

Poverty transitions in Italy

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Abstract In this paper we investigate the determinants of poverty transitions in Italy, using the EU-SILC panel survey (2007-2010). Our findings show that education and employment play a key role in preventing poverty, and ease poverty exits. Moreover, the presence of children and a new birth hamper household poverty exits. However, poverty transitions are also state-dependent, influenced by previous poverty experience: those who have already been in poverty are less likely to exit, and more likely to re-enter poverty.

1 Poverty as a dynamic phenomenon

In Italy, less than 20% of individuals are at risk of poverty between 2004 and 2010. The peak level is reached in 2007 (19.9%), and a decrease is observed in the following years to a minimum estimated in 2010 (18.2%).

Particularly relevant is how long individuals live in this condition, and how often they experience poverty over a lifespan. Patterns of poverty entries and exits, as well as their determinants are of main concern for policy makers, because only if the characteristics or the events that trigger poverty transitions are known, policies can be tuned to ease the exits and prevent entries and re-entries. For this reason, whenever possible, a dynamic approach of analysis is preferred to a static one in the literature.

Alternative approaches are used to study poverty dynamics, as the analysis of poverty profiles [2] or poverty transitions [1]. Both the frequency and the length of poverty are particularly relevant for predicting individuals likelihood of living in poverty. In fact, the chances of leaving poverty decrease with the increase of the time

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spent in this condition [1], and having already experienced poverty increases the risk of re-entering poverty [3]. However, the choice of a specific method of analysis is also constrained by the characteristics of the available data, and mostly by the panel length. The use of a relatively short panel survey, as EU-SILC, significantly limits the explanatory power of modelling profiles, and hampers the chance of using a duration model approach. However, poverty transitions between each year of observation and the following are still worth of attention.

2 Data and methods

We use the most recent panel from EU-SILC, based on a rotational sample designed of 4 panels. Individuals are interviewed yearly during 4 years. Individual and household characteristics refer to the moment of the interview (years 2007-2010), while the income reference period is the previous calendar year (2006-2009). According to Eurostat, individuals are at risk of poverty if their equivalent income is lower than a given threshold. This is defined as the 60% of the median of the equivalent income distribution estimated on the cross-sectional data. The equivalent income is computed dividing the household disposable income by the equivalised household size according to the OECD scale.

To investigate poverty dynamics in Italy, we firstly show the so-called poverty profiles [4]: (i) the persistent non poor (never poor during the period of observation), (ii) the transient poor (poor only once), (iii) the recurrent poor (poor more than once, but no longer than two consecutive years), and (iv) the persistent poor (poor for at least three consecutive years).

Secondly, we focus on poverty entries and exits, between each years of observation (t) and the following year ($t+1$), controlling for individual and household characteristics at t (state variables), as well as some changes in household and individual characteristics between t and $t+1$ (event variables). It is worth noting that for each wave we have household and individual characteristics at t , while the poverty refers to $t-1$. Consequently, we lag the income back one wave, to match it with the temporally coherent household and individual characteristics. Thus our analyses are based on three observations, and individuals can experience up to two transitions. We model separately the risk of exiting poverty in $t+1$ for individuals poor at t , and the risk of entering poverty in $t+1$ for individuals non-poor at t , using logistic regression. State variables are time-varying. The poverty state in the previous years is also controlled for, because it is likely to affect the risk of experiencing a poverty transition in the next year.

3 Main results

According to the poverty profiles above defined, 69.4% of individuals are persistent non poor, 9.9% are transient poor, 8.9% are recurrent poor, and 11.8% are persistent poor, showing that 30% of Italians experienced poverty at least once. Among those who experience poverty, the most common profile is represented by the persistent poor,

suggesting that individuals who experience poverty once are likely to experience it again, and often in consecutive years.

Table 1: Model estimates for poverty exits and entries (selected variables¹)

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
	<i>Exits</i>	<i>Exits</i>	<i>Entries</i>	<i>Entries</i>
Intercept	1.09 ***	3.48 ***	-3.24 ***	-4.96 ***
Poverty (ref: non poor $t-1$)				
Poor	-0.80 ***	-0.85 ***	1.42 ***	1.44 ***
Education (ref: lower secondary)				
secondary	0.24 *	0.25 *	-0.32 ***	-0.31 ***
higher	0.80 ***	0.77 ***	-1.05 ***	-1.06 ***
Current status (ref: employee)				
self-employed	-0.05	-0.13	0.82 ***	0.81 ***
unemployed	-0.44 *	-0.63 ***	0.77 ***	0.83 ***
retired	-0.18	-0.18	-0.05	-0.07
inactive	0.04	-0.03	0.24 *	0.29 *
Number of children (ref: 0)				
1-2	-0.01	-0.03	0.74 ***	0.79 ***
3+	-0.73 ***	-0.82 ***	0.75 ***	0.79 ***
Birth (ref: no birth)				
at least one		0.78		1.52 ***
Hh characteristics (ref: all inactive)				
at least one retired	0.34	0.32	-0.30	-0.20
one employed	0.53 ***	0.71 ***	-0.49 ***	-0.41 *
2+ employed	1.31 ***	1.98 ***	-1.22 ***	-1.35 ***
Individual change in employment (ref: no change)				
to employment		0.82 ***		0.04
to inactivity		-0.08		0.54 **
to retirement		-0.28		0.03
Hh change in employment (ref: no change)				
to at least one employed		0.01		0.33
one employed to 2+ employed		0.79 ***		-0.39
2+ employed to one employed		-1.17 ***		0.89 ***
to none employed		0.77 ***		0.69 ***

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$

Table 1 shows the model estimates for poverty exits and entries (only state variables in model 1 and 3, state and event variables in model 2 and 4)². Poverty state at $t-1$ significantly affects the likelihood of experiencing a transition between t and $t+1$: those who were poor are less likely to exit and more likely to re-enter poverty. As far

¹ The following household and individual characteristics are controlled for: sex, age, citizenship, marital status, number of elderly (65+), dwelling tenure, region of residence, material deprivation, change in the marital status, death, birth, moving in or out of a household member.

² Heterogeneity at individual level has been controlled for, but becomes non-significant as soon as individual and household characteristics are introduced. Consequently, we disregard it.

as individual characteristics are concerned, the higher the educational level the higher the risk of exiting, and the lower of entering poverty. Unemployed individuals are less likely to exit poverty, whereas inactive, unemployed and self-employed ones are more likely to enter poverty. Given that poverty is measured as a function of the household income, and is the same for all household members, household characteristics play a relevant role. Controlling for the presence of retired or employed individuals, we find – not surprisingly- that the chance of leaving poverty is positively correlated with the number of employed among household members. The risk of entering poverty also increases with the presence of children.

When we introduce event variables, the effect of state variables remains mostly the same, showing that individual and household characteristics are significant and relevant *per se*. Individuals who found an occupation have higher chances of exiting poverty, while those who lost their own jobs are more likely to enter poverty. When the household composition changes from one to two or more employed, the risk of exiting poverty increases and that of entering poverty decreases. The loss of one or more employed household members, instead, decreases the chances of leaving poverty and increases those of entering it. Eventually, the risk of entering poverty significantly increases if there is a new birth in the household.

4 Conclusions and future research

Our results show that poverty transitions depend on previous experiences, because having already experienced poverty decreases the chances of leaving poverty, and increases those of re-entering it. However, individual investments in human capital significantly contribute to prevent poverty, and trigger poverty exits. In addition, employment condition has a key role both at individual and household level, showing that the employment is the main strategy to avoid poverty. These findings are relevant for social policies aiming at reducing not only poverty in itself, but also the persistent or recurrent experience of poverty over the life course. Investments should necessarily concern both education and labour market, by easing access to high educational attainments and employment, and reducing job instability. Eventually, since childhood poverty is strongly related with poverty in adulthood, households should receive support not only when there is a new birth, but as long as there are children.

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