Evaluating the impact of "Reddito di Cittadinanza": an econometric approach

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Abstract

Reddito di Cittadinanza is a form of Guaranteed Minimum Income introduced in Italy in March 2019 with the aim of reducing poverty and unemployment. However, few efforts have been made in order to provide empirical evaluations of the policy. In this paper, we use province and region level data and a before-after estimator in order to assess its impact on unemployment. Moreover, a case-analysis study is carried on in order to investigate the relationship between poverty and unemployment during the three years in which the policy has been in effect. Our main conclusion is that the policy has been, overall, employment neutral, in the sense that it neither created new job opportunities nor it created strong incentives against occupation. Moreover, we show that the relationship between poverty and unemployment did not change significantly after March 2019.

1 Introduction

Reddito di Cittadinanza is the Italian government's latest attempt at creating a form of Guaranteed Minimum Income (GMI), with the twofold aim of reducing poverty and increasing employment. The policy, introduced in 2019, has been object of very intense public debate and criticism, mostly driven by ideologies rather than scientific analyses.
Our paper contributes to the debate by providing an econometric evaluation of the policy's effects on employment and poverty. In particular, Section 2 introduces the context of the analysis, and the legal framework. In Section 3, we briefly overview the existing literature on Reddito di Cittadinanza, and similar policies in neighboring countries.
Section 4 and 5 describe respectively our empirical strategy and the datasets we used to carry out the analysis. Finally, Section 6 and 7 present the results and our final conclusions.

2 Study context

In January 2019, the Law Decree n° 4/2019 introduced the Italian *Reddito di Cittadinanza* (RdC), as promised by the winning party *Movimento Cinque Stelle* during the election campaign.
Using the words famously chanted by the former leader Luigi di Maio, the aim of the policy is to *"abolish poverty"*. In better words, the policy is best described as an economic aid, aimed at tackling poverty, inequality, and social exclusion, whilst promoting labour activity.
Just in 2022, more than 1.6 million households received at least one RdC payment and received on average 551,41 Euro per month (INPS 2022).

Although the name of the policy seems inspired by universal basic income policies, most of their defining characteristics are missing, as the policy rather exemplifies a form of non-unconditional, non-individual and non-universal

form of Guaranteed Minimum Income.

2.1 Legal Framework

The Reddito di Cittadinanza was first introduced with the Law Decree n°4/2019 in January 2019, and its distribution began starting from April 2019.
As aforementioned, the policy is non-individual, as only one person per household is eligible as recipient, and it's non-universal as eligibility is conditional on several criteria.
First, applicants must be Italian citizens, or must have been residing in Italy for at least 10 years. Secondly, eligibility is constrained on several income requirements, starting from a maximum ISEE of 9.360 Euro, real estate value lower than 30.000 Euro, and value of all movable assets lower than 6.000 Euro (although it increases by family size). Finally, subjects who have voluntarily resigned in the previous 12 months are not eligible applicants, with the exception of those who did for just cause.
The RdC is paid monthly for a maximum of 18 months with the possibility of renewal, as long as the eligibility criteria are met, and the labour participation requirements satisfied.
The amount paid varies depending on household disposable income, diminishing as it gets farther from the poverty line, which in turn varies depending on family size and structure, and accommodation.
Italian poverty line estimates are based off of two different sources: first, ISTAT defines the poverty line according to households' spending habits, and takes into account family size and structure, the macro-region and size of the municipality of residence. This definition is known as "absolute poverty". The second source is Eurostat, which estimates the poverty line according to the households' incomes, and defines as poor the households whose equivalised disposable income is 60% lower than the national median. This is known as "relative poverty". Based on these, the Italian poverty line goes from 780 Euro monthly for a single-person household, to 1.716 Euro for larger

families living in rented accommodations (Maitino et al., 2022).
The amounts received by beneficiaries are computed according to an *equivalence scale*, exclusively created for the purposes of the RdC, ascribing a parameter equal to 1 to the first member of the household, summed by 0.4 for each further adult, and by 0.2 for each minor in the household. The highest achievable value is 2.1, unless the household includes members with severe disabilities, or not self-sufficient members, in which case the scale becomes equal to 2.2 (Table 1).

Family Composition	**Equivalence Scale**	**Highest Possible Yearly Benefit**
1 adult	1	€ 6.000,00
1 adult and 1 minor	1.2	€ 7.200,00
2 adults	1.4	€ 8.400,00
2 adults and 1 minor	1.4	€ 9.600,00
2 adults and 2 minors	1.8	€ 10.800,00
2 adults and 3 minors	2	€ 12.000,00
3 adults and 2 minors	2.1	€ 12.000,00
4 adults	2.1	€ 12.600,00
4 adults (or 3 adults and 2 minors), among which at least one person with severe disabilities or not self-sufficient	2.2	€13.200,00

Table 1: Highest yearly benefit based on family composition. *Source: Ministero del Lavoro e delle Politiche Sociali*

Finally, Reddito di Cittadinanza fulfils its role as promoter of labour activation through the so-called "Patto per il lavoro", by requiring each recipient – of legal age, unemployed, not in education and professional training, not retired, under 65 years of age and without disabilities – to register to public employment services and declare themselves as "job-seekers".
Unemployed subjects – suitable to work and not involved in any other training – are required to declare immediate availability to seeking job, through

the participation to a personalized path towards work insertion.
In particular, suitable recipients are required to sign the "Agreement for work", which includes the obligations to: i) registering into the designated digital platform, ii) actively searching for a job, iii) participating into training or retraining courses or projects, when suggested by the public employment services, vi) participating in psycho-aptitude interviews and in any selection test proposed by PES, v) accepting of at least one of three "suitable job offers"[1].
Recipients who do not fulfil obligations incur in sanctions, varying depending on the level of infringement, that could lead to the revocation of the RdC.

3 Literature Review

3.1 Econometric literature on GMI programs

A great variety of papers discuss the impacts of GMis (Guaranteed Minimum Income) in countries where such policies are adopted. However, as Italy is one of the last countries in Europe to introduce a form of large-scale GMI, limited literature has analyzed its impacts on the labour market. More frequently, papers are rather focused on analyzing its flaws.
In this next paragraph, we'll briefly overview relevant literature on similar GMIs programs.

Most empirical literature on GMIs focus on the distortive effects such policies could have on the labour market, i.e., whether welfare policies can create disincentives to work, and if work activation measures can neutralize or counterbalance them.
Indeed, the most interesting papers for our purposes focus on programs providing both selective income transfers and work activation projects.

[1]Suitability is based on geographical distance from the beneficiary's residence.

Terracol 2009 carries out an evaluation of the effects of the French RMI, *Revenu minimumm d'insertion*, on employment, using data from the European Community Household Panel. In the paper a mixed proportional hazard duration model is used for evaluating the transition from unemployment to work. The author found a substantial negative impact of the hazard out of unemployment, but such effect is significant up to the first 6 months of receipt, dropping to insignificant levels afterwards.
De la Rica and Gorjón 2019 evaluate the impact of Minimum Income Schemes (MIS) in the Basque Country using administrative data on the individuals registered to the public employment service of the region. Their findings show that overall MIS recipients do not delay their entry to employment; however, effects are heterogeneous based on the compositions of the treated and control groups. Indeed, less educated and younger MIS recipients tend to delay their entry into the labour market; however, for medium and high-educated recipients, the policy tends to accelerate it. Moreover, they find that all public employment activation services have positive impacts on job-finding rates.

We can observe that relevant papers find GMIs to be more likely of delaying employment, rather than causing it to drop for good, and this is mostly observed in regards to special categories of individuals, such as women, younger people and less educated workers.
With respect to labor activation programs, relevant papers find them to have overall positive effects on job-finding.

3.2 The italian case: non-econometric literature

Regarding the RdC, although not much literature has covered its impact on employment nor poverty, few papers highlight some of its most concerning elements. For most cases, the RdC presents three main limitations: i. due to its eligibility constraints, the policy leaves out half of the total population in absolute poverty; ii. the equivalence scale penalizes multi-persons households

in favour of one-person ones; iii. the policy does not account for regional differences in the cost of living. The three issues are discussed in the following.

First, as above-mentioned, due to its restricting eligibility conditions, the policy excludes an estimated 56%[2] of all population in absolute poverty (Caritas, 2022).
Among these are first included all non-EU citizens who have been living in Italy for fewer than 10 years: according to INPS data, non-EU citizens make up only 11% of the total recipients of RdC, although they are four times more likely to be living in poverty (Caritas 2022). Additional estimates by Banca d'Italia show that about 90.000 households, previously eligible for REI[3], have been left out from RdC.
Additionally, the constraints set on income and property do not take into account regional differences in cost of living, therefore the policy leaves out a portion of the poorest population whose income and assets exceed the thresholds defined by the policy. According to ISTAT's[4] estimates on poverty that integrate the cost of living in the computation, poor population spreads equally in the North (42,6%) and in the South (42,2%); nonetheless 70% of RdC recipients live in the South (Caritas 2022).

The last issue is related to the equivalence scale, exclusively created and utilized for achieving RdC's purposes, which penalizes bigger families in favour of single-persons households: due to the policy's original intention of guaranteeing a minimum income, that is at least equivalent to the poverty line, the benefits start from €780 for the single-person households. However, to avoid an excessive burden on public finances, the scale increases until the

[2]Another estimate by Banca D'Italia states that about 50% of all population in absolute poverty are not eligible for receiving the RdC.

[3]Reddito di Inclusione (REI), terminated in 2019 in favor of RdC, only required at least 2 year-residency in Italy.

[4]*Le statistiche dell'ISTAT sulla povertà 2021,* 2022

household reaches 5 members only, and no further benefit for bigger families is provided.

Another paper, by Busilacchi, Gallo, and Luppi 2021, shows that the lack of an implementing decree, and a lack of a unique information system, both specifically aimed at the implementation of the policy, to be applied homogeneously on the whole country, has led to inefficiencies in regulating the information fluxes across entities and appointed individuals.

In fact, the role of establishing the rules over the execution of the policy has been attributed to the Regions, rather than being defined originally with the definition of the policy. This has led to different approaches employed in the execution of the RdC, which are also profoundly dependent on the historical perception on welfare policies, and on inherent characteristics of the administrative systems in each Region.
The lack of clear instructions on the implementing system has great repercussions on the success of the policy, since it prevents it from reaching all the potential beneficiaries, and slows down the process of labour activation.

Our paper aims at evaluating whether the policy has been meaningful in increasing employment and reducing poverty: clearly, the issues discussed above heavily impact the successful achievement of these objectives.

3.3 The italian case: econometric literature

To the best of our knowledge, the empirical literature on the effects of the introduction of the Guaranteed Minimum Income in Italy is extremely limited. The only paper we know trying to estimate the causal effect on employment is Maitino et al. n.d. In particular, this study uses a Difference in Difference identification strategy with staggered entry timings using microdata from the region of Tuscany. The paper's main finding is that RdC was rather employment neutral (although with some heterogeneity across groups

of recipients): the policy neither disincentivized beneficiaries in seeking jobs opportunities neither it improved the employment conditions of those who received the income. More specifically, the study reports a (significant) average effect on the treated of 0.3 monthly working days, corresponding to an increase of only 3.4% monthly working days with respect to the pre-policy period.

Our paper contributes to the existing literature on RdC in at least two ways. First, our analysis expands the results of Maitino et al. n.d. in the sense that it uses data from all Italian provinces and can therefore give some insights on the external validity of the study mentioned. However, since we could not rely on micro-data, and the policy was introduced at the same time in all the Italian provinces, we could not rely on a causally solid identification strategy such as the Difference in Difference estimator (Angrist and Pischke 2009, paragraph 5.2). Therefore, our identification strategy (a Before-After estimation) is weaker from the point of view of internal validity and causal inference.

Second, our identification strategy allows us to gain some insights into the unemployment effect over and above the poverty effect. In particular, we investigate the effect on unemployment while the poverty effect has been cleared away and we investigate the relationship between poverty and unemployment before and after March 2019. A detailed overview of our identification strategy and the potential pitfalls it encounters is given in the following section.

4 Empirical Strategy

4.1 Ecological Regression with a Before-After Estimator

In order to analyse the relationship between the Guaranteed Minimum Income and unemployment, we rely on a before-after estimator with differential treatment intensities (similarly to the strategy adopted in Biancardi and Bratti 2019). The intensity of the treatment is represented by the percentage of household benefiting from the policy.

$$Y_{it} = \alpha_0 + \sum_i \alpha_{1i} D_i + \sum_t \alpha_{2t} Year_t + \alpha_{4t} \%\_beneficiaries_{it} + \alpha_{it} X_{it} + \epsilon_{it} \quad (1)$$

Where i and t are respectively the province and time subscripts. $Y_{i,t}$ is the unemployment rate, D_i and $Year_t$ are respectively unit and time fixed effects and $X_i t$ is a vector of control variables.

The regression specified in Equation 1 was ran on aggregated data, similarly to what is usually done in ecological regressions(Gelman et al. 2001). In particular, the granularity of the data at hand varied from province level in on case, to region-level in the other (see also Section 5). In the former case, the vector of controls was composed by data on the percentage of foreigners, percentage of graduates and the fraction of registered firm on the number of residents. In the latter case, where the number of statistical observations was limited, we controlled only for the inflation-adjusted GDP. However, since -at the level of region- also data on poverty was available, we enriched the region-level regression controlling, on the one hand, for the percentage of families living in conditions of relative poverty and, on the other hand, for the percentage of individuals living in conditions of relative poverty.

The main assumption of our model is that no variable has been omitted

from our specification. In order for a variable to undermine our estimations, it must satisfy two conditions:

1. Follow the same temporal dynamics of the policy under study, which was introduced in the year 2019;

2. Being correlated with the outcome of interest and, specifically, unemployment.

Even if the period considered in this study has been a period of serious economic shocks, we believe that the this specification correctly address the potential pitfalls of a before-after estimation strategy.

4.2 Event Study

In order to study the evolution of the relationship between poverty and unemployment in the years under examination, we estimate a second equation with an identification strategy similar to event-study analyses. In particular, we interact the year indicators with a time-invariant variable indicating the percentage of poor individuals in 2018 (i.e., the year preceding the introduction of the policy), adding year-fixed effects and controlling for the unit's GDP. The year 2018 is dropped from the regression and taken as reference year.

By plotting the coefficients on the interaction terms, we are able to study the dynamics of poverty and unemployment in the years under examination. In particular, to demonstrate the effectiveness of the policy, one should observe -ideally- positive coefficients before 2019 and negative coefficients after the introduction of the policy.

5 Data and Descriptive Statistics

Contrary to previous works on Reddito di Cittadinanza -e.g. Maitino et al. n.d.- we did not have access to microdata on recipients of the policy and outcomes of interest. As mentioned in the previous paragraph, the only data publicly available are aggregated data at the province and region level. This constraint limited to a certain extent both the available empirical strategies and the statistical power of our analysis (see also Section 6).

Moreover, not all the variables of interests were available at the preferred granularity of provinces, therefore, two different panels were built in order to perform the analysis: a province-level datasets and a region-level datasets, correspoding respectively to NUTS 3 and NUTS 2 in the Nomenclature of territorial units for statistics defined by Eurostat. A detailed description of the two panels has been provided in the following subsections.

5.1 Province-level Dataset

Data at province level come from three main sources: Istituto Nazionale di Previdenza Sociale (INPS), Italy's main entity of the public retirement system, the Ministry of Education, University and Research (MIUR) and, finally, the Italian National Institute for Statistics (ISTAT). INPS provides data on the number of recipients of the Reddito di Cittadinanza, MIUR publishes data on the number of graduates in each province, while ISTAT provides data on the unemployment rate, number of registred firms, and demographic characteristics of each province, such as the percentage of residents and foreigners.

The panel contains data from 106 geographical units[5] for the years 2015-

[5]The following units have been excluded from the analysis due to lack of data: Olbia-Tempio, Ogliastra, Medio Campidano, Carbonia-Iglesias, Sud Sardegna

2021. The dataset's variables have been summarised in table 2.

Variable Name	**Meaning**
percent_recipients	Percentage of residents receiving at least one monthly payment of the "Reddito di Cittadinanza" income.
unemployment	Unemployment rate.
percent_foreigners	Percentage of resident foreigners on the total number of residents in the province (at the 1st January).
percent_graduates	Percentage of residents with at least a Bachelor's degree.
frac_firms	Fraction of the number of registered firms on the resident population.

Table 2: Province-level dataset

5.2 Region-level Dataset

The main difference between the dataset at the province (NUTS 3) and region (NUTS 2) level is that, in the second case, data on the percentage of people living in poverty condition was available.

Similarly to the province-level dataset, two main sources have been used to build this dataset: INPS for data about Reddito di Cittadinanza recipients and ISTAT for socio-economic indicators. A summary of the variables has been provided in table 3.

5.3 Descriptive Statistics

From the data at hand, we cannot gain any interesting insights into the socio-demographic characteristics of the population receiving the income (see

Variable Name	Meaning
percent_recipients	Percentage of residents receiving at least one monthly payment of the "Reddito di Cittadinanza" income.
percent_applicants	Percentage of households which applied for the income.
unemployment	Total unemployment rate.
unemployment_no_degree	Unemployment rate among people with no degree or people with a lower secondary school diploma.
unemployment_25_34	Unemployment rate among people between 25 and 34 years old.
perc_poor_families	Percentage of families living in (relative) poverty conditions.
perc_poor_individuals	Percentage of individuals living in (relative) poverty conditions.
gdp	Region-level gross domestic product (adjusted for inflation).

Table 3: Region-level dataset

Maitino et al. n.d.). However, aggregated data allow us to explore the geographic distribution of the beneficiaries. In particular, Figure 1 displays at the province level the percentages of residents receiving the income in 2021, while Figure 2 plots respectively the mean percentage of residents benefiting from the policy over the years 2019-2021 and the mean percentage of households applying for the income. By looking at the map and at the upper panel of Figure 2, we can observe that the distribution of recipients is skewed towards the South of the country.

By plotting the percentage of recipients against the percentage of poor families in each region, in Figure 3 we investigate the relationship between poverty and beneficiaries from the policy. The plot shows that the percentage of recipients is approximately linear in the percentage of families living in conditions of relative poverty, suggesting that people with a relative higher number of poor benefit more from the policy. Since our data are aggregated, however, this evidence does not prove that the income was effectively received by poor people.

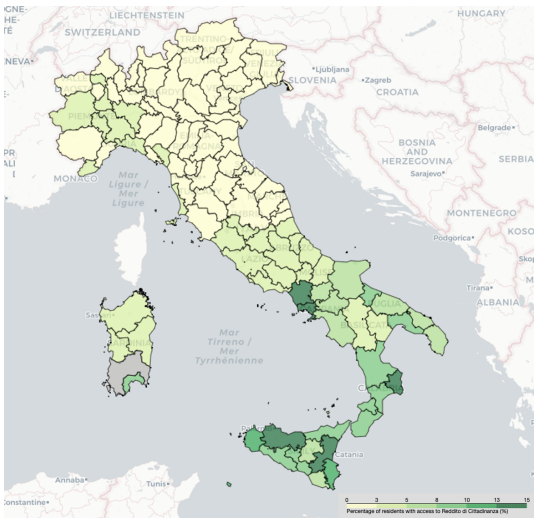

Figure 1: Percentage of residents receiving Reddito di Cittadinanza in 2021

6 Results

6.1 Ecological Regression

6.1.1 Province-level results

The results of the ecological regression ran at the province level of granularity are displayed in table 4, where the two columns refer to the results of the regressions run respectively without and with unit fixed effects. In the regression with fixed effects, the estimate for the coefficient on the variable measuring the percentage of recipients is negative, indicating an effective impact of the policy on unemployment. However, the coefficient is not statistically different from 0.

6.1.2 Region-level results

The estimations for the ecological regression ran on the region-level dataset are displayed in table 5. The regression, in this case, has been performed without any control on poverty conditions (columns 1 and 2), controlling for

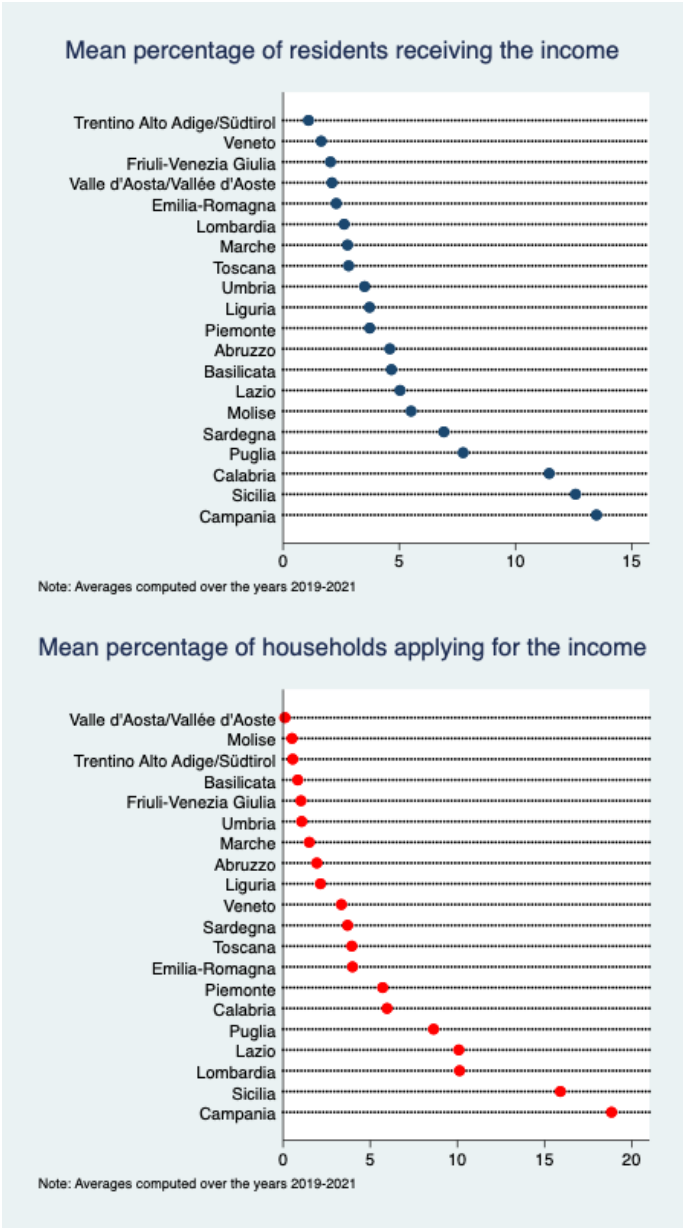

Figure 2: Regional variations in the percentage of residents receiving the income and the percentage of households applying for the income.

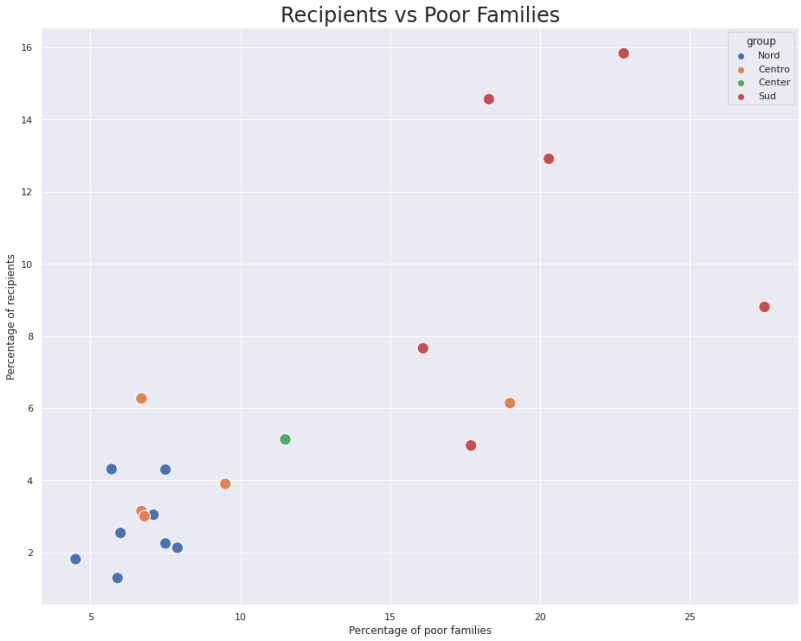

Figure 3: Percentage of recipients vs percentage of families living in relative poverty coniditions by region and geographic group for the year 2021).

VARIABLES	(1)	(2)
percent_recipients	1.071***	-0.446**
	(0.163)	(0.193)
percent_foreigners	-26.19**	37.46
	(10.94)	(28.80)
percent_graduates	2.964	-1.770
	(2.771)	(6.887)
frac_firms	-16.43	-110.5
	(17.94)	(72.59)
Constant	8.568***	19.65**
	(2.337)	(7.837)
Observations	315	315
R-squared		0.158
Number of id	105	105
Unit FE	No	Yes
Year FE	Yes	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Ecological Regression: Province-level results

the percentage of poor families in each unit (columns 3 and 4) and -finally- controlling for the percentage of poor individuals (columns 5 and 6). To check for robustness, each regression has been ran with and without unit fixed effect.

Similarly to the results obtained at the province-level, also in this case the coefficients on the variable representing the percentage of recipients (in the regressions with unit fixed effects) are negative. Moreover, in this case the coefficients are statistically significant at the 90 percent confidence level, with value between -0.193 and -0.238 depending on the different specification.

Therefore, according to this estimate, a 1-percent increase in the percentage of recipients is associated with a decrease of approximately 0.2 in the unemployment rate.

By comparing the coefficients in columns (2), (4) and (6), we can observe that the results are quite robust under the different specifications. In particular, we can observe that the coefficients do not vary significantly when we control for a measure of poverty in the regression. This result suggests that the effects of the Guaranteed Minimum Income on poverty act over and above the effect of poverty on unemployment.

VARIABLES	(1) No controls on poor	(2)	(3) Poor families (%)	(4)	(5) Poor individuals(%)	(6)
perc_recipients	0.913***	-0.238*	0.717***	-0.193*	0.722***	-0.233*
	(0.0665)	(0.119)	(0.118)	(0.111)	(0.119)	(0.126)
gdp	-4.72e-06	-2.55e-05	-1.06e-06	-2.52e-05	-1.77e-06	-2.58e-05
	(2.89e-06)	(2.60e-05)	(2.30e-06)	(2.80e-05)	(2.17e-06)	(2.70e-05)
perc_poor_families			0.229**	0.0264		
			(0.0933)	(0.0432)		
perc_poor_individuals					0.202***	0.00562
					(0.0774)	(0.0396)
Constant	7.219***	13.61***	5.002***	13.20***	4.810***	13.54***
	(0.831)	(2.206)	(0.834)	(2.396)	(0.884)	(2.284)
Observations	60	60	59	59	60	60
R-squared		0.404		0.437		0.404
Number of id	20	20	20	20	20	20
Unit FE	No	Yes	No	Yes	No	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5: Ecological Regression: Region-level results

6.2 Case-event study

Figure 4 displays the results of the event-study analysis conducted at the regional level. The graphs show the coefficients and confidence intervals for the percentage of poor individuals interacted with years dummies. The interaction with the year 2018, which is the year before the policy was introduced, has been dropped and represents the reference groups. The first, second and third graphs plot the results of the regression using different depend variables and in particular total unemployment, unemployment among people without a degree and unemployment among people between 25 and 34 years old. Table A.1 in the Appendix contains the figures from which these graphs have been produced.

From the first plot, we can see that the relationship between poverty (measured as the percentage of poor individuals in each unit) and total unemployment changes slightly after 2018 with respect to the pre-policy period. In particular, the coefficients for the post-policy period are negative, while the coefficients for the years 2016 and 2017 are positive. However, the confidence intervals for the coefficients of the period between 2015 and 2019 reveal that those coefficients are not statistically different from zero. Thus, we cannot confidently infer that the introduction of the policy changed the dynamics between poverty and unemployment.

Analogously, the second and third graphs show no evidence of a change in the dynamics between poverty and -respectively- unemployment among non-educated people and people.

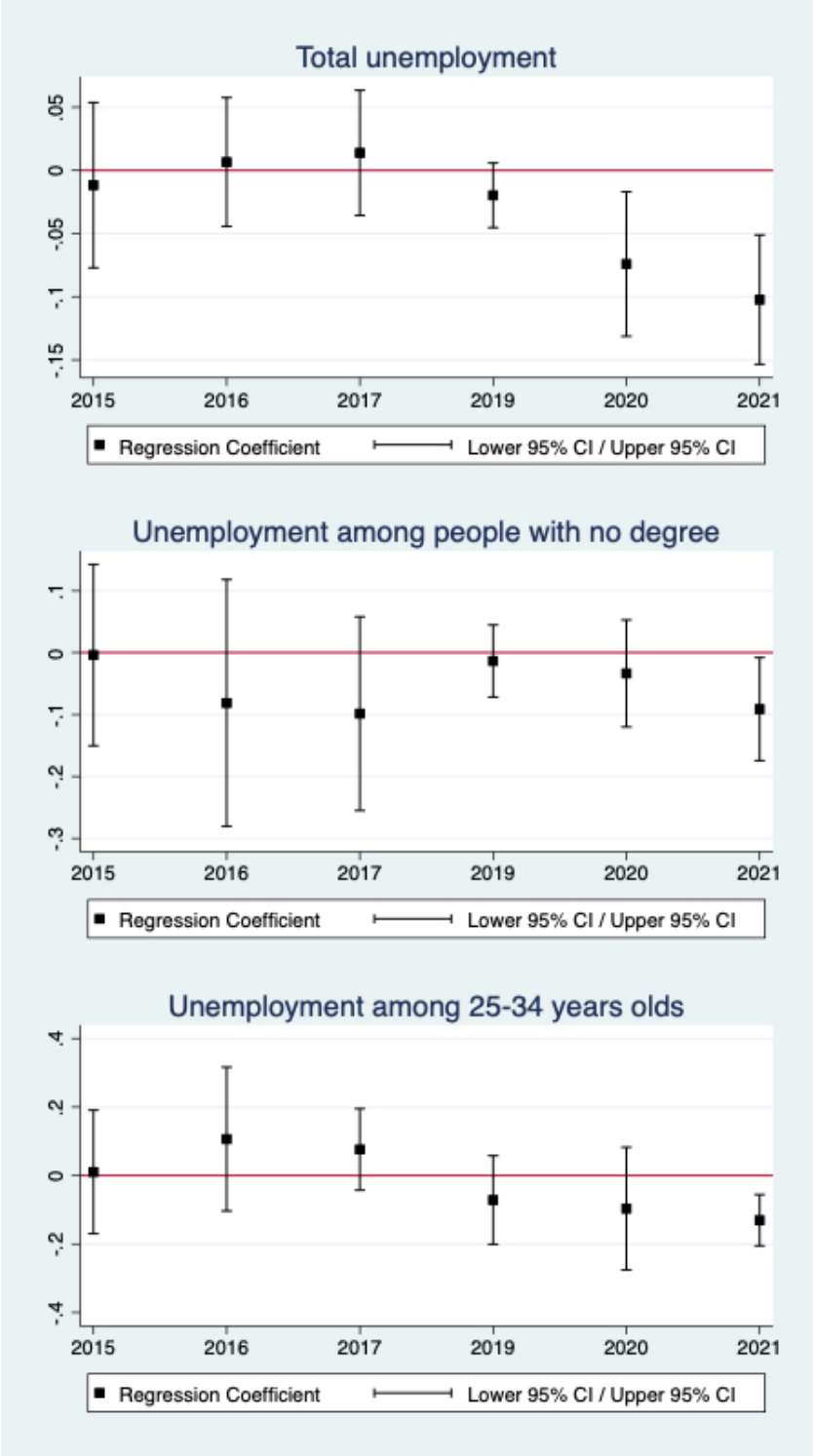

Figure 4: Coefficients and confidence intervals for the percentage of poor individuals interacted with the year indicators. The interaction with 2018 has been dropped and represents the reference group. The three graphs represent the coefficients of the regression ran respectively with total unemployment, unemployment among people with no degree and unemployment among people of age 25-34.

7 Discussion

Our analysis contributes to the current debate on the introduction of "Reddito di Cittadinanza" with respect to two main issues: on the one hand, it provides an estimate of the effect on employment, on the other hand, it clarifies whether the income contributed in changing the relationship between poverty and unemployment.

With respect to the first issues, our results show that there is evidence of a negative effect on unemployment. However, the magnitude of this effect is negligible. This evidence is confirmed by results both at the province and region level and is comparable to the results found in previous studies (namely, Maitino et al. n.d.). Therefore, we support the conclusion that the income was rather employment-neutral, i.e. RdC neither disincentivized people in seeking new jobs, neither it created significant employment opportunities for the recipients.

This result could be explained in several ways. First, the years included in our analysis overlap with the years of the Covid outbreak. We expect that the pandemics strongly slowed down the bureaucratic and allocation procedures of the people involved in the policy. Moreover, as mentioned in Section 3, some inefficiencies are rooted in the policy implementation itself and include -among the others- an uneven management across regions and an inefficient handling of information.

The second issue our analysis addresses is the effect of the policy introduction on the relationship between poverty and employment. The negative effect of the policy on unemployment remains stable under different specifications of the model, and in particular remains stable after controlling for the poverty level of each unit. Therefore, we argue that RdC affects unemployment over and above poverty, i.e. it does not significantly act on poverty.

The "event study" analysis carried out in Section 6.2 seems to confirm this hypothesis.

This argument is supported by the evidence, mentioned in Section 3, that the policy did not specifically tackle poverty, with the result that only 50% of people living in absolute poverty condition benefited from the income (Caritas 2022, see also Section 3).

8 Appendix

8.1 Table A.1

VARIABLES	(1) total_unemployment	(2) unemployment_no_degree	(3) unemployment_25_34
2016 * perc_poor_individuals_t0	0.00662	-0.0813	0.106
	(0.0243)	(0.0952)	(0.100)
2017 * perc_poor_individuals_t0	0.0139	-0.0985	0.0761
	(0.0237)	(0.0748)	(0.0568)
2019 * perc_poor_individuals_t0	-0.0197	-0.0135	-0.0715
	(0.0122)	(0.0278)	(0.0618)
2020 * perc_poor_individuals_t0	-0.0741**	-0.0336	-0.0965
	(0.0273)	(0.0413)	(0.0855)
2021 * perc_poor_individuals_t0	-0.102***	-0.0912**	-0.131***
	(0.0245)	(0.0397)	(0.0357)
Constant	13.48***	16.60***	18.16***
	(1.862)	(3.525)	(4.277)
Observations	140	140	140
R-squared	0.785	0.445	0.656
Number of id	20	20	20
Unit FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

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