Beliefs about Worker Ownership and Occupational Intentions Among Young Adults - *Pre-Analysis Plan*

Gabriel Burdin[*] Giacomo Degli Antoni[†] Fabio Landini[‡]

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Abstract

We conduct an information provision experiment to study young adults' policy views on worker cooperatives (i.e., firms owned and ultimately managed by their workforce) and intentions to work for such distinct economic organizations. Using a representative sample of individuals aged 18-30 years, we first elicit respondents' priors about the economic performance of cooperatives along well-defined dimensions (productivity, firm survival, employment security and pay inequality). We then create exogenous variation in beliefs by exposing respondents in the treatment group to expert-validated evidence on the behaviour of worker cooperatives vis-a-vis conventional firms along the same dimensions. We analyze whether treated individuals change their beliefs towards cooperatives and become more prone to search for a job in the cooperative sector. We also study whether the causal effect of information depends on individuals' behavioural traits (prosociality, risk, and time preferences) and self-reported preferences for job attributes.

Keywords: Occupational Intentions, Job Attributes, Economic Preferences, Beliefs, Worker Cooperatives, Information Provision Experiment

JEL Codes: C91, D83, J24, J54

[*]University of Leeds & IZA

[†]University of Parma, Department of Law, Political and International Studies

[‡]University of Parma, Department of Economics and Management

1 Introduction

Available evidence suggests that worker cooperatives offer more stable jobs, implement more egalitarian pay structures, and perform at least as well as conventional (investor-controlled firms) in many settings (Pencavel, 2013; Burdin, 2016; Dow, 2018; Montero, 2022; Young-Hyman et al., 2023). However, worker cooperatives remain rare due to low entry rates, suggesting that they may not be an attractive option for young entrepreneurs. Despite concerns over the future of the cooperative sector and its aging membership, surprisingly little is known about how young people perceive this organizational form.

In this paper, we use an information provision experiment (Haaland et al., 2023) to provide causal evidence on how young adults' beliefs toward worker cooperatives affect their occupational intentions and support for public policies aimed at promoting this type of organizations.

First, we elicit respondents' priors about the economic behaviour of worker cooperatives along four dimensions: i) firm productivity, ii) firm survival, iii) pay inequality, iv) job security. Then, we randomly assign subjects either a treatment group or a control group. In the treatment group, we expose subjects to expert-validated information about available scientific evidence on the performance of worker cooperatives along the same dimensions of organizational performance. To be precise, subjects in the treatment group receive the distribution of experts' responses to the same statements used to elicit respondents' priors about worker cooperatives. The information treatment is based on a survey to 164 experts who published academic work on worker cooperatives.

To mitigate concerns about demand effects, we run an "obfuscated" follow-up survey (subjects are not told about the connection between the main study and the follow-up). This allows us to understand whether treatment effects persist in the context of a (presumably perceived) independent survey about unrelated topics.

2 Experimental Design

2.1 Demographics and Behavioural Traits

In the first section of the survey, we ask subjects to complete a questionnaire on demographics, including gender, age, height, income, region, education, parental background, and left-right political orientation. Moreover, we collect information on preferences for job attributes. Finally, we elicit information on a wide range behavioural traits (risk, time, and social preferences - altruism, reciprocity, trust), using experimentally-validated survey questions (Falk et al., 2023).

2.2 Priors about Worker Cooperatives

After respondents complete the demographic information, we elicit their beliefs about the economic behaviour of worker cooperatives vis-a-vis conventional (investor-controlled) firms. We ask subjects to report whether they agree/disagree with a series of statements comparing worker cooperatives and conventional firms along four dimensions (productivity, firm survival, pay inequality, job security) on a 6-point Likert scale. All statements are framed in a negative way (e.g. *"worker cooperatives tend to be less productive than conventional firms in all sectors"*.

One of our main outcomes, i.e., respondents' intentions to work for a worker cooperative, may be affected by the expected probability of actually receiving a job offer in the cooperative sector. Therefore, we ask respondents to provide a guess of the share of cooperative employment in their province of residence on a 0-100% scale. Respondents' beliefs will be compared to an objective external benchmark.[1] To encourage greater cognitive effort from respondents and reduce biases (Haaland et al., 2023), we will incentivize more accurate answers (respondents in the top decil of accuracy will be paid 3 euros).

[1]Shares of cooperative employment at the province level (March 2023) were provided by Centro Studi LegaCoop and are not easily available online.

2.3 Treatment: Expert-Validated Evidence about Worker Cooperatives

Prior to our main study, we distributed a short survey among 164 experts on worker ownership and cooperative firms (see Appendix A1).[2] To construct the expert database, we relied on the list of all papers published in academic journals between 1990-2019 as reported in a recent meta-analysis (Mirabel, 2021). We also collected information about experts' demographics, main discipline and preferred research methods. We asked experts to indicate whether they agree/disagree with four statements comparing worker cooperatives and conventional firms on a 6-point Likert scale. Statements were similar to those we will use to elicit respondents' priors about worker cooperatives, referring to the same performance dimensions (productivity, firm survival, pay inequality, job security). Specifically, we asked experts to indicate whether, to the best of their knowledge, the statements reflect existing evidence accurately.

We randomize subjects' exposure to experts' assessments. Subjects in the treatment group receive graphical information (supplemented by explanatory notes) about the distribution of experts' responses and a reminder of their own prior belief about the performance of worker cooperatives in that specific dimension.

Despite the existence of authoritative reviews summarizing the available evidence (Pencavel, 2013; Dow, 2018), we opt for surveying experts' assessments of the evidence rather than exposing subjects to our reading of the literature. Importantly, empirical papers in this area refer to different contexts and do not always provide clean causal evidence, as conditions for an ideal random experiment are rarely met in observational contexts. Therefore, we want our information treatment to capture not only the most prevalent opinions among experts but also the uncertainty about existing evidence. Importantly, we frame the statements in such a way that we expect most experts to disagree with them to some extent, creating a contrast between information and subjects' priors.

[2]Originally, we sent the survey to 181 experts, but 17 email addresses resulted invalid.

2.4 Control Group

Subjects in the control group do not receive any information. After completing the demographic information and reporting their priors about worker cooperatives, they proceed to answer the outcome questions.

2.5 Outcomes I: Occupational Intentions

We collect information on individuals' intentions to work for different economic organizations (conventional firms, public sector, self-employment, worker cooperatives). To be precise, we ask about the chances of searching for a job in different sectors on a 6-point Likert scale.

2.6 Outcomes II: Open-ended Question

We use an open-ended question to directly measure what comes to subjects' mind when they think about worker cooperatives (Haaland et al., 2024). We want to understand whether providing expert-validated information changes respondents' attention to worker cooperatives.

2.7 Outcomes III: Support for Public Policies toward Worker Cooperatives

We ask subjects whether they agree/disagree (6-point Likert scale) with a statement indicating that *"the government should facilitate the creation of worker cooperatives"*

2.8 Posterior Beliefs about Worker Cooperatives

Using the same question to elicit priors and post-treatment beliefs may induce demand effects and create confusion among subjects in the control group (Haaland et al., 2023). Therefore, we elicit posterior beliefs about a related but different outcome. We ask subjects about the potential impacts of expanding the worker cooperatives sector for

the Italian economy on five dimensions: overall economic effect, productivity, firm survival, pay inequality, job security. Subjects report beliefs on a 6-point Likert scale.

2.9 Follow-up Survey

About one week after the main study, we conduct a follow-up study with the same subjects to see whether any possible treatment effects persist. We obfuscate the purpose of the follow-up study by including demographic questions and a series of questions on remote working, environment, and other social issues. Among these questions, we also include an additional outcome question on worker cooperatives. We further mask the connection between the main study and the follow-up by using a different survey layout. Finally, subjects are told that the main study and the follow-up are conducted by different departments within the University of Parma, the Department of Economics and Management and the Department of Law, Political and International Studies at the University of Parma, respectively. We expect demand effects to be less of a concern in this context (Haaland et al., 2023).

3 Sample Size

We will recruit subjects using Bilendi & Respondi, which is a leading data collection company. We will recruit 2000 subjects that will be representative of the 18-30 year old population in Italy. We will collect data from the obfuscated follow-up survey mentioned above one week after the main survey. Considering attrition rates for similar studies, we estimate we will be able to get around 1400 subjects in the follow-up.

3.1 Power Calculations

We make basic power calculations using *power* in Stata. 2000 subjects give us 0.8 power to detect an effect size of 0.13 of a standard deviation between the treatment and the control group in the main study at a 0.05 significance level. Furthermore, assuming 1400 subjects in the follow-up, we will have 0.8 power to detect an effect size of 0.15 of

a standard deviation between the treatment and the control group at a 0.05 significance level.

3.2 Hypothesis

Hypothesis 1: *Subjects in the treatment group who receive expert-validated information about the economic behaviour of worker cooperatives will be more supportive of public policies aimed at promoting this type of firms and more prone to search for a job in the cooperative sector than subjects in the control group.*

Hypothesis 2: *The treatment effect will be stronger for subjects with more pessimistic pre-treatment beliefs about worker cooperatives relative to experts' assessment.*

4 Analysis

4.1 Main Specification

In our main empirical specification, we investigate whether the information treatment affects the likelihood of searching for a job in the cooperative sector and support for public polices aimed at facilitating the creation of worker cooperatives. We estimate the following equation:

$$Y_i = \alpha_0 + \alpha_1 \text{ Treated}_i + \alpha_2 X_i + \varepsilon_i \tag{1}$$

where Y_i is the outcome of interest (as described in Section 5), Treated_i is an indicator for whether subject i received the expert-validated information, X_i is a vector of pre-specified control variables (as described in Section 5.1); ε_i is the individual error term. We use robust standard errors in all specifications.

According to **Hypothesis 1**, we expect to reject the null that $\alpha_1 = 0$ in favor of $\alpha_1 > 1$

4.2 Effect on Posterior Beliefs about Worker Cooperatives

To investigate whether the treatment shifts respondents' beliefs about worker cooperatives, we estimate an OLS regression similar to equation (1), including measures of posterior beliefs about worker cooperatives (defined in Section 2.8) as dependent variables.

4.3 Heterogeneous Effects by Pre-Treatment Beliefs

We also analyze whether subjects with different pre-treatment beliefs about worker cooperatives respond differently to the information treatment. We expect different treatment effects depending on whether subjects hold pessimistic or optimistic priors about worker cooperatives relative to experts' assessments. In fact, genuine changes in beliefs caused by the information provided in the treatment are expected to generate stronger effect for subjects with more pessimistic pre-treatment beliefs (Armantier et al., 2016; Haaland and Roth, 2020; Lergetporer et al., 2018; Roth et al., 2022). Therefore, we estimate the following equation:

$$Y_i = \beta_0 + \beta_1 \text{ Treated}_i + \beta_2 \text{ Prior}_i + \beta_3 \text{ Treated}_i \times \text{Prior}_i + \beta_4 X_i + \varepsilon_i \tag{2}$$

where Prior_i is an index of pre-treatment beliefs about worker cooperatives along the four dimensions: (i) productivity, (ii) firm survival, (iii) pay inequality, (iv) job security. As an alternative measure, we will also create an indicator for individuals holding more pessimistic views about worker cooperatives than the median expert.

According to **Hypothesis 2**, we expect to reject the null that $\beta_3 = 0$ in favor of $\beta_3 > 0$

4.4 Heterogeneous Effects: Risk Preferences

We will analyze heterogeneous treatment responses by risk preferences.

$$Y_i = \delta_0 + \delta_1 \text{ Treated}_i + \delta_2 \text{ RiskAverse}_i + \delta_3 \text{ Treated}_i \times \text{RiskAverse}_i + \delta_4 X_i + \varepsilon_i \quad (3)$$

where RiskAverse_i takes the value one if respondent i reports a value < 5 in the risk question. The coefficient of interest is δ_3, capturing the differential treatment response for risk averse subjects.

4.5 Heterogeneous Effects: Time Preferences

We will analyze heterogeneous treatment responses by time preferences.

$$Y_i = \gamma_0 + \gamma_1 \text{ Treated}_i + \gamma_2 \text{ Impatient}_i + \gamma_3 \text{ Treated}_i \times \text{Impatient}_i + \gamma_4 X_i + \varepsilon_i \quad (4)$$

where Impatient_i takes the value one if respondent i reports a value < 5 in the time preferences question. The coefficient of interest is γ_3, capturing the differential treatment response for impatient subjects.

4.6 Heterogeneous Effects: Prosociality

We will analyze heterogeneous treatment responses by social preferences.

$$Y_i = \kappa_0 + \kappa_1 \text{ Treated}_i + \kappa_2 \text{ Prosocial}_i + \kappa_3 \text{ Treated}_i \times \text{Prosocial}_i + \kappa_4 X_i + \varepsilon_i \quad (5)$$

where Prosocial_i is a measure of respondent's prosociality. To construct a comprehensive measure of prosocial attitudes, we combine the responses to questions about altruism, trust, positive, and negative reciprocity. Following Bietenbeck et al. (2023), we use an index of prosociality constructed as the unweighted average of these four dimensions of prosociality (standardized to mean 0 and standard deviation 1). The coefficient of interest is κ_3, capturing the differential treatment response depending on

the strength of prosocial attitudes.[3]

4.7 Heterogeneous Effects by Job Preferences

We will analyze heterogeneous treatment responses by preferences for job attributes (high income, reduced working time, job security, career development, meaningful work).

$$Y_i = \kappa_0 + \kappa_1 \text{ Treated}_i + \kappa_2 \text{ HighIncome}_i + \kappa_3 \text{ Treated}_i \times \text{HighIncome}_i + \kappa_4 X_i + \varepsilon_i \quad (6)$$

where HighIncome_i takes the value one if respondent i ranks high income as her most preferred job attribute. The coefficient of interest is the κ_3, capturing the differential treatment response for subjects with a stronger preference for monetary aspects of work.

4.8 Analysis of the Follow-up Study

The analysis of the follow-up survey will be similar to the main experiment. The outcome variable is slightly different in the follow-up study, and no information treatment is included. We will test whether attrition between the main study and the follow-up is related to the treatment.

5 Definition of Outcome Variables

Following Haaland and Roth (2020), we will consider all of the self-reported measures on public support toward worker cooperatives as continuous. For example, when respondents state to what extent they agree with a particular statement, we will code "Completely disagree" as 1, "Mostly disagree" as 2, "Slightly disagree" as 3, "Slightly Agree" as 4, "Mostly Agree" as 5 and "Completely agree" as 6.

[3]See also Kosse (2020).

In the case of job search intentions, when respondents state their chances of getting a job in the cooperative sector, we will code "Extremely unlikely" as 1, "Very unlikely" as 2, "Unlikely" as 3, "Likely" as 4, "Very Likely" as 5 and "Extremely likely" as 6.

Furthermore, we standardize these variables by subtracting the control group mean and dividing by the control group standard deviation for each observation.

5.1 Pre-specified Control Variables

In the main analysis, we will code control variables as follows:

- *Gender* will be coded as a dummy.
- *Macro-region of residence* will be coded as five regional dummies (Centre, North-West, North-East, South, Islands).
- *Parent educational background* will be coded as a dummy for individuals having least one parent who completed the university
- Whether at least *one of the subject's parents was born outside Italy* will be coded as a dummy.
- *Employment status* will be coded as dummy for individuals who are employed.
- *Education* will be coded as a dummy for individuals who completed the university.
- *Height (cm)* will be coded as a continuous variable.
- *Left-wing political orientation* will be coded as a dummy equals one for individuals indicating a value < 5 in a 0-10 Left-Right scale.
- *High self-perceived math skills* will be coded as a dummy variable equals to one for individuals indicating a value of > 5 on 0-10 subjective math skills scale.
- *Belief accuracy about % cooperatives*(gap between self-reported share of cooperative employment at the province level and objective benchmark) will be coded as a continuous variable

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Appendix

A Questionnaires

A.1 Experts Survey

Thank you very much for participating in this study! We are contacting you as an expert on employee ownership and cooperative firms. You have been included in our sample because you have published relevant research in this field or hold a related editorial role.

The aim of this short questionnaire is to assess the scientific accuracy of four statements regarding the comparative behaviour of worker cooperatives and conventional (investor-controlled) firms. We want to know whether, according to the best of your knowledge, the following statements accurately describe the available evidence in this field.

The online questionnaire will take less than 3 minutes of your time and your responses will be completely anonymous. This means that we will not be able to link your responses to your name. Responses to this survey will be aggregated and used for research purposes as part of a project on youth employment.

For further questions, please contact Prof. Fabio Landini (University of Parma, fabio.landini@unipr.it).

I have read and understood the above and want to participate in this study.

Yes

No

Please read the following statements and say if, according to you, they provide an accurate representation of available scientific evidence on the differences between worker cooperatives and investor-controlled firms.

Q1. Worker cooperatives tend to be less productive than investor-controlled com-

panies in all sectors.
Completely Agree
Mostly Agree
Slightly Agree
Slightly Disagree
Mostly Disagree
Completely Disagree

Q2. Worker cooperatives are more likely to go bankrupt than investor-controlled companies.
Completely Agree
Mostly Agree
Slightly Agree
Slightly Disagree
Mostly Disagree
Completely Disagree

Q3. Pay inequality (e.g., manager-to-worker pay ratio) is higher for worker cooperatives than for investor-controlled companies.
Completely Agree
Mostly Agree
Slightly Agree
Slightly Disagree
Mostly Disagree
Completely Disagree

Q4. Worker cooperatives offer less secure jobs than investor-controlled companies (e.g. layoffs when demand falls are more frequent in worker cooperatives).
Completely Agree

Mostly Agree

Slightly Agree

Slightly Disagree

Mostly Disagree

Completely Disagree

Q5. Worker cooperatives offer less secure jobs than investor-controlled companies (e.g. layoffs when demand falls are more frequent in worker cooperatives).

Completely Agree

Mostly Agree

Slightly Agree

Slightly Disagree

Mostly Disagree

Completely Disagree

Q6. Which of the following categories best captures how you think of yourself?

Women

Men

Other

Prefer not to say

Q7. How old are you?

20-29

30-39

40-49

50-59

60 or older

Q8. What is your region of residence?

Africa

Asia

Europe

North America

Oceania

South America

Q9. What is your main field of study or academic discipline?

Humanities (e.g., history, linguistics)

Economics

Other Social Sciences apart from Economics (e.g., sociology, political sciences)

Natural Sciences (e.g., biology)

Formal Sciences (e.g., mathematics, computer sciences)

Other Professions and Applied Sciences (e.g., education, law, social work)

Q10. Which of the following research methods do you mostly identify with?

Theoretical research

Quantitative research (e.g., econometrics of cross section and panel data)

Laboratory/field experiments

Qualitative case studies

Participatory action research

Other

A.2 Main Survey

SECTION 1 – DEMOGRAPHIC INFORMATION

Attention check I

The next question concerns the following problem. In questionnaires like ours, sometimes there are participants who do not read the questions carefully and just quickly click through the survey. This means there are a lot of random responses that compromise the results of research studies. To prove that you read our questions carefully, insert "elephant" as the answer to the next question. What is your favorite animal?

1.1 Can you tell us your age?

1.2 Can you tell us your gender?
Male
Female
Other

1.3 Can you tell us where you were born?
Italy
Abroad

[if the answer to 1.3 is "Italy"] In which province?

[if the answer to 1.3 is "Abroad"] In which foreign country?

1.4 Can you tell us your province of residence?

1.5 Were your parents born in Italy?
Neither

Only my mother

Only my father

Both

1.6 Are your parents graduates?

Neither

Only my mother

Only my father

Both

1.7 Can you tell us the highest qualification you have achieved so far?

Middle school diploma (lower secondary school)

High school diploma

Technical education diploma

Professional education diploma

Three-year degree

Master's or specialist degree

Single-cycle master's degree (5 or 6 years)

Research doctorate or first or second level master's degree

1.7-bis [if 1.7 ¿1] Can you tell us the grade you got in the final exam (esame di maturità)?

1.10 Could you tell us your height in centimetres?

1.11 Could you indicate your occupation?

Employed full time

Employed part-time

Self-employed

Unemployed looking for work

Student

Not in the workforce (not looking for work; full-time parent)

1.12 Consider the following list:

a. High income

b. No risk of being fired

c. Working hours are few, lots of free time

d. Career advancement opportunities

e. Work is important and gives a feeling of accomplishment

Please, can you tell us, among those indicated, which aspect do you consider to be most important in a job? Which comes next? What is the third most important?

1.13 How much do you trust scientific research?

I trust completely

I trust enough

I am uncertain

I don't trust much

I don't trust at all

Don't know/Does not answer

SECTION 2 – PREFERENCES, ATTITUDES

2.1 Please tell me, in general, how willing or unwilling you are to take risks, using a scale from 0 to 10, where 0 means that you are "completely willing to take risks" and 10 means that you is "very willing to take risks" . You can also use any number between 0 and 10 to indicate where your score is on the scale, using 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

10. Very willing to take risks

9.

8.

7.

6.

5.

4.

3.

2.

1.

0. Completely unwilling to take risks

98. I don't know

99. Refuse

2.2 How do you perceive yourself: do you think you are more impatient or more patient? Please answer on a scale where 0 means very impatient and 10 means very patient

10. Very patient

9.

8.

7.

6.

5.

4.

3.

2.

1.

0. Very impatient

98. I don't know

99. Rejection

2.2 Now we will ask you about your willingness to act in a certain way. Please indicate your answer again on a scale of 0 to 10. A 0 means "completely unwilling to do so" and a 10 means "very willing to do so." You can also use any number between 0 and 10 to indicate where find its score on the scale, using 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

A) How much are you willing to punish someone who treats you unfairly, even if it might cost you?

0 1 2 3 4 5 6 7 8 9 10 99

B) How much are you willing to punish someone who treats others unfairly, even if it might cost you?

0 1 2 3 4 5 6 7 8 9 10 99

C) How much are you willing to donate for a just cause without expecting anything in return?

0 1 2 3 4 5 6 7 8 9 10 99

2.3 How appropriate are the following statements to describe you? Please give me an answer using a scale from 0 to 10. A 0 means "does not describe me at all" and a 10 means "describe me perfectly". You can also use any number between 0 and 10 to indicate where your score on the scale, using 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

A) I generally act without thinking long and hard about things. In other words, I'm very impulsive.

0 1 2 3 4 5 6 7 8 9 10 99

B) When someone does me a favour, I am inclined to return it.

0 1 2 3 4 5 6 7 8 9 10 99

C) If I am treated very unfairly, I will take revenge at the first opportunity, even if there

is a cost to doing so.

0 1 2 3 4 5 6 7 8 9 10 99

D) I assume that people have only the best intentions. 0 1 2 3 4 5 6 7 8 9 10 99

E) I am good at mathematics

0 1 2 3 4 5 6 7 8 9 10 99

F) Competition brings out the best in me.

0 1 2 3 4 5 6 7 8 9 10 99

2.4. Imagine the following situation: You won 1,000 euros in the lottery. Considering your current situation, how much would you donate to charity? (Values from 0 to 1000 are possible)

.....euros

9999999999 - (Don't know/No answer)

2.5. In political debate, a distinction is usually made between "left" and "right". Using the scale below where 0 indicates the left and 10 the right, you can indicate your political orientation:

0 1 2 3 4 5 6 7 8 9 10

Attention check II

The next question concerns the following problem. In questionnaires like ours, sometimes there are participants who do not read the questions carefully and just quickly click on the survey. This means there are a lot of random responses that compromise the results of research studies. To prove that you read ourour questions carefully, please indicate green as the answer to the next question. What's your favourite colour?

SECTION 3 – TYPES OF ORGANIZATIONS

People work in different types of organizations. Some work in state-owned organizations, such as public hospitals, schools and public administration. Others, however, open their own businesses and become self-employed. Still others are employed in worker cooperatives. The members of worker cooperatives not only carry out the work for which they are hired, but are also owners and manage the company. Most people, however, are hired as employees under standard employment contracts by conventional businesses, controlled and managed by private investors. Please consider the following statements and indicate whether, in your opinion, they provide an accurate description of the differences that exist in reality between conventional businesses and worker cooperatives.

3.1 Worker cooperatives tend to be less productive than conventional businesses

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

3.1.1 How sure are you of the answer given to the previous question?

Very sure

Sure

Somewhat sure

Unsure

Very unsure

3.2 Worker cooperatives tend to fail more frequently than conventional businesses

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

3.2.1 How sure are you of the answer given to the previous question?

Very sure

Sure

Somewhat sure

Unsure

Very unsure

3.3 Worker cooperatives pay their workers more unequally than conventional businesses (for example, the difference between the salaries of managers and workers is greater in cooperatives)

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

3.3.1 How sure are you of the answer given to the previous question?

Very sure

Sure

Somewhat sure

Unsure

Very unsure

3.4 Worker cooperatives offer less secure jobs than conventional businesses (for example, during a recession, staff reductions are more frequent among worker cooperatives)

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

3.4.1 How sure are you of the answer given to the previous question?

Very sure

Sure

Somewhat sure

Unsure

Very unsure

The following question includes the possibility of obtaining additional compensation. The 10% of respondents who come closest to the correct answer will receive €3.

3.5. To the best of your knowledge, out of the total number of employees working for companies operating in your province of residence in March 2023, how many were employed by cooperative enterprises (considering all types including credit cooperatives, consumer cooperatives, retailer cooperatives, production cooperatives and work, social cooperatives, building cooperatives, agricultural cooperatives, consortia of cooperatives)?

Please indicate, as a percentage, how many employees out of every 100 you believe were employed by cooperatives (from 1 to 100): .....%

INFORMATION TREATMENT

The researchers conducting this study interviewed a panel of XX Italian and foreign experts (academics, social scientists, economists) who over the years have conducted in-depth research comparing conventional businesses and worker cooperatives. The information below shows the comparison between your responses and the distribution of responses among experts.

Worker cooperatives tend to be less productive than conventional businesses in all sectors

[Insert Distribution of Experts' Responses]

Worker cooperatives tend to fail more frequently than conventional businesses

[Insert Distribution of Experts' Responses]

Worker cooperatives pay their workers more unequally than conventional businesses (for example, the difference between the salaries of managers and workers is greater in cooperatives).

[Insert Distribution of Experts' Responses]

Worker cooperatives offer less secure jobs than conventional businesses (for example, in the presence of a recession, staff reductions are more frequent among worker cooperatives).

[Insert Distribution of Experts' Responses]

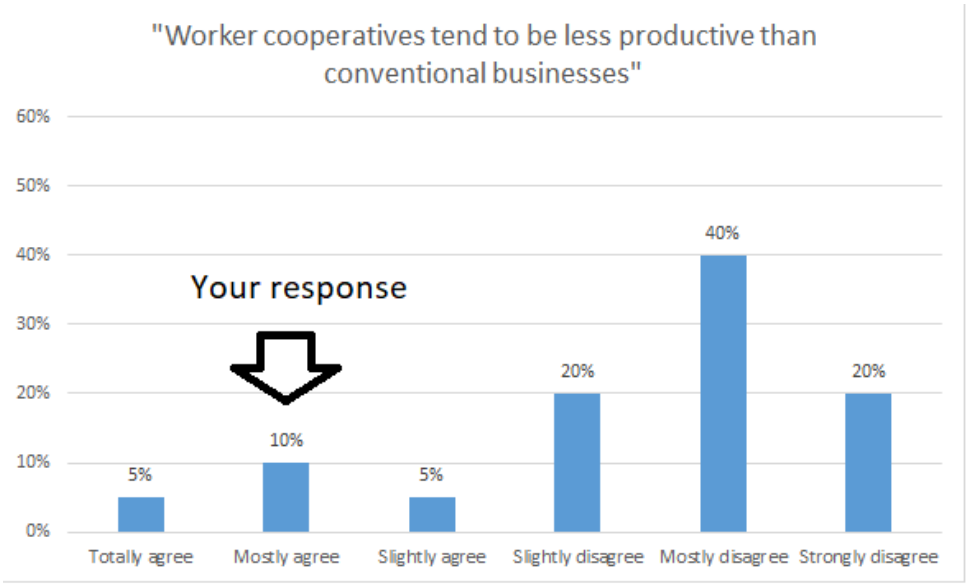

Figure 1: Information treatment example: distribution of experts' responses

SECTION 4 – OCCUPATIONAL INTENTIONS

4.1 Considering your occupational intentions for the future, how likely are you to consider the following options:

4.1.1 Working in a conventional business run by private investors

Extremely likely

Very likely

Likely

Unlikely

Very unlikely

Extremely unlikely

4.1.2 Working in an organization of the public sector

Extremely likely

Very likely

Likely

Unlikely

Very unlikely

Extremely unlikely

4.1.3 Joining an existing worker-managed cooperative

Extremely likely

Very likely

Likely

Unlikely

Very unlikely

Extremely unlikely

4.1.4 Founding a new worker-managed cooperative with a group of colleagues

Extremely likely

Very likely

Likely

Unlikely

Very unlikely

Extremely unlikely

4.1.5 Working as a self-employed/freelancer and/or creating your own business

Extremely likely

Very likely

Likely

Unlikely

Very unlikely

Extremely unlikely

What is the first thing that comes to mind when you think of a cooperative business in Italy? Please answer in 1 word

4.2 To what extent do you agree with the following statement: "The government should promote/facilitate the creation of new worker cooperatives in the coming years".

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

4.3 In your opinion, to what extent can the creation of a greater number of worker cooperatives contribute to productivity growth in Italy in the coming years? It would generate:

A strong decline in productivity

A decline in productivity

A small decline in productivity

A small increase in productivity

An increase in productivity

A strong increase in productivity

4.4 In your opinion, to what extent can the creation of a greater number of worker cooperatives contribute to improving job security in Italy (for example when the economy is hit by a recession)? It would generate:

A strong decline in job security

A decline in job security

A small decline in job security

A small increase in job security

An increase in job security

A sharp increase in job security

4.5 In your opinion, to what extent can the creation of a greater number of worker cooperatives contribute to reducing the failure rate of businesses in Italy in the coming years? It would generate:

A strong decline in the business failure rate

A decline in the business failure rate

A small decline in the business failure rate

A small increase in the business failure rate

An increase in the rate of business failure

A sharp increase in the rate of business failure

4.6 In your opinion, to what extent can the creation of a greater number of worker cooperatives contribute to reducing wage inequality in Italy in the coming years? It would generate:

A strong decline in wage inequality

A decline in wage inequality

A small decline in wage inequality

A small increase in wage inequality

An increase in wage inequality

A sharp increase in wage inequality

4.7 Thinking about all the potential positive and negative economic effects of promoting the creation of a greater number of worker cooperatives, do you think the overall effects would be positive or negative for the Italian economy?

The overall effects would be very negative

The overall effects would be negative

The overall effects would be slightly negative

The overall effects would be slightly positive

The overall effects would be positive

The overall effects would be very positive

SECTION 5 – QUESTIONS ON THE RESEARCH DESIGN

5.1 Do you believe that this questionnaire was distorted by right or left political positions?

Very left-wing biased

Somewhat left-wing biased

Neither left-wing nor right-wing biased

Somewhat right-wing biased

Very right-wing biased

5.2 Did the information provided on the comparison between conventional businesses and worker cooperatives seem reliable or unreliable?

Very unreliable

Mostly unreliable

Slightly unreliable

Slightly reliable

Mostly reliable

Very reliable

A.3 Follow-up Survey

SECTION 1 – DEMOGRAPHIC INFORMATION

1.1 Can you indicate your year of birth?

1.2 Can you indicate your gender?

Male

Female

Other

1.3 Can you indicate your place of birth ?

Italy

Abroad

1.4 Can you indicate your province of residence?

1.5 Can you indicate the highest qualification you have achieved to date?

Middle school diploma (lower secondary school)

High school diploma

Technical education diploma

Professional education diploma

Three-year degree

Master's or specialist degree

Single-cycle master's degree (5 or 6 years)

PhD

SECTION 2 – POLITICS AND ORGANIZATIONAL MEMBERSHIP

2.1. Did you vote in the 2022 general elections?

Yes

No

Below is a list of possible volunteer organizations. For each type of organization, can you indicate whether you are an active member (1), an inactive member (2) or a non-member (3)?

2.2 Religious organization

2.3 Recreational organization in the sports field

2.4 Recreational organization in the artistic, musical or educational field

2.5 Union

2.6 Political party

2.7 Environmental organisation

2.8 Humanitarian organisation

2.9 Mutual help groups, solidarity purchasing

2.10 Other types of organizations

SECTION 3 – POLICIES FOR SOCIAL AND ENVIRONMENTAL SUSTAINABILITY

Recently, various interventions have been discussed in the Italian public debate to promote the transition towards a sustainable economy from a social and environmental point of view. In this regard, we ask you to express your level of agreement/disagreement with the following statements.

2.1 "In Italy, the introduction of a minimum hourly wage of 9 Euros is an intervention that can improve the employment conditions of many workers"

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

2.2 "The return to nuclear power is the only energy policy that can allow us to combine economic and environmental sustainability"

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

2.3 “Worker cooperatives – businesses owned and managed by their workers – are an effective tool for ensuring better employment conditions in Italy.”

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

2.4 “Organizational practices aimed at encouraging a reduction in travel for work, such as remote working and short weeks, are a good tool for combining economic and environmental sustainability”

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree

2.5 “The Italian government should introduce more incentives to make it easier for young people to start a new business or become self-employed”

Totally agree

Mostly agree

Slightly agree

Slightly disagree

Mostly disagree

Strongly disagree