	[0.069]	[0.069]	[0.076]
Interaction terms			
Objective poverty * Share of labour income (temp	orary jobs)		
Poor * Share of income (temp.)		0.03	-0.011
		[0.462]	[0.430]
Vulnerable * Share of income (temp.)		-0.274	-0.152
		[0.415]	[0.458]
Non-poor * Share of income (temp.)		-0.545	-0.039
		[0.342]	[0.349]
Above the median * Share of income (temp.)		-0.508	0.053
		[0.334]	[0.347]
Constant	0.514**	0.465**	0.618**
	[0.182]	[0.187]	[0.196]
N	7922	7922	7922

Notes: coefficients and standard errors (in parentheses): model 2 uses an alternative measure of subjective poverty, defined as not to be able to afford two out of three of the following items: 1 week annual holiday away from home; a meal with meat, chicken, fish every second day; to face unexpected financial expenses

Source: EU-SILC 2014, Italian module. Authors' calculations (weighted)

P-value: \* = 0.10, \*\* = 0.05



#### References

Alderman H., & Paxson, C. H. (1994). Do the poor insure? A synthesis of the literature on risk and consumption in developing countries. In: E. L. Bacha (Ed.), *Economics in a changing world. International economic association series* (pp. 48–78). London: Palgrave Macmillan.

- Atkinson, A. B. (1987). On the measurement of poverty. Econometrica, 55, 749–764.
- Atkinson, A. B., Guio, A. C., & Marlier, E. (2017). Monitoring social inclusion in Europe. Luxembourg: Publications Office of the European Union.
- Ayllón, S., & Gábos, A. (2017). The interrelationships between the Europe 2020 poverty and social exclusion indicators. *Social Indicators Research*, 130(3), 1025–1049.
- Barbieri, P., Cutuli, G., & Scherer, S. (2018). In-work poverty in Southern Europe: the case of Italy. In H. Lohmann & I. Marx (Eds.), *In-work poverty in Southern Europe: The case of Italy* (pp. 312–327). Cheltenham: Edward Elgar Publishing.
- Bartus, T. (2005). Estimation of marginal effects using margeff. Stata Journal, 5(3), 1-23.
- Berloffa, G., Filandri, M., Matteazzi, E., Nazio, T., Negri, N., O'Reilly, J., Villa, P., & Zuccotti, C. (2015). Work-poor and work-rich families: Influence on youth labour market outcomes. STYLE working papers, CROME STYLE WP8.1, University of Brighton, Brighton.
- Berthoud, R., & Bryan, M. (2011). Income, deprivation and poverty: A longitudinal analysis. *Journal of Social Policy*, 40, 135–156.
- Blekesaune, M. (2013). Economic strain and public support for redistribution: A comparative analysis of 28 European countries. *Journal of Social Policy*, 42(1), 57–72.
- Buttler, F. (2013). What determines subjective poverty: An evaluation of the link between relative income poverty measures and subjective economic stress within the EU. Oldenburg: DFG Research Unit Horizontal Europeanization.
- Carvalho, L. S., Meier, S., & Wang, S. W. (2016). Poverty and economic decision-making: evidence from changes in financial resources at payday. American Economic Review, 106(2), 260–284.
- Castilla, C. (2011). Subjective well-being and reference dependence: Income over time, aspirations and reference groups. UNU-WIDER Working Paper 76.
- Dalton, P. S., Ghosal, S., & Mani, A. (2016). Poverty and aspirations failure. The Economic Journal, 126(590), 165–188.
- Eurofound. (2017). *In-work poverty in the EU*. Luxembourg: Publications Office of the European Union. Eurofound. (2018). *Income poverty statistics*. Luxembourg: Eurostat Statistics Explained. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Income\_poverty\_statistics-At-risk-of-poverty\_rate\_and\_threshold
- Eurostat. (2013). Household composition, poverty and hardship across Europe. Luxembourg: Publications Office of the European Union.
- Eurostat. (2018). Living conditions in Europe. Luxembourg: Publications Office of the European Union.
- Fahey, T. (2007). The case for an EU-wide measure of poverty. European Sociological Review, 23(1), 35-47
- Fana, M., Guarascio, D., & Cirillo, V. (2015) Labour market reforms in Italy: Evaluating the effects of the Jobs Act. ISIGrowth Working Paper 5.
- Filandri, M., Negri, N., & Parisi, T. (2013). Reddito e percezione della sua adeguatezza la relazione è cambiata con la crisi? *CAMBIO Rivista sulle Trasformazioni Sociali, 3*(5), 183–194.
- Filandri, M., & Struffolino, E. (2013). Working poor. Lavoratori con basso salario o occupati che vivono in famiglie povere? Un'analisi del fenomeno in Italia prima e dopo la crisi. Sociologia del Lavoro, 121, 190–205.
- Guagnano, G., Santarelli, E., & Santini, I. (2016). Can social capital affect subjective poverty in Europe? An empirical analysis based on a generalized ordered logit model. *Social Indicators Research*, 128, 881–907.
- Hagenaars, A., & de Vos, K. (1988). The definition and measurement of poverty. *The Journal of Human Resources*, 23(2), 211–221.
- Hall, R. E. (1978). Stochastic implications of the life cycle-permanent income hypothesis: Theory and evidence. *Journal of Political Economy*, 86(6), 971–987.
- Kim, S.-G. (2016). What have we called as "poverty"? A multidimensional and longitudinal perspective. Social Indicators Research, 129(1), 229–276.
- Kuivalainen, S. (2014). Subjective poverty. In A. C. Michalos (Ed.), Encyclopedia of quality of life and well-being research. Dordrecht: Springer.
- Lohmann, H., & Crettaz, E. (2018). Explaining cross-countries differences in in-work poverty. In H. Lohmann & I. Marx (Eds.), *Explaining cross-countries differences in in-work poverty* (pp. 50–69). Cheltenham: Edward Elgar Publishing.



- Lohmann, H., & Marx, I. (Eds.). (2018). Handbook on in-work poverty. Cheltenham: Edward Elgar Publishing.
- Long, J. S., & Freese, J. S. (2014). Regression models for categorical dependent variables using Stata. College Stattion: Stata Press.
- Lucchini, M., & Sarti, S. (2005). Il benessere e la deprivazione delle famiglie italiane. *Stato e mercato*, 74, 231–265.
- Mahmood, T., Yu, X., & Klasen, S. (2019). Do the poor really feel poor? Comparing objective poverty with subjective poverty in Pakistan. *Social Indicators Research*, 142(2), 543–580.
- Meyer, B. D., & Sullivan, J. X. (2012). Identifying the disadvantaged: Official poverty, consumption poverty, and the new supplemental poverty measure. *Journal of Economic Perspectives*, 26(3), 111–136.
- Modena, F., Rondinelli, C., & Sabatini, F. (2014). Economic insecurity and fertility intentions: The case of Italy. Review of Income and Wealth, 60(1), S233–S255.
- Muffels, R., & Fouarge, D. (2003). The role of european welfare states in explaining resources deprivation. EPAG working papers 41.
- Nandori, E. S. (2011). Subjective poverty and its relation to objective poverty concepts in Hungary. Social Indicators Research, 102(3), 537–556.
- Negri, N., & Saraceno, C. (2003). Povertà e vulnerabilità sociale in aree sviluppate. Roma: Carocci.
- Nolan, B., & Whelan, C. T. (2000). Using non-monetary deprivation indicators to analyze poverty: Lessons from Europe. *Journal of Policy Analysis and Management*, 29(2), 305–325.
- Nolan, B., & Whelan, C. T. (2009). Using non-monetary deprivation indicators to analyse poverty and social exclusion in rich countries: Lessons from Europe? *Journal of Policy Analysis and Management*, 29, 305–325.
- Pradhan, M., & Ravallion, M. (2000). Measuring poverty using qualitative perceptions of consumption adequacy. Review of Economics and Statistics, 82, 462–471.
- Ravallion, M. (2012). Poor, or just feeling poor? On using subjective data in measuring poverty. World Bank Policy Research Working Paper No. 5968.
- Ravallion, M. (2014). Poor, or just feeling poor? On using subjective data in measuring poverty. In A. E. Clark & C. Senik (Eds.), *Poor, or just feeling poor? On using subjective data in measuring poverty*, On using subjective data in measuring poverty (pp. 140–178). Oxford: Oxford University Press.
- Ravallion, M., & Chen, S. (2009). Weakly relative poverty. Policy Research Working Paper 4844.
- Ravallion, M., & Lokshin, M. (2001). Identifying welfare effects from subjective questions. *Economica*, 68(271), 335–357.
- Ravallion, M., & Lokshin, M. (2002). Self-rated economic welfare in Russia. European Economic Review, 46(8), 1453–1473.
- Scherer, S. (2009). The social consequences of insecure jobs. Social Indicators Research, 93(3), 527–547.
- Strengmann-Kuhn, W. (2000). Theoretical definition and empirical measurement of welfare and poverty: A microeconomic approach. In 26th IARIW conference.
- Tentschert, U., Till, M., & Redl, J. (2000). *Income poverty and minimum income requirements in the EU14*. Berlin: BIEN Congress.
- Van Praag, B. M. S., & Ferrer-i-Carbonell, A. (2008). A multidimensional approach to subjective poverty. In N. Kakwani & J. Silber (Eds.), A multidimensional approach to subjective poverty (pp. 135–154). London: Palgrave Macmillan UK.
- Van Praag, B. M. S., Goedhart, T., & Kapteyn, A. (1980). The poverty line—A pilot survey in Europe. The Review of Economics and Statistics, 62(3), 461–465.
- Verbič, M., & Stanovnik, T. (2006). Analysis of subjective economic wellbeing in Slovenia. Eastern European Economics, 44(2), 60–70.
- Vesan, P. (2009). Flessibilità, sicurezza e precarietà. In F. Berton, M. Richiardi & S. Sacchi (Eds.), Flex-insecurity. Perché in Italia la flessibilità diventa precarietà (pp. 29–46). Bologna: Il Mulino.
- Vignoli, D., Drefahl, S., & De Santis, G. (2012). Whose job instability affects the likelihood of becoming a parent in Italy? A tale of two partners. *Demographic Research*, 12(2), 41–62.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

