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# Social Trust and the Support for Universal Basic Income

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# Social Trust and the Support for Universal Basic Income\*

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#### Abstract

This paper presents a theoretical model showing how political mistrust affects people's preferences for Universal Basic Income (UBI) when its implementation involves a reduction in spending for other public services (*welfare retrenchment*). The model shows that individuals with lower levels of political mistrust are more likely to endorse UBI, reflecting their trust in the government's ability to manage public resources and avoid wasteful retrenchment of other public services. The model also shows that generalised mistrust — characterized by agents' expectations of their fellow citizens' misbehaviour that can reduce the government's fiscal capacity— does not significantly influence preferences for UBI when it involves a partial retrenchment of other public services. This result is driven by the agents' perception that their fellow citizens' misbehaviour would occur irrespective of the UBI implementation. The empirical analysis with 265 European regions from the European Social Survey (ESS) confirms the predictions of the model.

Keywords: Universal Basic Income, Generalised Trust, Political Trust, Welfare Retrenchment JEL Codes: D7, H53, I38

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# 1 Introduction

The concept of universal basic income (henceforth, UBI) involves providing regular and unconditional cash payments to all citizens, irrespective of their employment status, with an amount sufficient to meet their basic needs. The Covid-19 pandemic has led to amplified debates on the economic feasibility and necessity of a UBI (The New York Times, 2020; Wired, 2020; The Economist, 2021; Redmond et al., 2022). While the topic of UBI has gained much attention regarding its necessity and long-term economic feasibility, little focus has been given on the demand side of UBI. Understanding what influences people's preferences towards UBI, — particularly when implementing a UBI would involve a reallocation of public spending— , is crucial for contributing to the ongoing policy discussion and providing evidence-based recommendations.

In this paper, I present a theoretical model showing how political mistrust affects preferences for UBI. The model studies the preferences for UBI when its implementation involves a reduction in spending for other public services. The trade-off in the allocation of resources between the UBI and other public services is referred to as *welfare retrenchment*. My model shows that economic agents are more likely to support a UBI when they have lower levels of political mistrust. This result can be attributed to agents' perceptions of the government's ability to effectively manage public resources and minimize welfare retrenchment.

The model also shows that, under plausible conditions, generalised mistrust does not have any impact on preferences for a UBI. In the model, generalised mistrust relies on agents' perceptions about their fellow citizens engaging in misbehaviour that can reduce the government's fiscal capacity. This assumption aligns, for instance, with the empirical research on the negative relationship between generalised trust and perceived tax evasion (Hammar et al., 2009). The model shows that, if the implementation of a UBI requires the retrenchment of other public services, agents consider the perceived reduced government's fiscal capacity as a cost that would occur regardless of the UBI implementation. As a consequence, generalised mistrust does not affect the preferences for UBI. This result differs from the literature showing that higher levels of generalised trust lead to a greater preference for a welfare state when a more generous welfare state involves higher taxes (Daniele and Geys, 2015). In this paper, I show that the reason for such a difference lies in the implementation of the UBI through the retrenchment of other public services. Furthermore, the model shows that economic agents are less likely to support a UBI if their preferences for existing public services are stronger. This outcome arises because agents tend to prioritise retaining public services that they perceive as having higher value, rather than opting for a UBI. Indeed, implementing a UBI could potentially incur additional costs and further reduce the size of those public services.

To test the role of political and generalised mistrust on the support for UBI, I conduct an empirical analysis with 265 regions across 21 European countries using Wave 8 of the European Social Survey (ESS). The empirical findings confirm the predictions of the model. Particularly, in the context of welfare retrenchment, the empirical evidence shows that: (i) political mistrust is negatively correlated with the support for UBI; (ii) generalised mistrust has no statistically significant effect on the support for UBI. The results remain robust to different econometric specifications.

This paper contributes to three distinct research areas. First, it contributes to the theoretical economic literature on UBI. Previous studies on UBI have primarily focused on its feasibility and desirability as a substitute for unemployment insurance or other forms of redistribution policies (Fabre et al., 2014; Ghatak and Maniquet, 2019). Additionally, previous research has examined the impact of UBI on labor supply and income distribution (Horstschräer et al., 2010), as well as its long-term effects within general equilibrium models (Daruich and Fernández, 2020; Jaimovich et al., 2022). However, the demand-side determinants of UBI have not been studied yet. This paper expands the existing literature by presenting a novel model that investigates the demand-side determinants of UBI, when the implementation of a UBI involves a welfare retrenchment in other public services.

The second contribution pertains to the literature on preferences for redistribution and

welfare support.<sup>1</sup> The theoretical literature on preferences for redistribution is based on the assumption that economic agents choose their preferred tax rate to finance a public good or a monetary transfer, as formalized in the seminal work of Meltzer and Richard (1981).<sup>2</sup> This assumption holds even when voters choose between a universal and a meanstested system in a political economy framework (Cremer and Roeder, 2015).<sup>3</sup> These models assume that agents choose their desired tax rate; however, the introduction of a new policy may require a reduction in spending on other public services, thereby resulting in a welfare retrenchment for other public services rather than a tax change. When a welfare retrenchment is expected, preferences for redistribution can differ or be motivated by different factors. For instance, voters strongly oppose fiscal stabilisation through spending cuts and to a lesser extent through tax increases (Hübscher et al., 2021). Furthermore, agents oppose welfare retrenchment differently depending on the policy. For instance, the retrenchment of policies aimed to protect against life-course risks (such as health, pension, maternity, or education policies) is considered highly unpopular (Jensen, 2012). In a recent study in Spain, Rincon (2021) shows that if a UBI proposal involves welfare retrenchment, UBI support decreases. Thus, this paper contributes to the literature on preferences for redistribution by illuminating, theoretically and empirically, how economic agents choose the optimal amount of UBI when it involves a reduction in spending on other public services.

Finally, this paper contributes to the literature on the effect of social trust and civic capital on welfare support. Prior research has shown that interpersonal trust is an important factor in shaping support for the welfare state (Daniele and Geys, 2015). Algan et al. (2016) show that individuals with low levels of civic capital support large welfare states because

<sup>&</sup>lt;sup>1</sup>See Alesina and Giuliano (2011) and Mengel and Weidenholzer (2022) for a comprehensive literature review.

<sup>&</sup>lt;sup>2</sup>The theoretical literature have focused on the relationship between welfare support and various aspects, such as expected social mobility (Benabou and Ok, 2001) and future income prospect(Alesina and La Ferrara, 2005), perceived fairness (Galasso, 2003; Alesina and Angeletos, 2005; Le Garrec, 2018; Sabatini et al., 2020), ethnic fractionalisation (Alesina et al., 1999), ageing (Galasso and Profeta, 2007), perceived inequality (Iacono and Ranaldi, 2021) and imperfect information (Bredemeier, 2014).

<sup>&</sup>lt;sup>3</sup>See also Casamatta et al. (2000) for a model studying the relationship between political support and universality of a system.

they expect to benefit from them without bearing the costs, whereas more civic individuals support large welfare states only when they are surrounded by other trustworthy individuals. Cerqueti et al. (2019) extend this model by introducing tax surveillance and show that when tax surveillance is tight, civic individuals express greater support for welfare spending than uncivic ones. Using data from Italian municipalities, Camussi et al. (2018) find that higher levels of generalised and institutional trust are associated with greater social expenditures, even after controlling for other factors that may influence spending decisions. In addition, Keefer et al. (2022) theoretically model and empirically show that, in Latin America, political mistrust is associated with significant differences in the composition of public policies demanded by citizens, such as transfers, short-term public goods (i.e., public consumption), or long-term public goods (i.e., public investments). This paper contributes to the literature on social trust and welfare support in two ways: first, the paper introduces political and generalised mistrust in a model studying preferences for UBI when its implementation involves a reduction in spending for other public services. Second, the paper provides empirical evidence in support of the model with data from European countries.

The remainder of the paper is structured as follows: Section 2 provides the general set-up of the theoretical model showing how political and generalised mistrust affect preferences for UBI. Section 3 provides empirical evidence confirming the results of the theoretical model. Section 4 concludes.

# 2 Theoretical Framework

This section presents a basic model of UBI preferences within the context of welfare retrenchment, emphasizing the significant role played by political and generalised mistrust. Political mistrust relates to concerns about the potential waste of public resources in implementing a UBI, while generalised mistrust stems from perceptions of other citizens' misbehaviours impacting the government's fiscal capacity. By considering these factors, the model explores the diverse channels through which political and generalised mistrust influence individuals' preferences for UBI.

# 2.1 The Basic Model

The economy consists of a continuum of agents whose mass is normalised to 1. Each agent, denoted by i, has an exogenous income,  $y_i$ , which is randomly drawn from a continuous distribution with a cumulative distribution function,  $F(y_i)$ , and a probability density function,  $f(y_i)$ , defined over a continuous support  $[0, \hat{y}] \subset \mathbb{R}_+$ . As the population is normalized to 1, the average income and the aggregate income coincide and are given by  $\bar{y} = \int_0^{\hat{y}} y_i dF(y_i)$ , such that  $\bar{y} > 0$ . Moreover, each agent pays a marginal tax rate,  $\tau \in (0, 1)$ , which finances a public good,  $g \ge 0$  — that has already been provided in the past — and a new policy consisting of an unconditional monetary transfer,  $b \ge 0$ . Henceforth, the unconditional monetary transfer, b, will take the form of a UBI, while the public good, g, will refer to all the other public services provided in the economy.

The public good, g, and the UBI, b, differ in terms of per-unit cost. Providing one unit of the public good is assumed to be more expensive than providing one unit of UBI, as the cash-based distribution and universal coverage of UBI could lead to cost savings in public administration. As a result, the per-unit cost of g is normalized to 1, while the per-unit cost announced by the government to implement the UBI, b, is given by  $\kappa \in (0, 1]$ . For instance, a UBI may require costs to develop a database of UBI recipients, manage payment distribution, monitor the programme effectiveness and ensure privacy and data security.<sup>4</sup> The implementation of the UBI would also require coordination with other social welfare programs (for their substitution or co-existence) which could entail additional bureaucratic costs.

In this model, agents choose their optimal allocation of the total tax revenue between the

<sup>&</sup>lt;sup>4</sup>Collecting and managing personal data from UBI recipients would require robust privacy and data security measures, which may involve additional costs to reduce the risk of data leakages and online crimes. See Moore et al. (2009), Goldfarb and Tucker (2019) and Greenstein (2020) for a literature review about the economics of online crime, digital technology and internet infrastructures.

public good, g, and the UBI, b. In making their decision, agents assume that the government's fiscal capacity,  $\tau \bar{y}$ , does not change; thus, a government can provide a higher UBI only through a welfare retrenchment, that is a reduction of resources going to the public good, g. In other words, the implementation of the UBI is realised only through the reallocation of existing government resources between the UBI and other public services. Moreover, because the government's fiscal capacity does not change, the introduction of the UBI does not affect the labour supply in the economy. This assumption aligns with recent research on the effects of unconditional cash-transfers on labour supply in developed countries (Marinescu, 2018; Jones and Marinescu, 2022).

#### 2.1.1 Generalised and political mistrust

Agents hold individual perceptions regarding the government's capacity to fund the UBI as well as other public services. These perceptions are influenced by the mistrust that agents have in their fellow citizens and political institutions, ultimately shaping their allocation preferences over g and b. As a result, agents perceive that the amount of public resources invested in the public good, g, is such that:

$$\widetilde{g} = \tau(\overline{y} - e_i)(1 - \lambda_i) - b\widetilde{\kappa},\tag{1}$$

whereby  $\tilde{g}$  denotes the perceived amount of resources allocated to the public good g, and  $\tilde{\kappa}$  is the perceived per-unit cost of financing the UBI.<sup>5</sup>

The perceived per-unit cost of financing the UBI,  $\tilde{\kappa}$ , is a linear combination of the cost announced by the government,  $\kappa$ , and an expected higher cost due to the government's inefficiency,  $\hat{\kappa}$ , such that:

<sup>&</sup>lt;sup>5</sup>Alternatively, the budget constraint (1) could be expressed as  $\tilde{g}_1 = \tau(\bar{y} - e_i)(1 - \lambda_i) - b\tilde{\kappa} - \bar{g}_2$ . Here,  $\tilde{g}_1$  represents the perceived amount of resources allocated to the public good,  $g_1$ , which can be reduced to finance a UBI, and  $\bar{g}_2$  denotes the fixed amount of resources for a second public good,  $\bar{g}_2$ , which is not subject to welfare retrenchment. Because the results of the model can be easily generalised with only one public good,  $\bar{g}_2$  has not been introduced.

$$\widetilde{\kappa} = \kappa (1 - \lambda_i) + \widehat{\kappa} \lambda_i, \tag{2}$$

whereby  $\hat{\kappa}$  is assumed to be the same for all agents, with  $\hat{\kappa} > \kappa$ . Indeed, a UBI proposal is likely to occupy a central position in public debate, particularly through media, which play a pivotal role in shaping public opinion (Petrova, 2008). If media emphasise the potential expenses associated with UBI, they could influence agents' expected (or average) higher costs that the government might encounter if the UBI is not implemented efficiently.<sup>6</sup>

The perception of resources allocated to g and the perceived per-unit cost of financing the UBI also depend on two parameters, namely  $e_i$  and  $\lambda_i$ . The first parameter,  $e_i \in [0, \bar{y})$ , represents an individual's level of generalised mistrust. The empirical research indicates that people who do not trust their fellow citizens are more likely to believe that their fellow citizens evade taxes (Hammar et al., 2009). Moreover, it has also been shown that interpersonal trust is a key determinant of welfare state support, as individuals who engage in disruptive behaviours, such as tax evasion, can erode the provision of public goods that underpins the welfare state (Daniele and Geys, 2015).<sup>7</sup> The parameter  $e_i$  captures an individual's perception of others' socially disruptive behaviours that can reduce the total tax revenue,  $\tau \bar{y}$ , by an amount of expected evaded resources,  $\tau e_i$ . The higher the generalised mistrust parameter is, the lower is the expected amount of available public resources. If  $e_i = 0$ , an agent completely trusts other agents and the expected uncollected resources equal zero. The upper-bound  $e_i = \bar{y}$  is not included because everyone would be expected to evade taxes and the expected total tax revenue would equal 0, thereby implying the lack of a welfare state.

The second parameter,  $\lambda_i \in [0, 1)$ , represents an individual's level of political mistrust.

<sup>&</sup>lt;sup>6</sup>This assumption can be relaxed, and an individual value  $\hat{\kappa}_i$  can be introduced to the model. The introduction of  $\hat{\kappa}_i$  would not change the results of the model; instead, it would only increase the heterogeneity of the agents' parameters.

<sup>&</sup>lt;sup>7</sup>In the literature, the attitude of not cheating on claimed benefits is termed as "benefit morale" and is differently measured from generalised trust (see, for instance, Heinemann (2008), Halla et al. (2010) or Halla and Schneider (2014). Algan et al. (2016) define the behaviour of not eluding taxation and not abusing social benefits as civic spirit; however, while the authors use trustworthiness and civicness as synonymous in their theoretical model, they empirically study the effect of generalised trust and civicness on welfare support separately.

Political mistrust plays a critical role in shaping attitudes toward the welfare state, as individuals' confidence in the efficiency and effectiveness of how economic resources are allocated can influence their willingness to support welfare state policies. In this model, political mistrust can stem from perceived excessive bureaucratic costs, corruption among national or local authorities, or lack of political cohesion. All these factors can determine a higher expected waste of resources in the public sector and a more expensive implementation of the UBI.

Political mistrust has two effects on the perceived amount of resources invested by the government: on the one hand, higher political mistrust reduces agents' perceptions of the government's ability to invest the tax revenue into valuable public services. This effect is captured by  $\tau(\bar{y} - e_i)(1 - \lambda_i)$ , where a higher  $\lambda_i$  implies lower expected tax revenue allocated to public services; as a result, an agent's perceived waste of public resources that do not generate valuable public services is given by  $\tau(\bar{y} - e_i)\lambda_i$ .

On the other hand, higher political mistrust increases the perceived cost of implementing a UBI. If agents perceive excessive bureaucratic costs, corruption or lack of political cohesion, they are more likely to believe that the UBI will exceed the government's announced cost,  $\kappa$ . As political mistrust increases, the perceived cost of UBI also increases; thus, a rise in political mistrust leads to a perceived marginal waste of resources resulting from expected inefficiencies in the implementation of the UBI. This perceived marginal waste of resources equals the difference between the government's announced cost,  $\kappa$ , and the expected higher cost,  $\hat{\kappa}$ , such that:

$$\frac{\partial \widetilde{\kappa}}{\partial \lambda_i} = \widehat{\kappa} - \kappa > 0 \tag{3}$$

Finally, if  $\lambda_i = 0$ , an agent believes that there is no waste of resources; thus the total tax revenue is perceived as completely converted into a valuable public good and the per-unit cost of the UBI will correspond to  $\kappa$ . As for the case of generalised mistrust, the upper-bound case,  $\lambda_i = 1$ , is excluded as it would indicate the government's complete misuse of public resources, ultimately resulting in the absence of a welfare state.

#### 2.1.2 Individual preferences and demand for UBI

Individuals' preferences are represented by the utility function  $U_i(c)$ , which is linearly increasing in the perceived quality of the public good,  $\tilde{g}$ , and increasing and concave in private consumption, c, such that:

$$U_i(c) = \frac{(c_i)^{\alpha}}{\alpha} + q\tilde{g} \tag{4}$$

whereby  $\alpha \in (0, 1)$  is the private consumption elasticity and  $q \in [0, 1]$  represents the average preferences over the public good,  $\tilde{g}$ . The average preferences for the public good capture how close individuals are to the public good. Preferences can be affected, for instance, by region-specific cultural and ideological norms or by the perceived quality of public services. A higher value of q increases the utility that an individual gains from consuming the public good.

Agents maximise their utility function (4) under the individual budget constraint  $c_i \leq y_i(1-\tau) + b$  and obtain the following indirect utility function:

$$V_i(b,\tilde{g}) = \frac{(y_i(1-\tau)+b)^{\alpha}}{\alpha} + q\tilde{g}$$
(5)

Agents choose their desired UBI, b, and their preferred provision of the public good,  $\tilde{g}$ , maximising the indirect utility in (5) over  $\tilde{g}$  and b. However, because  $\tilde{g}$  can be written as a function of b, agents choose their preferred allocation ( $\tilde{g}(b^*), b^*$ ). Substituting (1) into the indirect utility function in (5), the maximisation problem for the optimal individual UBI can be rewritten as:

$$\max_{b} \quad \frac{(y_{i}(1-\tau)+b)^{\alpha}}{\alpha} + q(\tau(\bar{y}-e_{i})(1-\lambda_{i})-b\tilde{\kappa})$$
s.t. 
$$0 \le b \le \frac{\tau(\bar{y}-e_{i})(1-\lambda_{i})}{\tilde{\kappa}}$$
(6)

whereby  $b = \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$  is the maximum amount of UBI that a government can afford by setting g = 0.

The maximisation problem in (6) leads to the following preferred UBI, for a given pair of values of generalised and political mistrust,  $(e_i, \lambda_i)$ :

$$b^* = \begin{cases} \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}, & y_i \leq y_A \\ (q\tilde{\kappa})^{\frac{1}{\alpha-1}} - y_i(1-\tau), & y_A < y_i < y_B \\ 0, & y_i \geq y_B \end{cases}$$
(7)

with  $y_A = \frac{(q\tilde{\kappa})^{\frac{1}{\alpha-1}}}{1-\tau} - \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}(1-\tau)}$  and  $y_B = \frac{(q\tilde{\kappa})^{\frac{1}{\alpha-1}}}{1-\tau}$ .

**Proof.** See Appendix A

The demand for UBI in (7) is a continuous piecewise function, non-continuously differentiable and decreasing in pre-tax income. This result aligns with the theoretical and empirical literature on preference for redistribution, showing that, *ceteris paribus*, high-income individuals support less income redistribution than low-income individuals (e.g. Meltzer and Richard (1981) and Alesina and Giuliano (2011), among others).

The demand for UBI in (7) also shows that, for a given pair  $(e_i, \lambda_i)$ , there can be three groups of agents. These groups differ by the level of welfare retrenchment that they are willing to tolerate to implement a UBI. Specifically, the levels of tolerated welfare retrenchment are:

(i) **Total retrenchment**: agents request a complete substitution of current public spending in favour of a UBI if their income is such that  $y_i \leq y_A$ . Agents with an income below  $y_A$  would prefer the UBI to be more generous than  $\frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$ ; however, their demand for UBI is constrained by the expected government's fiscal capacity,  $\tau(\bar{y} - e_i)(1 - \lambda_i)$ , and by the expected costs of implementing the UBI,  $\tilde{\kappa}$ . All agents with income  $y_i \leq y_A$ demand the same UBI, namely  $b^* = \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$ .

- (ii) **Partial retrenchment**: agents demand a partial retrenchment of the current public spending in favour of a higher UBI if their income is such that  $y_A < y_i < y_B$ . For agents with income  $y_A < y_i < y_B$ , the demand for UBI declines with income, such that  $\frac{\partial b^*}{\partial y_i} = -(1 - \tau).$
- (iii) No retrenchment: agents with an income such that  $y_i \ge y_B$  never demand a positive UBI in substitution for current public services. All agents with income  $y_i \ge y_B$  are against a UBI and will demand  $b^* = 0$ .

In the UBI demand function (7) the necessary condition for which agents can demand total retrenchment is that  $y_A$  exists within the income support  $[0, \hat{y}]$ . This condition is satisfied if:

$$\frac{\tau(\bar{y} - e_i)(1 - \lambda_i)}{\tilde{\kappa}} \le (q\tilde{\kappa})^{\frac{1}{\alpha - 1}},\tag{8}$$

that is, the demand for total retrenchment exists only if the expected government's fiscal capacity of implementing a UBI is smaller than the preferred UBI that agents would have demanded if they had income  $y_i = 0$ . In simpler terms, if agents do not believe that the government can afford to give them their optimal UBI, as well as other public services when they have no other source of income, then they resort to total retrenchment. Although total retrenchment is theoretically possible, one should also notice that the inequality in (8) is unlikely to hold as it would imply either a small enough expected government's fiscal capacity,  $\tau(\bar{y} - e_i)(1 - \lambda_i)$ , weak enough preferences for the public good, q, or a small enough expected UBI implementation cost,  $\tilde{\kappa}$ .<sup>8</sup> Figure 1 illustrates the demand for UBI when the necessary condition in (8) is satisfied (graph on the left) and when it is not (graph on the right).

<sup>&</sup>lt;sup>8</sup>See (A.4)-(A.7) in Appendix A for a detailed derivation of (8) and of the conditions for which (8) holds.

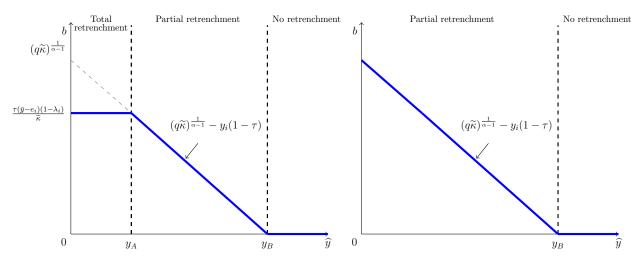


Figure 1: UBI demand for a given pair  $(e_i, \lambda_i)$ 

Notes: The graph shows the UBI demand (y-axis) as a function of income (x-axis) for a given pair  $(e_i, \lambda_i)$  when total retrenchment occurs (left) and without total retrenchment (right).

#### 2.1.3 The effect of generalised and political mistrust

Henceforth, I show how a change in political mistrust or in generalised mistrust affects the demand for UBI by presenting the comparative statics for the UBI demand in (7). Because the UBI demand is a piecewise function in  $y_i$ , the comparative statics are computed separately for the different levels of tolerated welfare retrenchment. From now on, I also assume q > 0. I will discuss the case for which q = 0 at the end of this section.

The optimal demand for UBI in (7) shows that the generalised mistrust does not appear in the preferred UBI if  $y_i > y_A$ . Thus, Proposition 1 yields:

**Proposition 1** If  $y_i > y_A$ , generalised mistrust does not affect the preferences for UBI, when the UBI involves a welfare retrenchment:

$$\frac{\partial b^*}{\partial e_i} = 0 \tag{9}$$

**Proof.** See Appendix B.1 ■

The conclusion drawn in Proposition 1 has two possible explanations: (i) because the UBI

involves providing equal and unconditional cash transfers to everyone, individuals cannot deceive or manipulate their eligibility for the UBI; thus, no agent can receive more than the expected amount, b. (ii) When allocating public resources between  $\tilde{g}$  and b, agents must make a choice without any accompanying increase in the marginal tax rate. The choice of the preferred allocation, ( $\tilde{g}(b^*), b^*$ ), precludes any opportunity for cheating in the implementation of the UBI; thus, any form of such dishonest behaviour exists *a priori* and does not impact the optimal resource allocation ( $\tilde{g}(b^*), b^*$ ). In other words, while agents may engage in tax evasion – which occurs independently of the equilibrium allocation choice ( $\tilde{g}(b^*), b^*$ )– they cannot manipulate the decision regarding how to distribute government economic resources.

Assuming that condition (8) holds, if  $y_i \leq y_A$ , Proposition 2 yields:

**Proposition 2** If  $y_i \leq y_A$ , the demand for UBI becomes  $b^* = \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$  and the effect of generalised mistrust on the demand for UBI is negative when the UBI involves a welfare retrenchment:

$$\frac{\partial b^*}{\partial e_i} = -\frac{\tau(1-\lambda_i)}{\widetilde{\kappa}} < 0 \tag{10}$$

#### **Proof.** See Appendix B.2

If  $y_i \leq y_A$ , generalised mistrust reduces the demand for UBI. Because agents with  $y_i \leq y_A$  demand as much as they believe the government can afford, higher generalised mistrust reduces the demand for UBI as agents expect a higher tax evasion and, in turn, a lower government's fiscal capacity. As a consequence, an increase in generalised mistrust, moves the threshold  $y_A$  on the right, thereby increasing the maximum level of income for which agents demand a UBI that involves total retrenchment. Figure 2 illustrates the change in the demand for UBI when generalised mistrust increases.

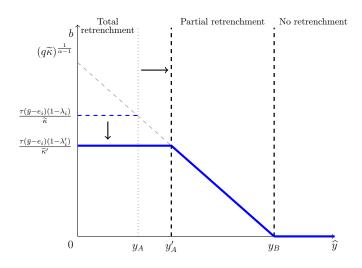


Figure 2: Effect of an increase in  $e_i$  on the UBI demand with total retrechment

Notes: The graph shows a decrease in the UBI demand when generalised mistrust,  $e_i$ , increases. The effect of higher generalised mistrust moves the income threshold  $y_A$  to the right, increasing the level of income for which agents demand a UBI with the partial retrenchment of other public services.

By taking the derivative with respect to political mistrust, one observes the effect of political mistrust on the demand for UBI; thus, Proposition 3 yields:

**Proposition 3** If  $y_i > y_A$ , political mistrust decreases the support for the UBI, if the UBI involves a welfare retrenchment:

$$\frac{\partial b^*}{\partial \lambda_i} = -\frac{q(\widehat{\kappa} - \kappa)}{1 - \alpha} (q\widetilde{\kappa})^{\frac{2 - \alpha}{\alpha - 1}} < 0 \tag{11}$$

**Proof.** See Appendix B.3 ■

Political mistrust decreases the support for the UBI because agents expect that the government will spend more resources to implement the UBI than the announced amount,  $\kappa$ . This expectation stems from the belief that the government is inefficient, prone to mismanagement, or made initial evaluation errors in the implementation of the UBI programme. As a result, concerns arise about the allocation of resources within the program, as well as higher individual welfare losses (i.e., a larger reduction in spending for the public good,  $\tilde{g}$ , compared to the initially announced cut). Indeed, only the marginal perceived waste of resources resulting from the implementation of the UBI,  $\hat{\kappa} - \kappa$ , appears in (9). Conversely, the marginal effect of political mistrust on the perceived amount of tax revenue generating valuable public services,  $\tau(\bar{y} - e_i)$ , does not appear in (9). Similarly to the case of generalised mistrust, the perceived waste of public resources generating valuable public services exists *a priori* and does not impact the optimal allocation ( $\tilde{g}(b^*), b^*$ ). Therefore, the derivative in (9) shows that, for agents demanding partial welfare retrenchment, the only channel through which political mistrust affects the UBI demand is the perceived waste of resources in the implementation of the UBI. Moreover, the result in (9) does not change qualitatively if  $y_i \leq y_A$  and the demand for UBI becomes  $b^* = \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$ :

$$\frac{\partial b^*}{\partial \lambda_i} = -\frac{\tau(\bar{y} - e_i)\hat{\kappa}}{\tilde{\kappa}^2} < 0 \tag{12}$$

**Proof.** See Appendix B.4

Differently from (9), the channel through which political mistrust affects the demand for UBI under total retrenchment is through the perceived waste of public resources generating valuable public services,  $\tau(\bar{y}-e_i)$ . The higher expected cost,  $\hat{k}$ , still appears in (10); however, differently from (9), the possible waste of resources,  $\hat{k} - k$ , is not the direct channel through which the demand for UBI decreases. The reason is akin to the one explained in Proposition 2. Because agents demand a complete retrenchment of the public good, they have no direct concern about the possible waste of resource,  $\hat{k} - k$ , that would further retrench the provision of the public good, g. Thus, higher political mistrust reduces the demand for UBI because agents expect a lower government's ability to transform the available tax revenue into the highest feasible UBI. Figure 3 illustrates the decline of UBI demand changes if political mistrust increases:

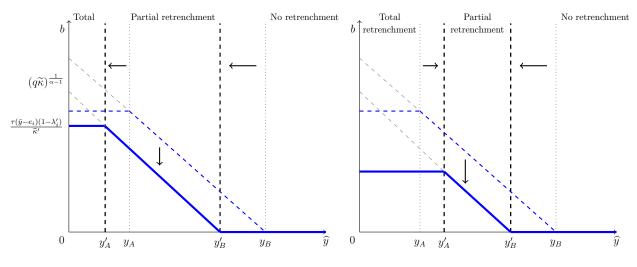


Figure 3: Effect of an increase in  $\lambda_i$  on the UBI demand

Notes: The graph on the left shows the decline of UBI demand if political mistrust increases, when  $y'_A < y_A$ . The graph on the left shows the decline of UBI demand if political mistrust increases, when  $y_A < y'_A$ .

Lastly, when the preferences for the public good increase, there is a decrease in the demand for UBI. This indicates that individuals prefer to retain a public good to which they attribute a significant value rather than adopting a new policy that could incur additional implementation costs, thereby further retrenching the public good, g:

$$\frac{\partial b^*}{\partial q} = -\frac{\widetilde{\kappa}}{1-\alpha} (q\widetilde{\kappa})^{\frac{2-\alpha}{\alpha-1}} < 0 \tag{13}$$

**Proof.** See Appendix B.5 ■

If  $q \to 0^+$ , then the demand for UBI  $b^* \to \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$ . This result occurs because, if q = 0, the welfare retrenchment does not reduce an agent's indirect utility function. Thus, agents will demand as much as they believe a government can afford, given their perceived implementation costs and the government's fiscal capacity. Moreover, derivative (13) equals 0 if agents' UBI preferences involve total welfare retrenchment.

# 2.2 Hypotheses

Before bringing the model to the data, I clarify the hypotheses stemming from the theoretical framework. The two main hypotheses raised by the model are:

**Hypothesis 1** Political mistrust reduces the demand for UBI when the implementation of a UBI involves a reduction in spending for other public services.

Hypothesis 1 stems from Proposition 3. Political mistrust lowers the support for UBI, as people expect that the government will squander more resources than necessary when implementing a UBI. Such expectations could arise from the belief that the government is inefficient and prone to mismanagement of the UBI programme, giving rise to concerns about how resources will be allocated in the UBI and potentially resulting in greater individual utility losses.

**Hypothesis 2** Generalised mistrust has a null or negative effect on the demand for UBI when the implementation of a UBI involves a reduction in spending for other public services.

Hypothesis 2 stems from Proposition 1 and Proposition 2. Generalised mistrust reduces the demand for UBI only if agents demand for total welfare retrenchment of other public services in favor of a UBI. However, this scenario would occur only if condition (8) is satisfied. When agents demand partial welfare retrenchment, generalised mistrust should have no effect on the demand for UBI.

# 3 Data

To test the predictions of the theoretical model on European countries, I use data from the European Social Survey (ESS). The ESS is a multi-country survey, which has been administered in over 30 countries, and aims to measure and understand the attitudes, beliefs, and behaviour of individuals in Europe.<sup>9</sup> I use Wave 8 of the ESS (henceforth, ESS 8), which

<sup>&</sup>lt;sup>9</sup>For more information, visit: https://ess-search.nsd.no/

was conducted in 2016-2017. This wave covers 44,387 respondents from 23 countries. For each country — except for Israel and Russia, which are not part of this analysis — the ESS 8 also provides detailed information about the region of origin of respondents. Regional information is provided using the NUTS (*Nomenclature of territorial units for statistics*) classification, namely a hierarchical system for dividing up the economic territory of the EU and the UK. Regional information is provided at different levels for different countries: NUTS 1 for Germany and the UK; NUTS 2 for Austria, Belgium, Switzerland, Spain, France, Italy, Netherlands, Norway, Poland and Portugal; and NUTS 3 for Czechia, Estonia, Finland, Hungary, Ireland, Iceland, Lithuania, Sweden and Slovenia.

The ESS 8 survey is particularly suitable for testing the predictions of the theoretical model as it includes a question about individual support for a UBI, which highlights the tradeoff between the UBI and other social benefits. Additionally, the survey provides questions that measure generalised mistrust and political mistrust, providing sufficient information to test Hypotheses 1 and 2, although causality cannot be claimed.

### 3.1 Main Variables

The main variables used in the analysis are: (i) a variable highlighting the support for UBI when the implementation of a UBI involves the replacement of other social benefits; (ii) a constructed index capturing political mistrust; (iii) a constructed index capturing generalised mistrust. Henceforth, I present a description of each of the main variables used in the empirical analysis. A comprehensive list of all the variables used in the analysis and descriptive statistics can be found in Appendix C. For the descriptive statistics and descriptive analysis, analytic weights are applied to correct for differential selection probabilities within each country, for sampling error related to the four post-stratification variables, and take into account differences in population size across countries, as suggested by the European Social Survey (ESS) official data guidance.

The question regarding UBI support incorporates an element of welfare retrenchment. It states:

"A basic income scheme includes all of the following: - The government pays everyone a monthly income to cover essential living costs. - It replaces many other social benefits. - The purpose is to guarantee everyone a minimum standard of living. - Everyone receives the same amount regardless of whether or not they are working. - People also keep the money they earn from work or other sources. -This scheme is paid for by taxes. Overall, would you be against or in favour of having this scheme in [country]?"

The question aligns with the theoretical model by emphasizing the tradeoff between the UBI scheme and existing social benefits. The statement "*It replaces many other social benefits*" entails a welfare retrenchment, indicating a reduction or elimination of other social benefits in order to implement a UBI scheme. Furthermore, the question explicitly mentions that the UBI scheme is universally distributed and financed through taxes, but does not mention any tax increase.

The answer to this question takes on values between 1 and 4 (Strongly against=1, Against=2, In favour =3, Strongly in favour=4). To simplify the interpretation, in the empirical analysis the variable is standardised with a mean equal to 0 and standard deviation equal to 1. A higher value of the standardised variable corresponds to higher support for UBI. Figure 4 shows the percentage of the population for each rank of the UBI preferences scale in 21 European countries.

#### 3.1.2 Political mistrust and generalised mistrust

To measure political and generalised mistrust, I construct two indices using the first principal component of a principal component analysis (PCA) conducted on a set of questions about

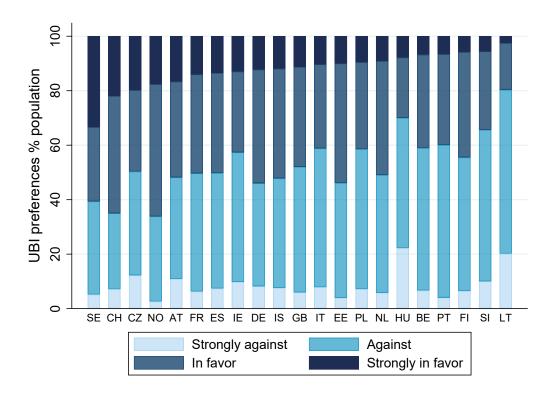


Figure 4: Percentage of population by UBI preference level in 21 European countries

Notes: The graph shows the percentage of UBI supporters across 21 European countries for each value of the 1-4 preference scale (Strongly against, Against, In favor, Strongly in favor). Analytic weights are applied.

political and generalised mistrust. The advantage of constructing two distinct indices for political and generalised mistrust, respectively, is that I can combine the diverse dimensions of political and generalised mistrust into one single variable instead of relying on only one dimension. Both indices are standardised (i.e. mean 0 and standard deviation 1) to facilitate the interpretation of the regression results.

The generalised mistrust index is the first principal component of a PCA conducted on these three questions: (i) "Would you say that most people can be trusted, or that you can't be too careful in dealing with people?", taking values going from 0 (You can't be too careful) to 10 (Most people can be trusted); (ii) "Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?", taking values going from 0 (Most people try to take advantage of me) to 10 (Most people try to be fair); (iii) "Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?", taking values going from 0 (People mostly look out for themselves) to 10 (People mostly try to be helpful). I reverse the values of the scale so that higher values are associated with higher generalised mistrust, in line with the design of the theoretical model. Question (i) is commonly used in the literature to measure generalised trust and measures how an agent behaves, while questions (ii)-(iii) capture that component of trust related to how an agent believes other people behave (See, for instance, Thöni et al. (2012) for the distinction between trust and fairness). Combining these different facets of social mistrust allows to have a definition of mistrust that is closer to the one in the theoretical model. The first principal component explains 68.63% of the total variance (Eigenvalue is equal to 2.05899 and weights are similarly assigned to each variable). The higher the index is, the higher is the level of generalised mistrust.

The political mistrust index is the first principal component of a PCA conducted on three questions about trust in (1) political parties, (2) politicians and (3) the country's parliament. The questions have all the same structure: "Tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust.". The variables are measured on a scale going from 0 (Do not trust at all) to 10 (Completely trust). I reverse the values of the scale so that higher values are associated with higher political mistrust, in line with the design of the theoretical model. The first principal component explains 85.37% of the total variance (Eigenvalue is equal to 2.56112 and weights are similarly assigned to each variable). The higher the index is, the higher is the level of political mistrust.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup>In Appendix D, the binned scatter plots showing the correlations between the variables chosen for constructing the generalised mistrust index (Panels (A)-(C)) and political mistrust index (Panels (D)-(F)) are presented (Figure D.1). All binned scatter plots have been residualised against region-fixed effects and exhibit strong correlations (at the 1% level) among the variables of interest. I also report the pairwise correlations among the variables used in the generalised mistrust index (Table D.2.2) and political mistrust index (Table D.2.1). In the same Appendix, I also show the average political mistrust and generalised mistrust indices for each country (Figure D.2).

# 3.2 Estimation strategy

In the first part of the empirical analysis, I test the relationship between political and generalised mistrust on the support for UBI in Europe. To this end, I use all the European countries in the ESS 8 to estimate the following econometric model:

$$UBI_{i,r} = \beta_1 PoliMis_{i,r} + \beta_2 GeneralMis_{i,r} + \zeta' \mathbf{X}_{i,r} + \eta_r + e_{i,r}, \tag{14}$$

where  $UBI_{i,r}$  is the continuous standardised measure of UBI support of an individual *i* in the region *r*,  $PoliMis_{i,r}$  is the measure of political mistrust for an individual *i* in the region *r*,  $GeneralMis_{i,r}$  is the measure of generalised mistrust for an individual *i* in the region *r*,  $X_{i,r}$  is a set of individual controls (Income controls: income deciles, occupation (2-digit ISCO-08), employment (paid work, unemployed, education, disabled, retired, other); Basic individual controls: gender, the highest level of completed education (ISCED), age, age squared, number of household members, type of respondent's domicile (big city, suburbs of a big city, town, country village or farm), marital status (married, divorced, widowed, none of these) and citizenship; Ideology controls: degree of religiosity (measured on a 0-10 scale) and left-right scale (measured on a 0-10 scale)) and  $\eta_r$  is a region-fixed effect. Standard errors are clustered at the region level.<sup>11</sup>

#### 3.3 Results

Table 1 presents the correlation between political mistrust and support for UBI in the context of welfare retrenchment. In Column (1) the basic specification of the model shows that a one standard deviation increase in political mistrust results in a reduction of 4.8% of a standard deviation of UBI support. The result is statistically significant at the 1% level,

<sup>&</sup>lt;sup>11</sup>Following the recent literature on social trust (see, for instance, Algan et al. (2017)), the inclusion of region-fixed effects is crucial in capturing time-invariant cultural and historical local factors that influence generalised and political mistrust. However, due to the possibility of generating clusters with a limited number of observations when including region-fixed effects and occupational controls (ISCO-08) at the 2-digit level, I also show that using country-fixed effects and clustering the standard errors at the country level do not change the results (see Table G.2.2 in Appendix G).

thus confirming Hypothesis 1. Additionally, even after accounting for a wide range of control variables such as generalised mistrust, income controls, basic individual characteristics, and ideology controls, the negative impact of political mistrust on UBI support persists and remains statistically significant at a 1% level.

In Column (2), I include generalised mistrust in the statistical model. In line with Hypothesis 2, the findings show that generalised mistrust does not affect the support for UBI. As explained in the model, this result may occur because people with high levels of generalised mistrust are more likely to perceive their fellow citizens as engaging in misbehaviour that can reduce the government's fiscal capacity, thereby disincentivising their support for UBI. However, if the implementation of a UBI scheme involves the retrenchment of other public benefits, people may see others' misbehaviour as a cost that would occur regardless of the UBI scheme, thereby not affecting their preferences.

The introduction of income controls in Column (3) shows a negative correlation between income and support for UBI. This finding is consistent with the theoretical model and previous research on preferences for redistribution.

In Columns (4)-(5), I introduce basic individual controls and ideology controls, such as the degree of religiosity and the left-right scale. Column (5) shows the results of the model specified in regression (14). Even with this specification, the effect of political mistrust, generalised mistrust, and income on UBI support remain similar in sign, size, and statistical significance to those in Columns (1)-(4).

Finally, the results presented in Table 1 suggest that individuals support UBI at the cost of a partial retrenchment of other social benefits. This conclusion arises from the strong negative correlation between political mistrust and UBI preferences, whereas generalised mistrust has no statistical effect. In fact, as stated in Proposition 1 and Proposition 3, when individuals support UBI without demanding the complete replacement of existing public services, only political mistrust influences the demand for UBI.

	UBI support						
Variables	(1)	(2)	(3)	(4)	(5)		
Political mistrust index	-0.048***	-0.046***	-0.047***	-0.044***	-0.055***		
	(0.010)	(0.012)	(0.011)	(0.011)	(0.012)		
Generalised mistrust index		-0.006	-0.012	-0.015	-0.011		
		(0.011)	(0.010)	(0.011)	(0.011)		
Income			-0.026***	-0.028***	-0.026***		
			(0.003)	(0.004)	(0.004)		
Region FE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Income Controls			$\checkmark$	$\checkmark$	$\checkmark$		
Basic Individual Controls				$\checkmark$	$\checkmark$		
Ideology Controls					$\checkmark$		
Regions	265	265	265	265	265		
Observations	$35,\!575$	$35,\!365$	28,022	27,414	$25,\!437$		
Adjusted R-squared	0.073	0.072	0.086	0.089	0.100		

Table 1: REGRESSION: UBI SUPPORT, POLITICAL MISTRUST AND GENERALISED MISTRUST

Notes: Columns (1)-(5) report the support for universal basic income regressed on political mistrust (1), generalised mistrust (2), income controls: income deciles, occupation (2-digit isco08), employment (paid work, unemployed, education, disabled, retired, other) (3), basic individual controls: gender, education (ISCED), age, age squared, number of household's member's, type of respondent's domicile (big city, suburbs of a big city, town, country village or farm), marital status and citizenship (4), ideology controls: degree of religiosity, left-right scale (5). Standard errors clustered at regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

# **3.4** Welfare retrenchment and plausible channels

In Table 1 I documented a negative correlation between political mistrust and preferences for UBI when its implementation involves the retrenchment of other social benefits. Conversely, generalised mistrust does not have a statistically significant effect. These findings align with the main predictions of the theoretical model. However, the theoretical model also provides insights into two potential channels through which political and generalised mistrust could influence the demand for UBI in the context of partial welfare retrenchment.

On one hand, individuals may believe that reallocating resources from other public services to implement a UBI could result in a waste of public resources due to the government's inefficiencies, thereby exacerbating the retrenchment of those services. This concern about the waste of public resources in the UBI implementation — and the subsequent greater retrenchment of other public services— represents the theoretical mechanism through which political mistrust affects people's preferences for UBI.

On the other hand, the model shows that generalised mistrust does not affect the demand for UBI when its implementation involves a partial retrenchment of other public services. This outcome arises because individuals who mistrust their fellow citizens are more likely to believe that their fellow citizens engage in misbehaviour that could undermine the government's capacity to sustain the welfare state; however, these misbehaviour exist independently of the reallocation of public resources to implement the UBI. As a result, generalised mistrust does not significantly influence preferences for UBI.

Henceforth, I present empirical evidence showing that: (i) under partial welfare retrenchment, the lack of an effect of generalised mistrust on people's demand for UBI could be attributed to the implementation of a UBI that involves the retrenchment of other public services; (ii) the concern among agents regarding the waste of public resources could serve as a plausible channel through which political mistrust may influence their demand for UBI; (iii) agents' perception of others' misbehaviour could serve as a plausible channel through which generalised mistrust may influence their demand for UBI. However, under partial welfare retrenchment, this channel remains inactive, as generalised mistrust does not appear to affect the demand for UBI.

#### 3.4.1 Welfare retrenchment

The results in Table 1 show that generalised mistrust is not statistically significant when the implementation of UBI involves welfare retrenchment. To further explore whether the implementation of UBI through welfare retrenchment could contribute to the lack of effect of generalised mistrust on people's preferences for UBI, I present the same specification as in model (14) using a different set of dependent variables.

The different set of dependent variables is based on three questions: (i) "Now imagine there is a fixed amount of money that can be spent on tackling unemployment. Would you be against or in favour of the government spending more on education and training programmes for the unemployed at the cost of reducing unemployment benefit?", taking values from 1 (Strongly against) to 4 (Strongly in favour); (ii) "Would you be against or in favour of the government introducing extra social benefits and services to make it easier for working parents to combine work and family life even if it means much higher taxes for all?", taking values going from 1 (Strongly against) to 4 (Strongly in favour); (iii) "To what extent are you in favour or against the following policies in [country] to reduce climate change? Increasing taxes on fossil fuels, such as oil, gas and coal.", taking values going from 1 (Strongly in favour) to 5 (Strongly against). Question (i) describes a policy involving welfare retrenchment, whereas questions (ii) and (iii) describe two policies involving a tax increase. The three questions cover distinct welfare topics, thereby mitigating the possibility that the results are driven by a specific topic rather than by their implementation methods. For question (iii), I reverse the values of the scale so that higher values are associated with a higher level of support for higher taxes to finance policies to address climate change. All three variables are standardised with a mean equal to 0 and a standard deviation of 1.

Table 2 shows that when the question involves a welfare retrenchment, generalised mistrust is not statistically significant (Column 1). However, when the question involves an increase in taxes, the results demonstrate a strong negative and statistically significant effect of generalised mistrust (Columns 2 and 3), in line with previous findings (e.g., see Daniele and Geys (2015)). Additionally, political mistrust consistently exhibits a negative correlation with all three questions, remaining statistically significant at the 1% level. These findings align with the predictions from the theoretical model and suggest that, under partial welfare retrenchment, the lack of an effect of generalised mistrust on people's demand for UBI could be attributed to the implementation of a UBI involving the retrenchment of other public services. Table 2: Regression: Political and generalised mistrust on welfare retrenchment and tax increasing policies

	Welfare retrenchment	Tax increase		
Variables	Training vs UI	Parental Benefits	Climate Policies (3)	
	(1)	(2)		
Political mistrust index	-0.037***	-0.070***	-0.146***	
	(0.011)	(0.011)	(0.010)	
Generalised mistrust index	-0.007	-0.028***	-0.042***	
	(0.010)	(0.010)	(0.010)	
Regions	265	265	265	
Observations	$25,\!614$	$25,\!496$	$26,\!217$	
Adjusted R-squared	0.079	0.063	0.156	

Notes: Columns (1)-(3) shows the effect of political and generalised mistrust on preferences for: (1) training spending versus UI, through welfare retrenchment; (2) parental benefits and (3) climate change policies, through a tax increase. Region-fixed effects, income controls, basic individual controls and ideology controls are always included. Standard errors clustered at the regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

#### 3.4.2 Economic costs of welfare and people's misbehaviour

The theoretical model reveals two plausible channels through which political mistrust and generalised mistrust influence preferences for UBI in the context of welfare retrenchment: (i) the individuals' concern regarding the possible waste of public resources associated with the UBI implementation; (ii) the individuals' perceptions of others' misbehaviour.<sup>12</sup>

To empirically test these channels, I introduce two new variables into the model. The first variable captures individual concerns regarding the costs of public spending, acting as a proxy for concern about the waste of public resources. The second variable captures individual concerns about other citizens' misbehaviour, acting as a proxy for disruptive behaviours that can undermine the sustainability of the welfare state.

Following Giger and Nelson (2013), the question capturing individuals' concern about the

<sup>&</sup>lt;sup>12</sup>In Appendix F, I also conduct a heterogeneity analysis to examine how the effects of political and generalised mistrust vary across sub-population groups defined by the following factors: (i) income and education levels, (ii) political spectrum and religiosity, and (iii) residential area, age, citizenship, and gender.

economic costs of public spending is: "To what extent do you agree or disagree that social benefits and services in [country] place too great a strain on the economy?", taking values from 1 (Agree Strongly) to 5 (Disagree Strongly). I dichotomise the responses by assigning a value of 1 if the response is "Agree" or "Agree Strongly" and 0 otherwise. Although this question does not directly capture the concern for the possible waste of public resources associated with the UBI, it is likely that people who are more concerned about the economic cost of public spending are also more concerned about the waste of resources due to the implementation of new policies. Thus, the question can represent a good proxy for individuals' concern about the waste of public resources when associated with the UBI question.

To capture individuals' concern about other citizens' misbehaviour, I choose two questions commonly used in the literature: (i) "Say how much you agree or disagree with each of the following statements about people in [country]. Many people manage to obtain benefits and services to which they are not entitled.", taking values from 1 (Agree Strongly) to 5 (Disagree Strongly); (ii) "Say how much you agree or disagree with each of the following statements about people in [country]. Most unemployed people do not really try to find a job.", taking values from 1 (Agree Strongly) to 5 (Disagree Strongly). Because these two questions could capture different aspects of perception about other people's misbehaviour, I generate a new variable assigning a value of 1 if the respondent answered with "Agree" or "Agree Strongly" to both questions (i) and (ii), and 0 otherwise.<sup>13</sup>

Table 3 shows the results obtained when introducing the concern about the welfare cost and other people's misbehaviour. Column (1) presents the outcomes of the basic model as presented in Table 1. For comparability reasons, Column (1) includes only those observations providing information about both the welfare cost and the perceived misbehaviour of other citizens. With this empirical specification, one standard deviation increase in political

<sup>&</sup>lt;sup>13</sup>Daniele and Geys (2015) conduct a factor analysis between question (i), question (ii) and the question "Say how much you agree or disagree with each of the following statements about people in [country]. Employees often pretend they are sick in order to stay at home.". Unfortunately, the last question is not present in the ESS 8, so I opted for creating a dummy variable aggregating by the responses "Agree" or "Agree Strongly" from question (i) and (ii). Also Algan et al. (2016) use these questions as a proxy for others' misbehaviour.

mistrust results in a reduction of 5.4% of a standard deviation of UBI support. In Column (2), controls for the concern about the welfare cost and other people's misbehaviour are introduced. Both variables exhibit negative correlations with UBI support and are statistically significant at the 1% level. Being concerned about the welfare cost reduces the support for UBI by an 8.9% of one standard deviation, whereas being concerned about fellow citizens' misbehaviour reduces the support for UBI by an 8% of one standard deviation. On the other hand, the magnitude and the statistical significance of political mistrust declines, although this decrease is modest. When controlling for the concern about the welfare cost and other people's misbehaviour, one standard deviation increase in political mistrust results in a reduction of 4.9% of a standard deviation of UBI support, whereas the effect of generalised mistrust remains statistically not different from zero.

In Column (3), the interactions between political mistrust and concern for the welfare cost and between generalised mistrust and the concern for other people's misbehaviour are added to the model. The interaction between political mistrust and the concern for welfare cost is statistically significant at the 1% level, showing a heterogeneous effect among individuals. The negative impact of political mistrust on UBI preferences is about 60% larger for individuals who are concerned about the cost of the welfare state. On the other hand, the interaction between generalised mistrust and the perception of other people's misbehaviour (Column 4) is not statistically different from zero, showing no heterogeneity among individuals. Column (5) replicates the result of Columns (3)-(4) when both interactions are introduced in the same regression.

In Appendix E, Figure E.1 shows a plot of the coefficients for the marginal effects, confirming the higher negative effect of political mistrust for individuals who are concerned about the welfare cost. However, the overlap in confidence intervals (95% confidence level) between the reference category (i.e., individuals not concerned about the cost of welfare) and the coefficient of the variable capturing concern for the cost of welfare provides evidence that the negative correlation between political mistrust and UBI is not only driven by individuals who are concerned about the cost of welfare. Figure E.1 also shows that the marginal effect of generalised mistrust is always statistically insignificant, supporting the theory that, under partial welfare retrenchment, the misbehaviour channel is not activated.

	UBI support					
Variables	(1)	(2)	(3)	(4)	(5)	
Political mistrust index	-0.054***	-0.049***	-0.030**	-0.050***	-0.032**	
	(0.012)	(0.012)	(0.013)	(0.012)	(0.013)	
Generalised mistrust index	-0.014	-0.009	-0.009	0.001	-0.001	
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	
Welfare cost		-0.089***	-0.092***	-0.090***	-0.092***	
		(0.017)	(0.017)	(0.017)	(0.017)	
Political mistrust index $\times$ Welfare cost			-0.048***		-0.046***	
			(0.016)		(0.016)	
Misbehaviour		-0.080***	-0.079***	-0.078***	-0.077***	
		(0.018)	(0.018)	(0.017)	(0.017)	
Generalised mistrust index $\times$ Misbehaviour				-0.030	-0.026	
				(0.018)	(0.018)	
Regions	265	265	265	265	265	
Observations	$24,\!198$	$24,\!198$	$24,\!198$	$24,\!198$	$24,\!198$	
Adjusted R-squared	0.098	0.101	0.101	0.101	0.101	

Notes: Column (1) shows the basic model in Eq. 14. Columns (2)-(5) introduce the variables welfare cost and misbehaviour and their interactions with political mistrust and generalised mistrust, respectively. Region-fixed effects, income controls, basic individual controls and ideology controls are always included. Standard errors clustered at the regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

# 3.5 Robustness

I conduct several tests to verify the robustness of the empirical analysis. In Table G.2.1, I use an ordered probit specification to take into account that the question on UBI support is an ordinal dependent variable while replicating the results in Table 1. Results do not change with this specification. I also present the results of Table 1 in which I use each variable of the PCA as a proxy for generalised mistrust (i.e. mistrust in people, lack of people fairness,

and unhelpful people) in Table G.1.1 and political mistrust (i.e. mistrust in parliament, government and politicians) in Table G.1.2. Results do not change. In Table G.2.2 I also replicate the results from Table 1 including country-fixed effects and cluster the standard error at the country level, with no change to the results. In Table G.2.3 I use the variable income deciles as a categorical variable (reference category: bottom decile) to capture possible non-linear effects of income. Results remain robust also to this specification.

# 4 Conclusion

In this paper I presented a theoretical model showing how political mistrust affects the preferences for UBI if its implementation involves the retrenchment of other public services. My model shows that economic agents are more likely to support a UBI when they have lower levels of political mistrust. This result is attributed to the agents' confidence in the government's ability to effectively manage public resources and minimise retrenchment of other public services.

The model also shows that, under plausible conditions, generalised mistrust does not impact agents' preferences for UBI in the context of welfare retrenchment. This outcome can be explained by the fact that individuals with higher levels of generalised mistrust tend to perceive their fellow citizens as more prone to engage in misbehaviour that could reduce the government's fiscal capacity. However, when the implementation of UBI involves the retrenchment of other public services, agents perceive the expected reduced government fiscal capacity as a cost that would exist irrespective of the UBI implementation. As a consequence, generalised mistrust has no effect on preferences for UBI.

The predictions of the model are empirically tested using Wave 8 of the European Social Survey (ESS). While causality cannot be claimed and these results must be taken as purely descriptive, the empirical evidence supports the conclusions of the theoretical model. The results indicate a negative correlation between political mistrust and the support for the UBI scheme. Individuals with higher levels of political mistrust are less likely to support the UBI scheme when it involves reducing spending on other public services. Conversely, generalised mistrust does not significantly impact support for the UBI scheme.

This finding complements previous research showing that higher levels of generalised trust lead to greater preferences for a welfare state (Daniele and Geys, 2015; Algan et al., 2016). With this model, I show that, if a UBI is implemented at the cost of reducing public spending on other public services, generalised mistrust has little or no effect on preferences for redistribution. To this end, I show new theoretical mechanisms illuminating how political and generalised mistrust can influence the demand for redistribution when individuals face a trade-off between the implementation of a UBI and the retrenchment of other public services. In addition, this paper also contributes to the recent literature exploring the relationship between the demand for redistribution, social trust, and the allocation of public spending (Keefer et al., 2022).

This paper has important implications for policymakers and future research in economics and social science. The paper emphasizes the significance of understanding how citizens perceive the costs associated with diverting resources from existing public services to fund UBI. These perceived costs are likely to be influenced by the level of trust citizens have in their current political institutions, while trust in other people does not have a significant effect. Future research should better study whether these findings can be generalised to other public policies involving welfare retrenchment. Finally, while this paper provides descriptive and robust evidence linking the demand for redistribution, social trust, and welfare retrenchment, further empirical research should focus on estimating the causal relationship.

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# A Maximisation problem

Agents solve the following maximisation problem to determine their preferred UBI scheme  $b^*$ :

$$\max_{b} \quad \frac{(y_{i}(1-\tau)+b)^{\alpha}}{\alpha} + q(\tau(\bar{y}-e_{i})(1-\lambda_{i})-b\tilde{\kappa})$$
  
s.t. 
$$0 \le b \le \frac{\tau(\bar{y}-e_{i})(1-\lambda_{i})}{\tilde{\kappa}}$$
 (A.1)

To solve the maximisation problem, I use the Lagrangian method. The Lagrangian function is:

$$\mathcal{L} = \frac{(y_i(1-\tau)+b)^{\alpha}}{\alpha} + q(\tau(\bar{y}-e_i)(1-\lambda_i)-b\tilde{\kappa}) + \nu_1 b + \nu_2 \left[\frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}} - b\right] \quad (A.2)$$

where  $\nu_1$  and  $\nu_2$  are the lagrangian multipliers.

The necessary conditions for a local maximum are given by the FOCs. The FOCs must solve the Kuhn-Tucker conditions: (A.2.1) - (A.2.4):

$$\frac{\partial \mathcal{L}}{\partial b} \le 0: \quad \left[ (y_i(1-\tau) + b)^{\alpha - 1} - q\widetilde{\kappa} + \nu_1 - \nu_2 \right] \le 0, \tag{A.2.1}$$

$$\nu_1 \frac{\partial \mathcal{L}}{\partial \nu_1} = 0 : \quad \nu_1 b = 0, \tag{A.2.2}$$

$$\nu_2 \frac{\partial \mathcal{L}}{\partial \nu_2} = 0: \quad \nu_2 \left[ \frac{\tau(\bar{y} - e_i)(1 - \lambda_i)}{\tilde{\kappa}} - b \right] = 0, \tag{A.2.3}$$

$$\nu_1 \ge 0, \ \nu_2 \ge 0$$
 (A.2.4)

To find the possible solutions to the maximisation problem, I analyse 3 cases:

• Case 1:  $\nu_1 > 0$ ,  $\nu_2 = 0$  and b = 0.

Under the conditions of Case 1, it is easy to see that (A.2.2) -(A.2.4) are always satisfied. Because  $\nu_1 > 0$ , condition (A.2.1) is satisfied only if:

$$y_i(1-\tau) \ge (q\widetilde{\kappa})^{\frac{1}{\alpha-1}} \tag{A.3}$$

Thus, if holds (A.3) and if  $|y_i(1-\tau) - (q\tilde{\kappa})^{\frac{1}{\alpha-1}}| \ge |\nu_1|$ ,  $b \ge 0$  is binding and  $b^* = 0$  is a solution to the maximisation. That is, richer agents are against the UBI scheme.

• Case 2:  $\nu_1 = 0$ ,  $\nu_2 > 0$  and  $b = \frac{\tau(\bar{y} - e_i)(1 - \lambda_i)}{\tilde{\kappa}}$ .

Under the conditions of Case 2, it is easy to see that (A.2.2) - (A.2.4) are always satisfied. Condition (A.2.1) is satisfied if:

$$\nu_2 \ge \left(y_i(1-\tau) + \frac{\tau(\bar{y} - e_i)(1-\lambda_i)}{\tilde{\kappa}}\right)^{\alpha - 1} - q\tilde{\kappa} > 0, \tag{A.4}$$

that is true, if:

$$y_i(1-\tau) < (q\widetilde{\kappa})^{\frac{1}{\alpha-1}} - \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\widetilde{\kappa}}$$
(A.5)

Thus, if (A.5) holds,  $b \leq \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$  is binding and  $b^* = \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$  is a solution to the maximisation. The result shows that only agents with a level below a certain income threshold will ask for a total replacement of the public good, g. Because  $y_i \geq 0$ , the inequality in (A.5) also implies that a necessary condition to obtain the solution  $b^* = \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$  is that:

$$\frac{\tau(\bar{y} - e_i)(1 - \lambda_i)}{\tilde{\kappa}} \le (q\tilde{\kappa})^{\frac{1}{\alpha - 1}},\tag{A.6}$$

which can be rewritten also as:

$$\widetilde{\kappa} \le \frac{1}{q^{\alpha} [\tau(\bar{y} - e_i)(1 - \lambda_i)]^{\frac{\alpha}{1 - \alpha}}}$$
(A.7)

Thus, if  $\tau(\bar{y} - e_i)(1 - \lambda_i)$ , q or  $\tilde{\kappa}$  are sufficiently small and (A.5) is satisfied, then  $b^* = \frac{\tau(\bar{y} - e_i)(1 - \lambda_i)}{\tilde{\kappa}}$  is a solution for some level of income,  $y_i$ .

• Case 3:  $\nu_2 = 0$ ,  $\nu_2 = 0$  and  $0 < b < \frac{\tau(\bar{y} - e_i)(1 - \lambda_i)}{\tilde{\kappa}}$ .

Under the conditions of Case 2, it is easy to see that (A.2.2) - (A.2.4) are always satisfied. Condition (A.2.1) is satisfied if:

$$b = (q\widetilde{\kappa})^{\frac{1}{\alpha-1}} - y_i(1-\tau) \tag{A.8}$$

that is true, if:

$$y_i(1-\tau) < (q\tilde{\kappa})^{\frac{1}{\alpha-1}} \tag{A.9}$$

Thus, if (A.9) holds, the maximisation problem admits an interior solution, that is (A.8).

The sufficient conditions require the constraint to be differentiable and convex in b and the value function to be differentiable in b. The constraint clearly is differentiable and convex in b, while the SOCs show that the value function is concave in b for any feasible b:

$$-(1-\alpha)(y_i(1-\tau)+b)^{\alpha-2} < 0.$$
(A.10)

# **B** Mathematical proofs

### B.1 Proof Proposition 1

**Proof.** If  $y_i > y_A$ , the demand for UBI is  $(q\tilde{\kappa})^{\frac{1}{\alpha-1}} - y_i(1-\tau)$ . The generalised mistrust parameter,  $e_i$ , does not appear in the demand for UBI. Thus,

$$\frac{\partial b^*}{\partial e_i} = 0 \tag{B.11}$$

### B.2 Proof Proposition 2

**Proof.** If  $y_i \leq y_A$ , the demand for UBI becomes  $b^* = \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$ . The derivative ith respect to  $e_i$  is straightforward:

$$\frac{\partial b^*}{\partial e_i} = -\frac{\tau(1-\lambda_i)}{\widetilde{\kappa}} < 0 \tag{B.12}$$

#### **B.3** Proof Proposition 3

**Proof.** If  $y_i > y_A$ , the demand for UBI is  $(q\tilde{\kappa})^{\frac{1}{\alpha-1}} - y_i(1-\tau)$ . To study the effect of political mistrust on the demand for UBI, I differentiate with respect to the parameter  $\lambda_i$ . Remind that  $\tilde{\kappa} = \kappa(1-\lambda_i) + \hat{\kappa}\lambda_i$ . Thus, the derivative is:

$$\frac{\partial b^*}{\partial \lambda_i} = \left(\frac{1}{\alpha - 1}\right) (q\widetilde{\kappa})^{\frac{1}{\alpha - 1} - 1} (\widehat{\kappa} - \kappa)q 
= -\frac{q(\widehat{\kappa} - \kappa)}{1 - \alpha} (q\widetilde{\kappa})^{\frac{2 - \alpha}{\alpha - 1}} < 0$$
(B.13)

#### **B.4 Proof derivative** (12)

**Proof.** If  $y_i \leq y_A$ , the demand for UBI becomes  $b^* = \frac{\tau(\bar{y}-e_i)(1-\lambda_i)}{\tilde{\kappa}}$ . To study the effect of political mistrust on the demand for UBI, I differentiate ith respect to the parameter  $\lambda_i$ . Remind that  $\tilde{\kappa} = \kappa(1-\lambda_i) + \hat{\kappa}\lambda_i$ . Thus, the derivative is:

$$\frac{\partial b^*}{\partial \lambda_i} = \frac{-\tau(\bar{y} - e_i)\tilde{\kappa} - (\hat{\kappa} - \kappa)\tau(\bar{y} - e_i)(1 - \lambda_i)}{\tilde{\kappa}^2} 
= \frac{-\tau(\bar{y} - e_i)\kappa(1 - \lambda_i) - \hat{\kappa}\lambda_i\tau(\bar{y} - e_i) - \hat{\kappa}\tau(\bar{y} - e_i)(1 - \lambda_i) + \kappa\tau(\bar{y} - e_i)(1 - \lambda_i)}{\tilde{\kappa}^2} 
= \frac{-\hat{\kappa}\lambda_i\tau(\bar{y} - e_i) - \hat{\kappa}\tau(\bar{y} - e_i) + \hat{\kappa}\tau(\bar{y} - e_i)\lambda_i}{\tilde{\kappa}^2} 
= -\frac{\tau(\bar{y} - e_i)\hat{\kappa}}{\tilde{\kappa}^2} < 0$$
(B.14)

### **B.5** Proof derivative (13)

**Proof.** If  $y_i > y_A$ , the demand for UBI is  $(q\tilde{\kappa})^{\frac{1}{\alpha-1}} - y_i(1-\tau)$ . To study the effect of the average preferences over the public good,  $\tilde{g}$ , on the demand for UBI, I differentiate with respect to the parameter q. Thus, the derivative is:

$$\frac{\partial b^*}{\partial q} = \left(\frac{1}{\alpha - 1}\right) (q\widetilde{\kappa})^{\frac{1}{\alpha - 1} - 1} \widetilde{\kappa}$$
$$= -\frac{\widetilde{\kappa}}{1 - \alpha} (q\widetilde{\kappa})^{\frac{2 - \alpha}{\alpha - 1}} < 0 \tag{B.15}$$

# C Descriptive statistics

	(1)	(2)	(3)	(4)	(5)
Variables	N	Mean	S.D.	Min	Max
UBI support (standardised)	36,355	0	1.000	-1.810	1.846
Political mistrust index	38,291	0	1.000	-2.681	1.770
Mistrust in parliament	$38,\!678$	5.362	2.535	0	10
Mistrust in political parties	38,761	6.330	2.366	0	10
Mistrust in politicians	$38,\!932$	6.304	2.407	0	10
Generalised mistrust index	39,032	0	1.000	-2.437	2.950
Mistrust in people	$39,\!327$	4.690	2.348	0	10
Unfariness	39,167	4.145	2.164	0	10
Unhelpfulness	39,265	4.781	2.226	0	10
Paid work	39,289	0.522	0.500	0	1
Education	39,289	0.0785	0.269	0	1
Unemployed	$39,\!289$	0.0508	0.220	0	1
Permanently sick or disabled	39,289	0.0264	0.160	0	1
Retired	$39,\!289$	0.249	0.433	0	1
Housework	$39,\!289$	0.0616	0.241	0	1
Other	39,289	0.0115	0.107	0	1
A big city	39,358	0.188	0.391	0	1
Suburbs or outskirts of big city	39,358	0.104	0.306	0	1
Town or small city	39,358	0.324	0.468	0	1
Country village	39,358	0.315	0.465	0	1
Farm or home in countryside	39,358	0.0688	0.253	0	1
Married	$38,\!581$	0.506	0.500	0	1
Separated	$38,\!581$	0.103	0.304	0	1
Widowed	$38,\!581$	0.0834	0.277	0	1
None of these	$38,\!581$	0.308	0.461	0	1
Household members	39,276	2.577	1.322	1	12
Age	39,272	49.43	18.57	15	100
Age (squared)	39,272	2,789	1,881	225	10,000
Less than lower secondary education (ISCED 0-1)	$39,\!193$	0.0927	0.290	0	1
Lower secondary education completed (ISCED 2)	$39,\!193$	0.179	0.383	0	1
Upper secondary education completed (ISCED 3)	$39,\!193$	0.365	0.481	0	1
Post-secondary non-tertiary education completed (ISCED 4)	$39,\!193$	0.130	0.336	0	1
Tertiary education completed (ISCED 5-6)	$39,\!193$	0.233	0.423	0	1
Income	$32,\!647$	5.269	2.732	1	10
Isco (2-digits)	35,739	48.75	24.85	0	96
Left-Right scale	$34,\!629$	5.117	2.192	0	10
Religiosity	39,088	4.468	3.122	0	10
Parental Benefits (standardised)	$36,\!554$	0	1.000	-2.171	1.933
Training vs UI (standardised)	36,783	0	1.000	-2.304	1.739
Climate Change Policies (standardised)	$37,\!999$	0	1.000	-1.441	1.784
Welfare cost	$37,\!621$	0.375	0.484	0	1
Misbehaviour	36,777	0.300	0.458	0	1

#### Table C.0.1: Descriptive statistics

Notes: The table presents the descriptive statistics of the variables used in the analysis. The descriptive statistics are: total number of observations (1); mean (2); standard deviation (3); minimum value (4); maximum value (5). Analytic weights are applied.

# D Political and generalised mistrust

### D.1 Fixed-effects correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)
Unfariness	0.584***		0.473***			
	(0.011)		(0.010)			
Unhelpfulness		0.470***				
		(0.011)				
Mistrust in political parties				0.870***		0.727***
				(0.005)		(0.009)
Mistrust in parliament					$0.666^{***}$	
					(0.007)	
Observations	39,125	39,214	39,067	$38,\!679$	38,483	38,354
Adjusted R-squared	0.377	0.291	0.317	0.773	0.583	0.538

#### Table D.1.1: Regression: FIXED-EFFECTS CORRELATIONS

Notes: the table shows the regressions between the variables for the generalised and political mistrust indeces. Region-fixed effects are always included. The same statistical model is used to compute the binned scatter plots. The dependent variables are: Mistrust in people (1)-(2), Unhelpfulness (3), Mistrust in politicians (4)-(5) and Mistrust in parliament (6). Standard errors clustered at the regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

#### D.2 Pairwise correlations

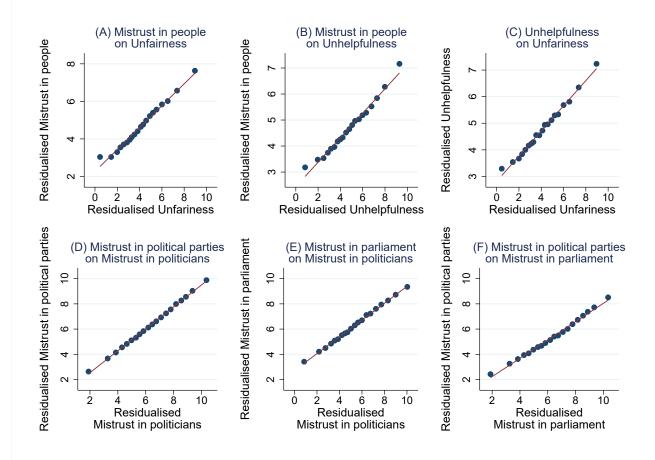


Figure D.1: Binned scatter plots generalised and political mistrust

Notes: This figure plots binned scatter plots for the correlation between mistrust in people and unfairness (Panel (A)), mistrust in people and unhelpfulness (Panel (B)), unhelpfulness and unfairness (Panel (C)), mistrust in political parties and mistrust in politicians (Panel (D)), mistrust in the parliament and mistrust in politicians (Panel (E)) and mistrust in political parties and mistrust in the parliament (Panel (F)). In all panels, both the horizontal and vertical axes are residualised against region-fixed effects.

	Parliament	Political Parties	Politicians
Parliament	1		
Political Parties	0.7168	1	
Politicians	0.7434	0.8768	1

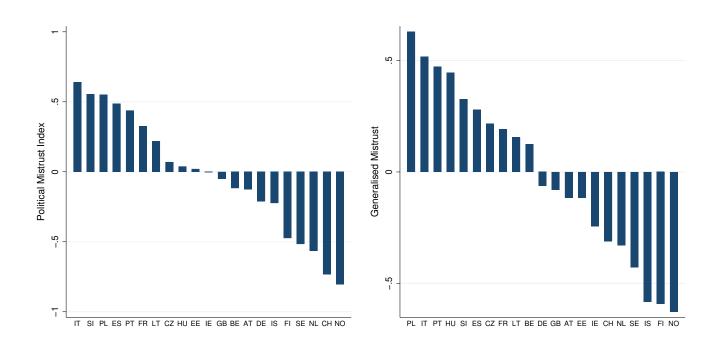
Table D.2.1: Pairwise Correlation: Political Mistrust

Notes: The table shows the pairwise correlation for the variables used to create the political mistrust index. All the correlations are statistically significant at the 1% level.

Table D.2.2: Pairwise Correlation: Generalised Mistrust

	Mistrust	Unfairness	Unhelpful
Mistrust	1		
Unfairness	0.5822	1	
Unhelpful	0.4953	0.5102	1

Notes: The table shows the pairwise correlation for the variables used to create the generalised mistrust index. All the correlations are statistically significant at the 1% level.



D.3 Political Mistrust Index and Generalised Mistrust Index

Figure D.2: Political Mistrust Index and Generalised Mistrust Index in 21 European countries

Notes: The graph shows the average political mistrust index (left graph) and the average generalised mistrust index (right graph) in 21 European countries. The higher the index is, the higher the level of mistrust is. Analytic weights are applied.

# E Marginal effects: Table 3

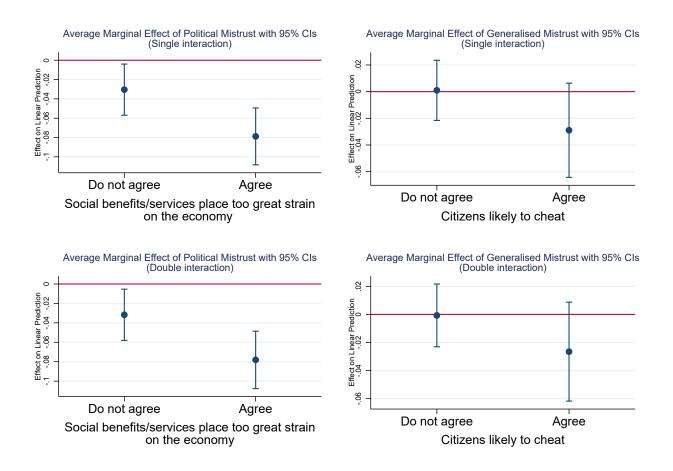


Figure E.1: Marginal effect of political and generalised mistrust: welfare cost and others' misbehaviour

Notes: The figure shows the plot of the coefficient of the marginal effects from Table 3 with a 95% confidence intervals. When the title single interaction, the graph refers to Columns (3) and (4). When the title reports double interactions, the graph refers to Column (5). Reference categories: "Do not agree".

## **F** Heterogeneity Analysis

Henceforth, I describe the main results of the heterogeneity analysis. The main purpose of the heterogeneity analysis is to examine how the effects of political and generalised mistrust vary across sub-population groups defined by the following factors: (i) income and education levels in Table F.1.1, (ii) political spectrum and religiosity in Table F.2.1, and (iii) residential area, age, citizenship, and gender in Table F.3.1. The heterogeneous analysis also enables the identification of whether specific sub-population groups are driving the results presented in Table 1.

#### F.1 Income and education level

The heterogeneity analysis in Column (1) of Table F.1.1 shows that the negative effect of political mistrust on preferences for UBI is 30% smaller for individuals at the bottom quintile of the income distribution compared to individuals in the percentile range 21%-79%. The interaction term between the bottom income quintile and political mistrust is statistically significant at the 5% level. However, the marginal effect of political mistrust on preferences for UBI in Figure F.1 is not statistically significant at the 5% statistical level. On the other hand, individuals at the top quintile of the income distribution do not show any heterogeneous effect compared to individuals in the percentile ranges 21%-79% in Table F.1.1. However, the marginal effect of political mistrust on the support for UBI for individuals at the top quintile is statistically significant at 1%. Finally, the overlap in confidence intervals (95%) confidence level) in the coefficient of the three income groups provides evidence that the negative correlation between political mistrust and UBI is not driven by any income group. Table F.1.1 also shows that the effect of generalised mistrust is not heterogeneous among income groups. Column (2) of Table F.1.1 shows that there is no heterogeneity in the effect of political and generalised mistrust between individuals who completed higher education and who did not. In the case of political mistrust, the marginal effects in Figure F.1 are statistically significant but the confidence intervals between individuals who completed higher education and those who did not overlap providing evidence that the negative correlation between political mistrust and UBI is not driven by the education level.

	UBI	support
Variables	(1)	(2)
	0.007***	0.054***
Political mistrust index	-0.067***	-0.054***
	(0.013)	<pre></pre>
Generalised mistrust index	-0.020*	
	(0.012)	(0.011)
Political mistrust index $\times$ Bottom quintile	$0.049^{**}$	
	(0.019)	
Political mistrust index $\times$ Top quintile	0.009	
	(0.020)	
Generalised mistrust index $\times$ Bottom quintile	0.012	
	(0.020)	
Generalised mistrust index $\times$ Top quintile	0.024	
	(0.023)	
Political mistrust index $\times$ Higher Education	. ,	-0.001
		(0.019)
Generalised mistrust index $\times$ Higher Education		-0.035
-		(0.021)
Regions	265	265
Observations	$28,\!805$	$25,\!437$
Adjusted R-squared	0.097	0.100

Notes: Columns (1)-(2) show the interactions between political mistrust and generalised mistrust and bottom and top quintiles (1) and higher education (2). Region-fixed effects, income controls, basic individual controls and ideology controls are always included. Each variable that is interacted with generalised and political mistrust is included in the controls of the regression, but not shown in the regression table. Reference categories: range 21-79% and no higher education. Standard errors clustered at the regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

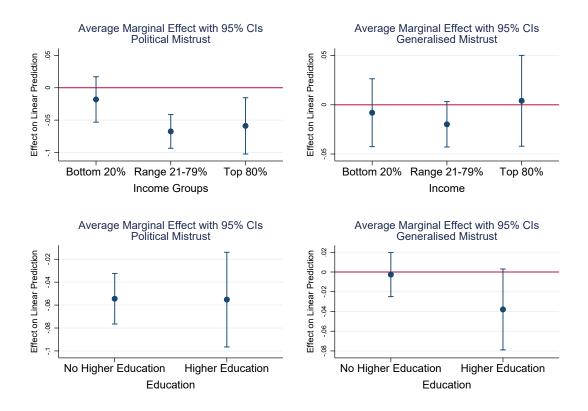


Figure F.1: Marginal effects of political and generalised mistrust: income and education

Notes: the plot shows the marginal effects of the interactions between political mistrust and generalised mistrust bottom and top quintiles and higher education with 95% confidence intervals. Reference categories: range 21-79% and no higher education.

#### F.2 Political spectrum and religiosity

The heterogeneity analysis in Column (1) of Table F.2.1 shows that generalised mistrust has a negative effect on preferences for UBI only for leftists compared to centrists. Indeed, generalised mistrust reduces the UBI support by 5.9% of a standard deviation and this effect is statistically significant at 1%. On the other hand, political mistrust does not show any heterogeneous effect by political spectrum groups.

In Column (2) of Table F.2.1, I study the effect of the heterogeneous effect of being religious. Because the degree of religiosity in the main model is a variable ranging from 0 to 10, to better define whether a person is religious or not, in the heterogeneity analysis I use the question to generate a dummy variable: "Do you consider yourself as belonging to any particular religion or denomination?". If the respondent answered "Yes", they are considered as religious and they are assigned with a value 1. Non-religious people are assigned the value 0. The interaction terms in Column (2) show that religious people have around a 20% smaller negative effect of generalised mistrust on preferences for UBI (statistically significant at the 5% level), while there is no heterogeneous effect for political mistrust. However, by looking at Figure F.2, the marginal effect is not statistically significant.

By looking at the marginal effects, Figure F.2 does not show statistically significant differences between centrists, leftists and rightists and between religious and not religious people as the confidence intervals of the marginal effects overlap. As a consequence, Figure F.2 suggests that the effects of political and generalised mistrust are not driven by any sub-population group related to the political spectrum or religiosity.

	UBI	support
Variables	(1)	(2)
Political mistrust index	-0.043***	-0.053***
	(0.016)	(0.015)
Generalised mistrust index	0.010	-0.029*
	(0.016)	(0.015)
Political mistrust index $\times$ Rightist	0.002	
	(0.019)	
Political mistrust index $\times$ Leftist	-0.017	
	(0.018)	
Generalised mistrust index $\times$ Rightist	-0.011	
0	(0.018)	
Generalised mistrust index $\times$ Leftist	-0.059***	
	(0.019)	
Political mistrust index $\times$ Religious	· · ·	-0.010
		(0.018)
Generalised mistrust index $\times$ Religious		0.035**
		(0.016)
Regions	265	265
Observations	$27,\!343$	$25,\!447$
Adjusted R-squared	0.097	0.101

#### Table F.2.1: REGRESSION: UBI HETEROGENEOUS EFFECT BY EDUCATION AND INCOME

Notes: Columns (1)-(2) show the interactions between political mistrust and generalised mistrust and bottom and the political spectrum (leftist, centrist, rightist) (1) and religiosity (religious, not religious) (2). Reference categories: centrist, not religious. Region-fixed effects, income controls, basic individual controls and ideology controls are always included. Each variable that is interacted with generalised and political mistrust is included in the controls of the regression, but not shown in the regression table. Standard errors clustered at the regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

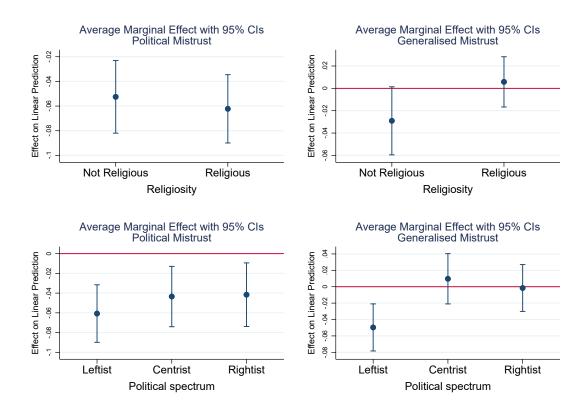


Figure F.2: Marginal effects of political and generalised mistrust: political spectrum and religiosity

Notes: the plot shows the marginal effects of the interactions between political mistrust and generalised mistrust and political spectrum (leftist, centrist, rightist) and religiosity (religious, not religious) with 95% confidence intervals. Reference categories: centrist, not religious.

### F.3 Residential area, age, citizenship and gender

Table F.3.1 show that the only heterogeneous effect is given by individuals living in a big city compared to those living in a rural or small city. Indeed, people living in a big city show a negative effect of generalised mistrust on preferences for UBI. However, the result is statistically significant only at 10%.

When looking at the marginal effects, Figure F.3 and Figure F.4 do not show any heterogeneity that could drive the results of Table 1.

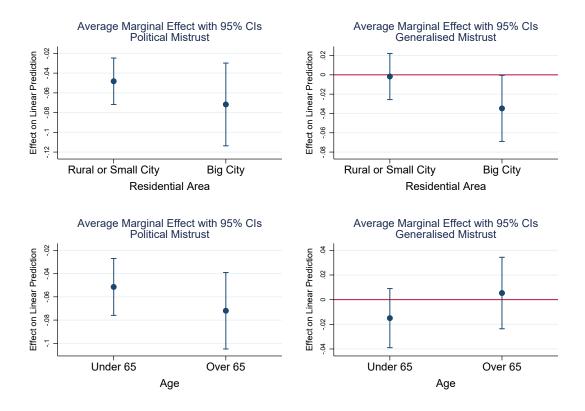


Figure F.3: Marginal effects of political and generalised mistrust: residential area and age

Notes: the plot shows the marginal effects of the interactions between political mistrust and generalised mistrust and residential area (big city, rural or small city) and age (younger than 65, older than 65) with 95% confidence intervals. Reference categories: rural or small city, younger than 65

	UBI support			
Variables	(1)	(2)	(3)	(4)
Political mistrust index	-0.048***	-0.051***	-0.061**	-0.056***
i onticai mistrust muex	(0.043)	(0.012)	(0.030)	(0.015)
Generalised mistrust index	-0.002	-0.015	0.008	-0.006
	(0.012)	(0.012)	(0.031)	(0.014)
Political mistrust index $\times$ City	-0.024	(0.012)	(0.001)	(01011)
v	(0.022)			
Generalised mistrust index $\times$ City	-0.033*			
	(0.019)			
Political mistrust index $\times$ Over 65	· · ·	-0.020		
		(0.017)		
Generalised mistrust index $\times$ Over 65		0.020		
		(0.016)		
Political mistrust index $\times$ Citizen			0.007	
			(0.032)	
Generalised mistrust index $\times$ Citizen			-0.020	
			(0.032)	
Political mistrust index $\times$ Male				0.002
				(0.014)
Generalised mistrust index $\times$ Male				-0.011
				(0.014)
Regions	265	265	265	265
Observations	$25,\!437$	$25,\!457$	$25,\!437$	$25,\!437$
Adjusted R-squared	0.100	0.099	0.100	0.100

Table F.3.1: REGRESSION: UBI SUPPORT, POLITICAL MISTRUST AND GENERALISED MISTRUST

Notes: Columns (1)-(4) show the interactions between political mistrust and generalised mistrust and bottom and residential area (big city, rural or small city) (1), age (younger than 65, older than 65) (2) citizenship (citizen, not a citizen) (3) and gender (male, female) (4). Reference categories: rural or small city, younger than 65, not a citizen, female. Region-fixed effects, income controls, basic individual controls and ideology controls are always included. Each variable that is interacted with generalised and political mistrust is included in the controls of the regression, but not shown in the regression table. Standard errors clustered at the regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

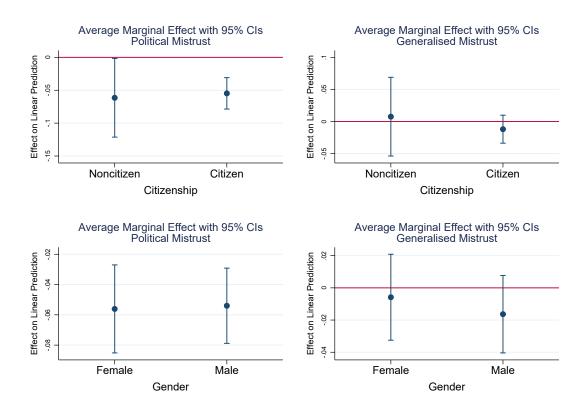


Figure F.4: Marginal effects of political and generalised mistrust: citizenship and gender

Notes: the plot shows the marginal effects of the interactions between political mistrust and generalised mistrust and citizenship (citizen, not a citizen) and gender (male, female) with 95% confidence intervals. Reference categories: not a citizen, female.

# G Robustness Checks

## G.1 Robustness: Principal Component Analysis

		UBI support	t
Variables	(1)	(2)	(3)
Mistrust in people	-0.006		
	(0.004)		
Unfariness		0.001	
		(0.004)	
Unhelpfulness			-0.006
			(0.004)
Political mistrust index	-0.055***	-0.060***	-0.055***
	(0.011)	(0.011)	(0.012)
Income	-0.026***	-0.026***	-0.026***
	(0.004)	(0.004)	(0.004)
Regions	265	265	265
Observations	$25,\!437$	$25,\!437$	$25,\!437$
Adjusted R-squared	0.100	0.100	0.100

Table G.1.1: UBI support and generalised mistrust

Notes: Columns (1)-(3) report the support for universal basic income regressed on three different measures of generalised mistrust. Region-fixed effects, income controls, basic individual controls and ideology controls are always included. Standard errors clustered at regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

	UBI support				
Variables	(1)	(2)	(3)		
Mistrust in politicians	$-0.020^{***}$ (0.005)				
Mistrust in political parties		-0.021***			
		(0.005)			
Mistrust in parliament			-0.017***		
			(0.004)		
Generalised mistrust index	-0.014	-0.014	-0.016		
	(0.011)	(0.011)	(0.011)		
Income	-0.025***	-0.025***	-0.026***		
	(0.004)	(0.004)	(0.004)		
Regions	265	265	265		
Observations	$25,\!437$	$25,\!437$	$25,\!437$		
Adjusted R-squared	0.099	0.099	0.099		

Table G.1.2: UBI support and political mistrust

Notes: Notes: Columns (1)-(3) report the support for universal basic income regressed on three different measures of political mistrust. Region-fixed effects, income controls, basic individual controls and ideology controls are always included. Standard errors clustered at regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively. Controls have been suppressed for brevity.

## G.2 Other Robustness Checks

	UBI support				
Variables	(1)	(2)	(3)	(4)	(5)
Political mistrust index	-0.052***	-0.050***	-0.052***	-0.049***	-0.062***
	(0.012)	(0.013)	(0.013)	(0.013)	(0.014)
Generalised mistrust index		-0.006	-0.013	-0.017	-0.013
		(0.012)	(0.012)	(0.012)	(0.012)
Income			-0.030***	-0.032***	-0.030***
			(0.004)	(0.005)	(0.005)
Cut 1	-1.144***	-1.142***	-1.121***	-1.217***	-1.577***
	(0.017)	(0.018)	(0.107)	(0.134)	(0.156)
Cut 2	-0.006	-0.004	0.054	-0.039	$-0.384^{**}$
	(0.007)	(0.009)	(0.106)	(0.134)	(0.156)
Cut 3	$1.495^{***}$	$1.495^{***}$	$1.563^{***}$	$1.468^{***}$	$1.130^{***}$
	(0.022)	(0.022)	(0.108)	(0.132)	(0.156)
Log-pseudolikelihood	-41209	-40982	-32144	-31431	-29006
Region FE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Income Controls			$\checkmark$	$\checkmark$	$\checkmark$
Basic Individual Controls				$\checkmark$	$\checkmark$
Ideology Controls					$\checkmark$
Regions	265	265	265	265	265
Observations	$35,\!575$	$35,\!365$	28,022	$27,\!414$	$25,\!437$

Table G.2.1: Regression: Ordered Probit

Notes: Columns (1)-(5) report the ordered probit results of the support for universal basic income regressed on political mistrust and generalised mistrust. Standard errors clustered at the regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively. Only political mistrust, generalised mistrust and income are shown.

	UBI support					
Variables	(1)	(2)	(3)	(4)	(5)	
Political mistrust index	-0.047***	-0.046***	-0.046***	-0.041***	-0.052***	
	(0.014)	(0.015)	(0.014)	(0.014)	(0.015)	
Generalised mistrust index		-0.002	-0.009	-0.013	-0.009	
		(0.012)	(0.010)	(0.010)	(0.010)	
Income			-0.025***	-0.028***	-0.025***	
			(0.005)	(0.006)	(0.006)	
Country FE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Countries	21	21	21	21	21	
Observations	$35,\!576$	$35,\!366$	28,022	27,414	$25,\!437$	
Adjusted R-squared	0.053	0.052	0.066	0.070	0.081	

Table G.2.2: REGRESSION: UBI SUPPORT, POLITICAL AND GENERALISED MISTRUST AT COUNTRY LEVEL

Notes: Columns (1)-(5) report the support for universal basic income regressed on political mistrust (1), generalised mistrust (2), income controls: income deciles, occupation (2-digit isco08), employment (paid work, unemployed, education, disabled, retired, other) (3), basic individual controls: gender, education (ISCED), age, age squared, number of household's member's, type of respondent's domicile (big city, suburbs of a big city, town, country village or farm), marital status and citizenship (4), ideology controls: degree of religiosity, left-right scale (5). Standard errors clustered at the country level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

Table G.2.3: REGRESSION: UBI SUPPORT, POLITICAL MISTRUST AND GENERALISED MISTRUST (INCOME CATEGORICAL VARIABLE)

	UBI support						
Variables	(1)	(2)	(3)	(4)	(5)		
Political mistrust index	-0.048***	-0.046***	-0.048***	-0.044***	-0.055***		
	(0.010)	(0.012)	(0.011)	(0.011)	(0.012)		
Generalised mistrust index		-0.006	-0.011	-0.015	-0.011		
		(0.011)	(0.010)	(0.011)	(0.011)		
Income Decile 2			-0.060**	-0.052*	-0.057*		
			(0.028)	(0.029)	(0.031)		
Income Decile 3			-0.082***	-0.086***	-0.082**		
			(0.031)	(0.032)	(0.034)		
Income Decile 4			-0.096***	-0.102***	-0.084***		
			(0.029)	(0.030)	(0.031)		
Income Decile 5			$-0.134^{***}$	$-0.143^{***}$	-0.134***		
			(0.031)	(0.033)	(0.035)		
Income Decile 6			$-0.146^{***}$	-0.153***	-0.143***		
			(0.033)	(0.035)	(0.038)		
Income Decile 7			-0.133***	-0.144***	-0.129***		
			(0.036)	(0.038)	(0.040)		
Income Decile 8			-0.191***	-0.200***	-0.182***		
			(0.033)	(0.035)	(0.038)		
Income Decile 9			-0.227***	-0.241***	-0.219***		
			(0.034)	(0.038)	(0.040)		
Income Decile 10			-0.292***	-0.308***	-0.287***		
			(0.040)	(0.043)	(0.045)		
Region FE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Income Controls			$\checkmark$	$\checkmark$	$\checkmark$		
Basic Individual Controls				$\checkmark$	$\checkmark$		
Ideology Controls					$\checkmark$		
Regions	265	265	265	265	265		
Observations	$35,\!575$	35,365	28,022	27,414	$25,\!437$		
Adjusted R-squared	0.073	0.072	0.086	0.089	0.100		

Notes: Columns (1)-(5) report the support for universal basic income regressed on political mistrust (1), generalised mistrust (2), income controls: income deciles (categorical variable. Reference category: first decile), occupation (2-digit isco08), employment (paid work, unemployed, education, disabled, retired, other) (3), basic individual controls: gender, education (ISCED), age, age squared, number of household's member's, type of respondent's domicile (big city, suburbs of a big city, town, country village or farm), marital status and citizenship (4), ideology controls: degree of religiosity, left-right scale (5). Standard errors clustered at regional level in parentheses. \*\*\*, \*\*, and \* indicate levels of statistical significance at 1, 5, and 10 percent, respectively.

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