# Can we all be Denmark? Re-evaluating the role of culture as a determinant of welfare state reforms

Andrea Celico [*]      Martin Rode [†]

November 29, 2021

**Abstract**

Past research has demonstrated the economic effectiveness of welfare state reforms that broadly follow the Danish flexicurity model, defined as the combination of highly flexible labor market policies and generous protection schemes for individuals that become unemployed. Notwithstanding, it has also been argued that the institutional viability of this model rests on very specific cultural characteristics, such as the prevalence of high overall levels of social trust. Furthermore, large and generous welfare states might erode civic attitudes over time, defined here as people's willingness to cheat on taxes, transfers, or practice free-riding. Combining data from all available waves of the World Values Survey and the European Values Study with a self-constructed flexicurity index, this paper finds no support for either claim in a sample of OECD and EU countries.

JEL Classification: I38, K31, H55, H29 , Z18

Keywords: Welfare state reform, Flexicurity, Social trust, Civic attitudes, Benefits and tax morale

---

[*]Universidad de Navarra. Economics Department. Campus Universitario. 31009. Pamplona. Navarra (Spain). Email: acelico@unav.es (Corresponding author)

[†]Universidad de Navarra. Economics Department. Campus Universitario. 31009. Pamplona. Navarra (Spain). Email: martinrode@unav.es

# 1   Introduction

In the last three decades Danish labor market institutions have attracted a lot of attention among scholars. Denmark has traditionally been characterised by a combination of flexible labor markets and high levels of income protection, but this has not always guaranteed satisfactory macroeconomic performances. Only after a set of reforms in the 1990s which introduced a shift from passive to active labor market policies, the Danish total unemployment rate has substantially decreased and remained well under the levels of the rest of the European Union countries (Andersen, T. M. and Svarer, M., 2007; Zhou, 2007). Even in the experience of the Great Recession, the Danish organization of welfare state institutions ensured high levels of gross job flows and low youth and long-term unemployment rates (Andersen, T. M., 2015). For this reason, the Danish flexicurity model, i.e. the combination of flexible labor markets with employment security along with a set of targeted *active labor market policies* (ALMPs), has become a cornerstone in many of the European Union (EU) policy reform guidelines. According to EU official documents, the synthesis of labor market flexibility, security, and appropriate ALMPs would allow to tackle labor market segmentation and facilitate the transition between jobs, as required by the constantly and rapidly changing context brought forth by globalisation and technological advances, allowing for overall better economic perfomances [1].

However, although its merits have been widely recognised, flexicurity principles have faced some resistance making their way into the welfare systems of certain countries. For instance, many Southern EU member states have limited themselves to the introduction of novel contractual forms for new hires, without really changing regimes for labor market insiders. In addition, unemployment benefit systems have often experienced benefit reductions, yet without enhancing labor market flexibility in a significant way. As a result, the institutional configuration of many European welfare states has remained far from the Danish flexicurity model (Boeri, T. and Conde-Ruiz, J. and Galasso, V., 2012). Thus, it seems logical to ask "why haven't other countries adopted the Danish flexicurity arrangements?" Cultural arguments can help to answer this question, as it is nowadays settled that social norms have particular relevance for the design of welfare state institutions and for their reforms. Within this perspective, two cultural traits are particularly important: civic attitudes and social trust. Civic attitudes can be defined as the manifestation of the degree of engagement with civic norms of an individual. Social trust is the individual expectation about others' trustworthiness and is considered to be an important determinant of overall civic attitudes. In a famous work, Lindbeck, A. (1995) warned about the possibility that welfare state systems may provide the incentive to abandon social norms and to abuse of social security benefits, thus making their sustainability more difficult. Although it seems very plausible and it generated some agreement among scholars, this view has never definitively settled the issue and today empirical evidences are still contradictory. On one side,

---

[1] See "Towards Common Principles of Flexicurity: More and better jobs through flexibility and security". At https://eur-lex.europa.eu

Lindbeck's argument is supported by some empirical studies that associate increasing social expenditure to the progressive erosion of civic attitudes such as tax morale and benefits morale, determining an effect which is known in the literature as "crowding-out effect". Accordingly, the existence of a such effect would represent a relevant concern for the fiscal sustainability of larger welfare states. On the other side, there exist empirical evidences indicating that the exposure to larger and well-developed welfare states favors the creation of civic attitudes, or at least it does not erode them. Thus, it remains unclear whether the implementation of reforms expanding welfare state benefits, like flexicurity, is impeded by the existence of a crowding-out effect that these welfare state models exert on civic attitudes, or it depends on other factors.

In this paper we empirically test for a set of OECD and EU countries whether the combination of larger welfare state benefits together with the flexibilization of labor markets determines an erosion of individuals' civic attitudes. Our approach is innovative inasmuch as it combines the study of the relationship between welfare state generosity and civic attitudes with the understanding of the role of social trust in the process of reforming welfare state institutions. To the best of our knowledge, our paper is the first to bring together these two very related strands of literature. Moreover, our work relies on a more extended set of data than most previous studies. Combining data from all the available waves of the World Values Survey (WVS) and the European Values Study with a self-constructed proxy for the intensity of country-level flexicurity, this paper finds no support for the claim that civic attitudes are substantially eroded by reforms going in the direction of flexicurity. Conversely, we find that such reforms might actually be associated with improvements in declared civic attitudes, without being conditional neither on average social trust levels, nor on past welfare state designs.

Findings thus challenge the existence of a crowing-out effect and its dependency on pre-existing levels of social trust. In contrast with work claiming that flexicurity reforms are only viable in countries with the unique combination of high trust levels and a strong civic culture, such as Denmark (Algan, Y. and Cahuc, P., 2006), our findings suggest that institutional reforms guided by flexicurity principles may theoretically be viable in more countries than could be expected. The rest of the paper is structured as follows: Section 2 reviews the literature on welfare state organization, civic attitudes, and social trust; Section 3 introduces the data and describes our self-constructed proxy for flexicurity; Section 4 specifies the empirical strategy and discusses the results; Section 5 contains some concluding remarks.

# 2 Literature review

The flexicurity model of welfare state emerged in Denmark in the early 2000s in the form of a "golden triangle" combining flexible labor markets, generous social transfers and active labor market policies to provide the incentives to "activate" the unemployed. This

model has often been praised for being associated to low unemployment rates and higher standards of income security for the unemployed with respect to other welfare state organizations (Sharkh, 2008; Phillips and Eamets, 2007; Sahnoun and Abdennadher, 2019). The effectiveness of the two main pillars of flexicurity policies, namely labor market flexibility and high standards of income security have generated a lot of discussion among labor economists. Many studies remarked how well-designed labor market institutions and more flexible labor markets are important factors contributing to lower unemployment rates and to overall better labor market performances (Scarpetta, 1996; Blanchard and Wolfers, 2000; Feldmann, 2009; Bernal-Verdugo et al., 2012). As for social security, it is a commonplace that the expansion of social security provisions, if without stringent control mechanisms, both can reduce the individual incentive to work and raise the level of reservation wages (Lindbeck, 1994). This can turn into a higher incidence of welfare state abuses, a boosting effect for the informal economy and eventually higher and more persistent unemployment rates (Lemieux et al., 1994; Card et al., 2007; Zhou, 2007; Feldstein, 2005). Civic attitudes can be an informal barrier against the diffusion of cheating behaviors toward welfare state provisions as they entail the sense of individual responsibility and the individual attitudes toward the public good (Letki, 2006). In this sense, civic attitudes represent the declared willingness of an individual to comply with social norms and collective prescriptions. Breaking a social norm in a community provided with high civic attitudes is discouraged because it will generate a utility loss in the individual, caused by the sense of discomfort related to committing the infraction. (Lindbeck, A., 1995). Although the strength of civic attitudes of a community is highly related to the likelihood of anti-social behaviors to happen, civic attitudes do not necessarily coincide with real individuals' behaviors. If is true that cultural traits matter for the determination of institutional designs (Moellman and Tarabar, 2021; Andriani et al., 2020; Algan and Cahuc, 2009; Lindbeck et al., 1999), it should be also considered the argument by which, over the long-run, the incentives provided by different institutional designs can influence civic attitudes themselves (Lindbeck, A., 1995).

On this last point, the existing literature appears rather divided about what is the effect of the expansion of social benefits on top of the stock of existing civic attitudes. Do transfers and subsidies expansions erode the stock of civic attitudes? For some, there exists a concern for a "self-destructive welfare state", that by extending social benefits would over the long-run deteriorate the stock of existing civic attitudes, thus reducing the disincentive that keeps away individuals from cheating on social security provisions (Heinemann, 2008). As a consequence of such a "crowding-out" effect of larger welfare states on civic attitudes, the successful implementability of the flexicurity model would be impeded in all those countries that do not present a particularly high sense of "public-spiritedness" similar to the Danish one, as otherwise morally hazardous behaviours would jeopardize the fiscal sustainability of the system (Algan, Y. and Cahuc, P., 2006). On the other hand, there is a second strand of literature made of scholars who found evidences contradicting the crowding-out effect hypothesis (Rothstein, 2001; Boje and Strandh, 2005; Kääriäinen and Lehtonen, 2006;

Künemund and Rein, 1999; Nicolaysen, 2001; Salamon and Sokolowski, 2003; Kumlin and Rothstein, 2003). According to this literature, larger social expenditure does not determine any deterioration of the existing civic attitudes, and consequently, the fiscal sustainability of the social security scheme is not put at risk from the supposed erosion of social capital caused by the generosity of the welfare state (Van Oorschot, 2005). In light of these empirical evidences, agreement about the existence of a crowding-out effect is little.

It is also worth noticing that the above-mentioned literature has not provided a satisfactory explanation for what is the role played by social trust in the process of welfare state reform. Social trust can be defined as an individual expectation about the others' trustworthiness and honest behaviors (Uslaner, 2002), which is highly dependent on individual feelings of reciprocity. Following Putnam et al. (1994), social trust is a facilitator of solidarity and co-operation among individuals, which discourages selfish attitudes and incentivizes individuals to collaborate for the public good. By this mechanism, social trust is a factor contributing to the determination of civic attitudes (Letki, 2006), can alleviate the moral-hazard issues arising from the expansion of social benefits (Algan and Cahuc, 2009), and is generally associated to better economic and institutional outcomes (Newton et al., 2018; Bergh, 2020). Given the close relation between social trust and civic attitudes, and considered that welfare state organizations are very sensitive to the free-rider problem, social trust is a fundamental cultural trait to take into account in the designing of social security schemes. However, a clear causal nexus between trust and welfare state policies has not been identified yet. Is trust a necessary pre-existing condition for larger welfare states or is it the result of their implementation? In a first set of studies it has been claimed that social trust can be fostered by appropriate designs of the welfare state policies. These studies focused mostly on the Scandinavian dilemma, characterised by the co-existence of high levels of civic attitudes, trust and extensive welfare state arrangements (which are supposed to create high incentives for anti-social behaviors) (Kumlin and Rothstein, 2005). According to these works, the universal welfare state model is capable of creating social trust (Rothstein, B. and Uslaner, E. M., 2005; Rothstein, B., 2003) while other types of social programs may reduce it (Kumlin and Rothstein, 2003). However, apart from the results obtained for the Scandinavian countries, the evidences supporting this view are rather scarce and a second set of more recent studies started going in the opposite direction: trust is rather an exogenous factor whose presence is a determinant for the successful implementation of certain types of welfare state arrangements and reforms. In line with this hypothesis, Heinemann and Tanz (2008) highlight how the presence of high levels of trust makes easier to collectively agree around certain welfare enhancing reforms. Similarly, (Berggren, N. and Bjørnskov, C., 2017) specify that social trust has an important dual role in the political process: it facilitates the implementation of market-liberalizing reforms, while it makes the implementation of de-liberalizing reforms more difficult. This could imply that the observed trust - flexicurity link may actually depend on an endogenous preference of high trust societies for reform processes that make the welfare state compatible with free markets. As a consequence, the resistance

to implement flexicurity models in certain countries would not necessarily depend on fiscal sustainability concerns resulting from the expectation of increased levels of cheating, but rather on the political viability of being able to collectively negotiate reforms. In another paper supporting the idea of trust as a prerequisite for large welfare states, Bjørnskov and Svendsen (2013) put that social trust is likely to be a determinant of the welfare state size and that it favours the fiscal sustainability of generous welfare arrangements, by reducing uncivic attitudes. In this sense social trust is a necessary but not sufficient condition for the successful implementation of generous social security schemes, that would be otherwise exposed to large free-riding problems (Bergh, A. and Bjørnskov, 2011).

All in all, scholars appear divided about both what is the effect of larger welfare state provisions on civic attitudes and about the relationship occurring between social trust and welfare state designs. This makes our research design highly valuable as it investigates the existence of a crowding-out effect of the flexicurity model on top of individuals' civic attitudes while trying to shed light on the role played by social trust in the process of welfare state reform.

# 3   Data

The empirical analysis of this study relies on two different data sources. First, we employ the integrated World Value Survey/European Value Studies (WVS/EVS) for collecting individuals' micro-data about social, cultural characteristics, and civic attitudes. Secondly, we use the database offered by the Fraser Institute on the Economic Freedom (EFW) [2] index to collect indicators regarding publicly financed social expenditure and labour market regulation levels, which we use to construct a self-made indicator to measure the degree of flexicurity across countries and time. Below follows a detailed description of the two data sources.

## 3.1   World Value Survey

The integrated WVS/EVS study offers a reliable survey-data source for exploring the moral and social beliefs, values, and motivations of people around the world. It offers individual micro-data collected from more than 150 countries that contain about 90% of the world's population on a period from 1981 to 2020. Our dependent variables are coded from three WVS questions about individuals' civic attitudes. Specifically, these variables capture the attitudes toward the following three behaviors: tax-evasion/tax avoidance, free riding on social security benefits, free-riding on public transports. The variables are measured on a 0-10 Likert's scale and respond to the survey questions:

1. CHEATING ON GOVERNMENT BENEFITS: "How justifiable it is to claim government benefits to which you are not entitled?", where 1 stands for "Never justifiable"

---

[2]https://www.fraserinstitute.org

and 10 for "Always justifiable" and 5 is a neutral judgement.

2. CHEATING ON TAXES: "How justifiable it is to cheat on taxes if you have a chance?", where 1 stands for "Never justifiable", 10 for "Always justifiable" and 5 is a neutral judgement.

3. AVOID FARE: "How justifiable it is to avoid paying a fare on public transport?", where 1 stands for "Never justifiable" and 10 for "Always justifiable" and 5 is a neutral judgement.

Our prominent variables of interest are the first and the second here listed, as they are directly relevant for the social security scheme sustainability. We use "Avoid fare" as an additional proxy for overall attitudes towards cheating behaviours and free-riding. Following the definition given by Uslaner (2002), the survey also offers a measure for social trust, captured by the survey question: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?". The resulting variable is a dummy with two possible response categories: "most people can be trusted", in which case SOCIAL TRUST=1, and "need to be careful", in which case SOCIAL TRUST=0. For the scope of our analysis, we use SOCIAL TRUST (ST) to generate a new variable capturing average social trust at the country level. Note that while ST captures an individuals' feature, AVERAGE SOCIAL TRUST (AST) captures the evolution over time of trust, aggregating individual's responses by nationality of the respondent and year of observation. We then introduce a set of relevant controls : [3]

- Female: it takes value one if the gender of the respondent is female, zero otherwise.

- Age 15-30: it is one if the respondent' age is from 15 to 30 years old.

- Age 60+: it takes value one if the respondent is older than 60 years old, 0 otherwise.

- Self-employed: it takes value one if the respondent is an independent worker, 0 otherwise.

- Unemployed: it takes value one if the respondent is unemployed at the moment of the survey or 0 if is employed.

- Income high: it takes value one if the respondent enjoys a high level of income, zero otherwise.

---

[3]Age and the process of growing old are associated to improved civic morality and social trust (Letki, 2006; Sutter and Kocher, 2007; Schwadel and Stout, 2012; Clark and Eisenstein, 2013). Gender and religious activism influence overall civicness, trust, and tax morale (Letki, 2006; Bjørnskov, 2007; Dingemans and Van Ingen, 2015). Social-economic characteristics such as employment status, income and education also contribute to the determination of trust and civic attitudes (Alesina and La Ferrara, 2002; Bergh and Bjørnskov, 2014). Finally, political ideology is also a determinant of social trust as according to Forbes and Zampelli (2013) and Pitlik and Rode (2020)

Table 1: Summary statistics - OECD and EU28 countries

| | Obs. | Mean | SD | Min | Max |
|---|---|---|---|---|---|
| Avoid fare | 212375 | 2.456033 | 2.255211 | 1 | 10 |
| Cheat tax | 224336 | 2.257146 | 2.137374 | 1 | 10 |
| Cheat benefits | 221515 | 2.242489 | 2.161356 | 1 | 10 |
| Female | 236560 | .5293794 | .4991372 | 0 | 1 |
| Age 15 - 30 | 236509 | .2658842 | .4418038 | 0 | 1 |
| Age 60+ | 236509 | .2138692 | .4100365 | 0 | 1 |
| Self-employed | 233914 | .0719324 | .2583765 | 0 | 1 |
| Unemployed | 233914 | .0610994 | .239513 | 0 | 1 |
| Income_low | 225327 | .2443826 | .4297215 | 0 | 1 |
| Income_high | 225327 | .4510245 | .4975967 | 0 | 1 |
| Education_low | 222728 | .1640521 | .3703237 | 0 | 1 |
| Education_high | 222728 | .4022709 | .4903571 | 0 | 1 |
| Children 1 or 2 | 228240 | .3550605 | .4785327 | 0 | 1 |
| Good health | 205797 | .686526 | .4639063 | 0 | 1 |
| Religious | 224931 | .6106939 | .487594 | 0 | 1 |
| Left orientation 10 | | 196341 | 5.517034 | 2.178771 | 1 |
| Life control | 225367 | 7.02164 | 2.219768 | 1 | 10 |
| Social trust (ST) | 228461 | .3381365 | .4730763 | 0 | 1 |
| AST | 237767 | .3393999 | .1648297 | .0413058 | .7604307 |
| FX index | 239093 | .033636 | 2.228865 | -6.001671 | 5.349315 |
| Log_GDPPC | 239062 | 9.789445 | .858265 | 7.390948 | 11.6854 |
| EVS/WVS wave | 237767 | 4.275261 | 1.961041 | 1 | 7 |

- Income low: it takes value one if the respondent enjoys a low level of income, zero otherwise.

- Education high: it takes value one if the respondent enjoys a level of education equal or higher to tertiary education, zero otherwise.

- Education low: it takes value one if the respondent enjoys a level of education equal or lower to primary education, zero otherwise.

- Good health: it is a variable equal to one if the respondent declares to enjoy an overall good health status, zero otherwise.

- Religious: it is one if the respondent defines himself/herself as religious, zero otherwise.

- Left-orientation: it is one for left-wing respondents, 10 for right-wing individuals.

- Life control: it captures the degree to which a respondent declares to feel in control of his/her life on a scale from 1 to 10.

- Log GDPPC: it is the logarithm of per capita GDP by country as from the World Bank database.

Table 1 shows the descriptive statistics for a sample of EU28 and the OECD countries. Figure 1 shows the distribution of social trust and civic attitudes over time and across countries. On the y-axis (0-10) we take the average by country of the three civic attitudes of interest, while on the x-axis (0-1) we plot the average country level of trust. Red lines indicate the overall average value for each one of the variables displayed. Recall from the description of our dependent variables that, on the y-axis, higher scores correspond to a higher tolerance for anti-social behaviors. While for the average levels of trust we observe substantial variation across the EU28 countries, the same does not hold true for overall civicness, where Continental and Southern European countries seem to be concentrated in a much more restricted interval of values. Civic attitudes in countries like Italy or Spain are rather in line with the levels displayed by Northern countries, where the universal welfare state is successfully in place. If we found, in countries like the Southern European ones, a particularly lower presence of civic attitudes we could expect that expanding social benefits could foster moral-hazard to a greater extent than in countries characterized by higher standards of civic attitudes. However this does not seem to be the case.

Figure 1: Average social trust and overall civicness by country - OECD&EU28 countries
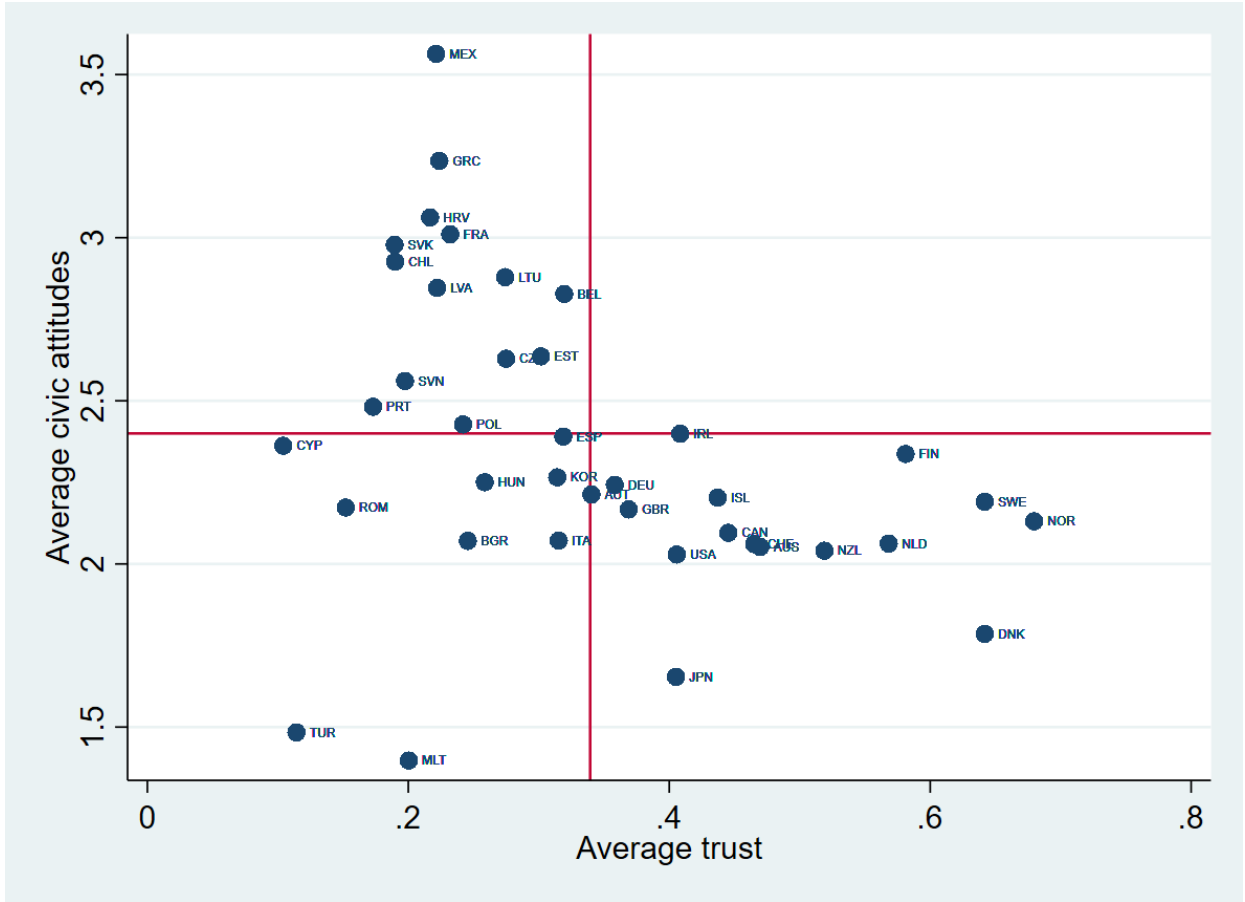


## 3.2 Measuring flexicurity

According to EU institutions' documents, the concept of flexicurity has four main components: *flexible and secure contractual arrangements (FSCA); lifelong learning strategies (LLS); effective labour market policies (LMP); modern social security systems (SSS).* Each one of these components is evaluated according to a broad range of legislative and financial dimensions. Just to name a few: FSCA is founded on *employment protection legislation* (EPL) scores, proportion of temporary employment and number of weekly hours in the main job; LLS take into account levels of public expenditure on education both from public and private institutions along with the levels of participation in these programs; LMP are evaluated according to the level of ALMPs expenditure, the number of people in these programs and unemployment indicators; finally, SSS are ranked according to their levels of expenditure on social protection, passive LMP, risk of poverty, employment rate of females, formal childcare etc. The difficulty to synthesize these many heterogeneous spheres of national social policies and labour regulation has resulted in the lack of a univocal measurement tool of this concept (Chung, 2012; Tangian, 2004). Synthesizing these many different features, which are highly country-specific, for the broad set of countries on which we focus on in this study, makes this task furtherly challenging. In a pragmatic attempt to provide a synthetic measure for flexicurity, we propose a proxy indicator based on the two pillars of the concept

of flexicurity: (i) security, as income and social security; (ii) flexibility, as flexibility of the labor relations and work organization. Our flexicurity index (FX) is calculated from the data of the Fraser Institute on the Economic Freedom of the World indicator (EFW) about the country-level size of transfers and subsidies and the degree of labor market regulation. The "Transfers and subsidies" sub-component of the EFW measures on a 0-10 scale the size of countries' transfers sector as a share of GDP and is used as a proxy for the security component of flexicurity. Here, countries with a larger public transfers sector score lower ratings. The "Labor market regulations" sub-component of the EFW is used as a proxy for the flexibility component of flexicurity and measures on a 0-10 scale the degree of labor market regulation in terms of: (i) Hiring regulations; (ii) Hiring and firing regulations; (iii) Centralized collective bargaining; (iv) Hours regulation; (v) Mandated cost of worker dismissal; and (vi) Conscription. Stricter labor market regulations result in lower ratings. We operationalize the FX index by subtracting the scores obtained in the category "Labour market regulation" to the scores for the category "Transfers and subsidies". The resulting FX index can potentially vary in the range [-10;10], where -10 indicates a situation of *"inflex-insecurity"* with a highly rigid labor market and no transfers at all, whereas 10 stands for a system entirely based on high subsidies and no labor market regulation. Thus, higher scores indicate welfare state models closer to the flexicurity model while low scores can indicate either a situation of "flex-insecurity", with flexible labour markets but no income security, or "inflex-security", that is highly rigid labour markets and high income-security. While individually the two subcomponents of the FX index capture different concepts from that of flexicurity, their combination into a single indicator provides a good approximation for it. We recognise that our approach simplifies to some extent the multidimensionality of the concept of flexicurity, yet we show in Appendix A that the sub-components of our index strongly correlate to a set of individual welfare state and labor market features which are peculiar to flexicurity, and that hence our proxy carries the necessary information to make a reliable assessment of the degree of flexicurity across countries.

The FX index that we construct recalls the substitute goods relationship occurring between compensation and regulation as described by Posner (1971). In Posner's argumentation, regulation owns distributive and allocative properties which are more generally recognised as belonging to the fiscal system. In fact, although apparently costless, labor market regulation is actually capable of shifting the cost of employment protection from the whole labor force, onto labor market outsiders, producing distortionary effects comparable to those of taxation. In this sense, it is evident how a welfare system can result in being unbalanced in the amount of regulation and compensation it combines. While generous and inclusive unemployment benefits can represent a heavy burden on the government budget, protecting the employed through regulation is potentially costless, and thus very appealing to the policy-maker. This is the case of Mediterranean countries, where social security schemes focus mostly on employment protection rather than on income security. Conversely, social security systems following the principles of flexicurity, still maintain an inverse relationship

between regulation and compensation, but, unlike in Mediterranean countries, they combine lower levels of regulation with more generous compensation. The way we calculate our FX index is purposely designed to capture this degree of substitutability between labor market regulation and generosity in compensation.

# 4 Empirical design and results

In this study we want to verify whether the implementation of reforms going in the direction of flexicurity determines an erosion (or crowding-out effect) of individuals' civic attitudes. To this purpose, we study the effect that the exposure to different levels of labor market flexibility and social benefits generosity has on the individuals' attitude to cheat on taxes, to cheat on government benefits and to avoid the payment of public transport fares. While doing so we also control for the role played by the average country-level of social trust. We run two different linear specifications:

In Equation (1) we regress the dependent variables ($Civ.Att._{ijt}$) on the FX index, a set of individual-level covariates ($X_{ijt}$) and two country-level controls, namely average social trust (AST) and the logarithm of GDP per capita ($GDPPC_{ijt}$). Country and time fixed-effects are accounted for respectively by $\alpha_j$ and $\gamma_t$. In Equation (2) we include the multiplicative interaction between the FX index and average social trust. In both the equations, suffixes i, j, and t indicate respectively the individual, the country, and the year of each observation. By the second specification, our purpose is to try to clarify the effect of implementing flexicurity reforms given the existence of different degrees of trust at the country-level.

$$Civ.Att._{ijt} = \beta_0 + \beta_1 FR_{jt} + \beta_2 X_{ijt} + \beta_3 AST_{jt} + \beta_4 GDPPC_{jt} + \alpha_j + \gamma_t + \epsilon_{ijt} \quad (1)$$

$$\begin{aligned} Civ.Att._{ijt} = &\beta_0 + \beta_1 FR_{jt} + \beta_2 X_{ijt} + \beta_3 AST_{jt} + \beta_4 AST_{jt} * FR_{jt} + \\ &+ \beta_5 GDPPC_{jt} + \alpha_j + \gamma_t + \epsilon_{ijt} \end{aligned} \quad (2)$$

It should be noted that in both the specifications the dependent variables that we use are defined at the individual-level, which eliminates an important source of potential reverse causality. While it is reasonable that the national levels of flexicurity can influence the individual attitude to cheat, it is instead very implausible that the degree of civicness of a single individual has any effect on the degree of flexicurity of the welfare state.

## 4.1 Main results

Table 2 shows the OLS estimates for the models in Equation 1 and 2 in OECD and EU28 countries. Columns 1 to 6 correspond to different specifications of Equation 1 while columns 7 to 9 contain the estimations for Equation 2. Before analyzing the results obtained on the

main variables of interest, we briefly describe the estimates obtained for the control variables: in all cases being female, growing older,, higher education, parenthood, being in good health, and being religious are factors associated with a negative attitude towards "uncivic behaviors", in accordance with the existing literature. Being self-employed is associated with a stronger positive individual attitude for cheating on taxes. Also, facing unemployment appears to be significantly related with a higher tolerance for all the uncivic behaviors here considered. From Table 2 social trust apparently results to be not significantly different from zero in any of our specifications besides those relative to avoiding to pay for a public transport fare, where it displays a positive coefficient. The introduction of average social trust and the GDP per capita does not seem to substantially affect the results of the analysis. The negative and significant coefficients obtained in Table 2 for the FX index suggest us that increasing levels of flexicurity are associated with a lower individual inclination in favor of anti-social behaviors. This is a first evidence against the existence of the crowding-out effect: making welfare provisions larger while reducing labor market rigidities does not lead to the erosion of civic attitudes toward the welfare state. Actually, tax and benefits morale levels seem to be reinforced, opening for the possibility that increasing flexicurity "crowds-in" civic attitudes. These results are reinforced from the estimates obtained on AVOID FARE, which shows that increasing flexicurity is associated with a reduction of overall uncivic attitudes, not only those related to the welfare state. In columns 7, 8 and 9 of Table 2 we introduce the multiplicative interaction of the FX index with the country-level average of social trust, as according to Equation 2. As a matter of fact, part of the literature deemed certain minimum national levels of social trust to be a necessary condition for the successful implementation of flexicurity reforms (Algan, Y. and Cahuc, P., 2006). Taking inspiration from this line of reasoning, the aim of this last specification is to clarify if social trust plays any role conditioning the outcome of flexicurity reforms on civic attitudes. Do the effect of flexicurity reforms on civic attitudes varies when we have different levels of average social trust? From Table 2, coefficients for the interaction term appear to be close to zero and not significant, however, to understand the effect of the interaction between flexicurity and country levels of trust, we cannot rely solely on the regression coefficients. Figures 2, 3 and 4 display the marginal effects of additional levels of flexicurity on each one of the civic attitudes considered, conditioned on the levels of average social trust. The blue line represents the marginal effect coefficients measured on the y-axis, while the yellow histogram on the x-axis shows the frequency distribution of the different levels of average trust. The vertical bars in correspondence of each blue dot represent 95% confidence intervals, from which statistical significance can be deduced. Any point on the blue sloping line indicates the effect on the different civic attitude considered produced by a variation in the flexicurity index, that is $d(Civic attitudes)/dFX = \beta_1 + \beta_3 * AST$.

Table 2: Estimates on the OECD-EU28 countries.

| VARIABLES | (1) Cheat Benefits | (2) Avoid Fare | (3) Cheat Taxes | (4) Cheat Benefits | (5) Avoid Fare | (6) Cheat Taxes | (7) Cheat Benefits | (8) Avoid fare | (9) Cheat taxes |
|---|---|---|---|---|---|---|---|---|---|
| Female | -0.106*** | -0.0678*** | -0.287*** | -0.107*** | -0.0679*** | -0.287*** | -0.107*** | -0.0677*** | -0.287*** |
| | (0.0171) | (0.0233) | (0.0313) | (0.0173) | (0.0234) | (0.0312) | (0.0171) | (0.0235) | (0.0311) |
| Age 15-30 | 0.469*** | 0.727*** | 0.367*** | 0.465*** | 0.727*** | 0.368*** | 0.465*** | 0.727*** | 0.368*** |
| | (0.0461) | (0.0647) | (0.0403) | (0.0470) | (0.0649) | (0.0396) | (0.0469) | (0.0650) | (0.0396) |
| Age 60+ | -0.337*** | -0.515*** | -0.392*** | -0.336*** | -0.515*** | -0.393*** | -0.335*** | -0.515*** | -0.393*** |
| | (0.0284) | (0.0316) | (0.0233) | (0.0285) | (0.0317) | (0.0230) | (0.0289) | (0.0318) | (0.0230) |
| Self employed | 0.00400 | 0.00680 | 0.241*** | 0.00557 | 0.00696 | 0.240*** | 0.00604 | 0.00655 | 0.241*** |
| | (0.0354) | (0.0236) | (0.0533) | (0.0337) | (0.0239) | (0.0535) | (0.0339) | (0.0240) | (0.0536) |
| Unemployed | 0.204*** | 0.127*** | 0.121*** | 0.207*** | 0.128*** | 0.121*** | 0.206*** | 0.129*** | 0.120*** |
| | (0.0512) | (0.0424) | (0.0304) | (0.0492) | (0.0414) | (0.0305) | (0.0488) | (0.0418) | (0.0307) |
| Income_low | 0.137*** | 0.134*** | 0.00626 | 0.140*** | 0.136*** | 0.00767 | 0.140*** | 0.136*** | 0.00769 |
| | (0.0421) | (0.0403) | (0.0306) | (0.0386) | (0.0383) | (0.0314) | (0.0377) | (0.0391) | (0.0312) |
| Income_high | 0.0224 | -0.0138 | 0.102*** | 0.00876 | -0.0151 | 0.106*** | 0.00848 | -0.0148 | 0.106*** |
| | (0.0329) | (0.0255) | (0.0331) | (0.0293) | (0.0253) | (0.0338) | (0.0285) | (0.0253) | (0.0336) |
| Education_low | 0.0835 | -0.0568 | -0.0345 | 0.0685 | -0.0572 | -0.0272 | 0.0680 | -0.0567 | -0.0277 |
| | (0.0554) | (0.0559) | (0.0382) | (0.0554) | (0.0512) | (0.0357) | (0.0562) | (0.0516) | (0.0358) |
| Education_high | -0.196*** | -0.0260 | -0.0904*** | -0.198*** | -0.0280 | -0.0928*** | -0.198*** | -0.0281 | -0.0927*** |
| | (0.0411) | (0.0513) | (0.0285) | (0.0388) | (0.0500) | (0.0279) | (0.0386) | (0.0501) | (0.0281) |
| Children 1 or 2 | -0.0669*** | -0.117*** | -0.0180 | -0.0672*** | -0.117*** | -0.0176 | -0.0671*** | -0.117*** | -0.0175 |
| | (0.0138) | (0.0207) | (0.0190) | (0.0146) | (0.0208) | (0.0185) | (0.0146) | (0.0210) | (0.0185) |
| Good health | -0.0565*** | -0.0493*** | -0.0480** | -0.0587*** | -0.0486*** | -0.0460** | -0.0586*** | -0.0486*** | -0.0460** |
| | (0.0169) | (0.0164) | (0.0200) | (0.0170) | (0.0164) | (0.0188) | (0.0169) | (0.0165) | (0.0187) |
| Religious | -0.107*** | -0.271*** | -0.286*** | -0.106*** | -0.271*** | -0.285*** | -0.106*** | -0.271*** | -0.286*** |
| | (0.0273) | (0.0280) | (0.0297) | (0.0272) | (0.0279) | (0.0300) | (0.0270) | (0.0279) | (0.0299) |
| Left orientation | 0.0211** | 0.0155* | -0.00576 | 0.0208** | 0.0156* | -0.00555 | 0.0206*** | 0.0158** | -0.00569 |
| | (0.00798) | (0.00777) | (0.00892) | (0.00783) | (0.00788) | (0.00892) | (0.00759) | (0.00773) | (0.00887) |
| Life control | -0.0340*** | -0.0268*** | -0.0384*** | -0.0351*** | -0.0270*** | -0.0382*** | -0.0349*** | -0.0271*** | -0.0381*** |
| | (0.00689) | (0.00522) | (0.00609) | (0.00644) | (0.00510) | (0.00597) | (0.00661) | (0.00522) | (0.00614) |
| Social trust | -0.0454 | 0.0692* | -0.0368 | -0.0419 | 0.0673* | -0.0414 | -0.0420 | 0.0674* | -0.0415 |
| | (0.0389) | (0.0348) | (0.0363) | (0.0399) | (0.0374) | (0.0341) | (0.0399) | (0.0374) | (0.0341) |
| AST | | | | -0.0300 | 0.237 | 0.387 | 0.123 | 0.121 | 0.483 |
| | | | | (0.850) | (0.648) | (0.539) | (1.010) | (0.771) | (0.596) |
| FX index | -0.126*** | -0.102*** | -0.0653* | -0.102*** | -0.101*** | -0.0740* | -0.0714 | -0.125** | -0.0545 |
| | (0.0332) | (0.0327) | (0.0334) | (0.0366) | (0.0304) | (0.0370) | (0.0812) | (0.0600) | (0.0569) |
| Log_GDPPC | | | | 0.687** | 0.124 | -0.128 | 0.680** | 0.130 | -0.132 |
| | | | | (0.328) | (0.220) | (0.232) | (0.325) | (0.219) | (0.232) |
| FX index*AST | | | | | | | -0.0905 | 0.0700 | -0.0575 |
| | | | | | | | (0.202) | (0.141) | (0.135) |
| Constant | 2.334*** | 2.343*** | 3.187*** | -3.709 | 1.168 | 4.179* | -3.701 | 1.158 | 4.187* |
| | (0.106) | (0.125) | (0.149) | (3.031) | (1.909) | (2.114) | (3.041) | (1.893) | (2.143) |
| | | | | | | | | | |
| Observations | 132,577 | 134,890 | 133,075 | 132,577 | 134,890 | 133,075 | 132,577 | 134,890 | 133,075 |
| Number of categories | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| R-squared | 0.130 | 0.110 | 0.083 | 0.132 | 0.110 | 0.083 | 0.132 | 0.110 | 0.083 |

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Time and country fixed-effects are used

In Figure 2 the marginal effect of the FX index on the dependent variable "Cheat on government benefits" is displayed. The effect is negative and significant for the most frequent observations of social trust, and it negatively strengthens for increasing values of average trust. Accordingly, claiming a benefit to which one is not entitled to is a behavior which is less likely to be individually accepted as welfare state institutions become closer to the flexicurity model, and this likelihood further decreases as the overall country-level of social trust is higher. The level of social trust does not seem to be a key determinant of the effect on the likelihood to cheat on government benefits, as marginal effects are negative for the whole distribution of the interaction variable. Results in Figures 3 and 4 are analogous: the marginal effects on both cheating on taxes and free-riding on public transport fare are negative for the whole distribution of average social trust and do not display high levels of variation across the different levels of average social trust. Again, increasing degrees of flexicurity do not result in an erosion process of civic attitudes, it is actually the opposite. Overall, the responsiveness of individuals' civic attitudes to the introduction of higher degrees of flexicurity is positive and independent of the existing levels of social trust. Our results are furtherly confirmed when repeating the analyses on a wider set of more than 80 countries not belonging nor to the EU or the OECD, in which a negative association between uncivic attitudes and the degree of flexicurity can be observed. Details are provided in Table B1 of Appendix B. In the Appendix C we show whether past welfare state institutions' designs matter on the relationship between the FX index and individuals' civic attitudes. The individuals' incentives received to cheat on social security provisions are highly related to the conditions under which social benefits are provided, thus this may create a certain dependence of civic attitudes on past welfare state designs. Table C2 and Figures C2, C3, and C4 show that even when splitting the sample in three subgroups by the initial level of flexicurity, increasing FX is negatively, or at least non-positively, associated to the uncivic attitudes we study. Once again, this confirms the hypothesis by which there is no crowding-out effect of additional flexicurity on individuals' civic attitudes. Institutional past designs do not affect the sign of the marginal effect of FX on indidividuals' civic attitudes, but some differences in magnitudes across groups of countries can be found. Finally, in Appendix D we run a last specification in which we control for expressive respondents. By creating a new sample in which we reduce the likelihood of expressive responses to happen, we find negative associations between uncivic attitudes and flexicurity, independently on the average level of social trust. For details, see Table D1, and Figures D1, D2 and D3 in Appendix D.

Figure 2: Marginal effects of flexicurity on the attitudes to cheat on government benefits.



Conditional effect of FX index on cheat on gvt. benefits (95%CI)
OECD-EU28 countries
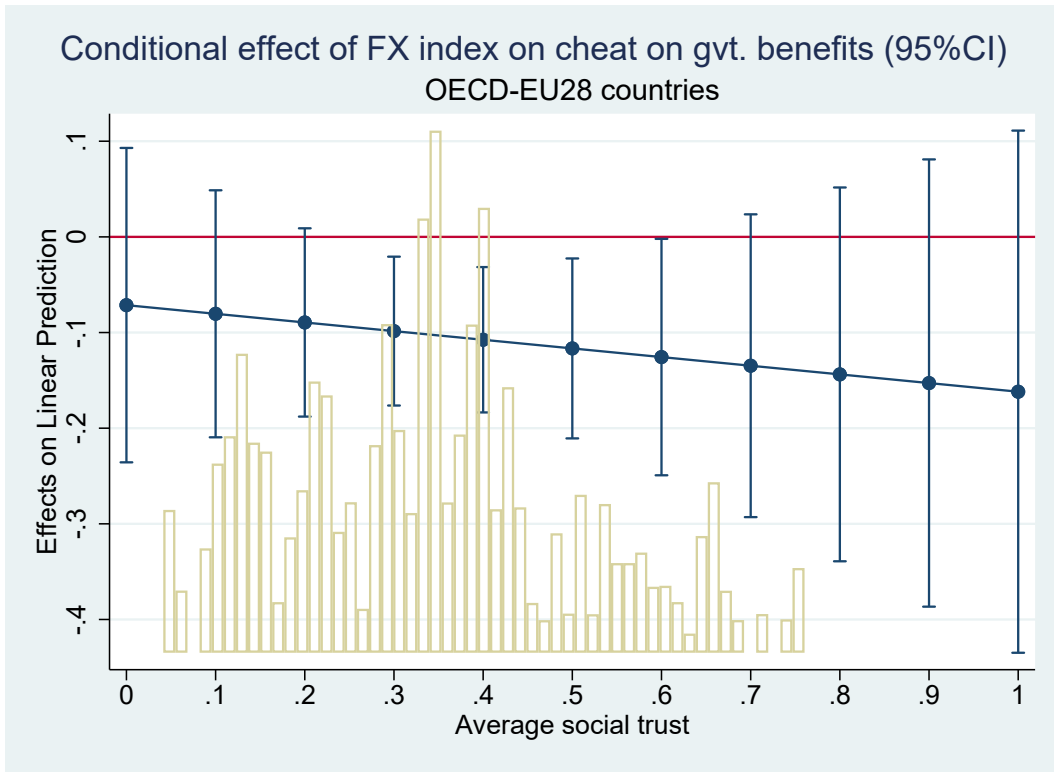
Figure 3: Marginal effects of flexicurity on the attitudes to cheat on taxes.



Conditional effect of FX index on cheat on taxes (95%CI)
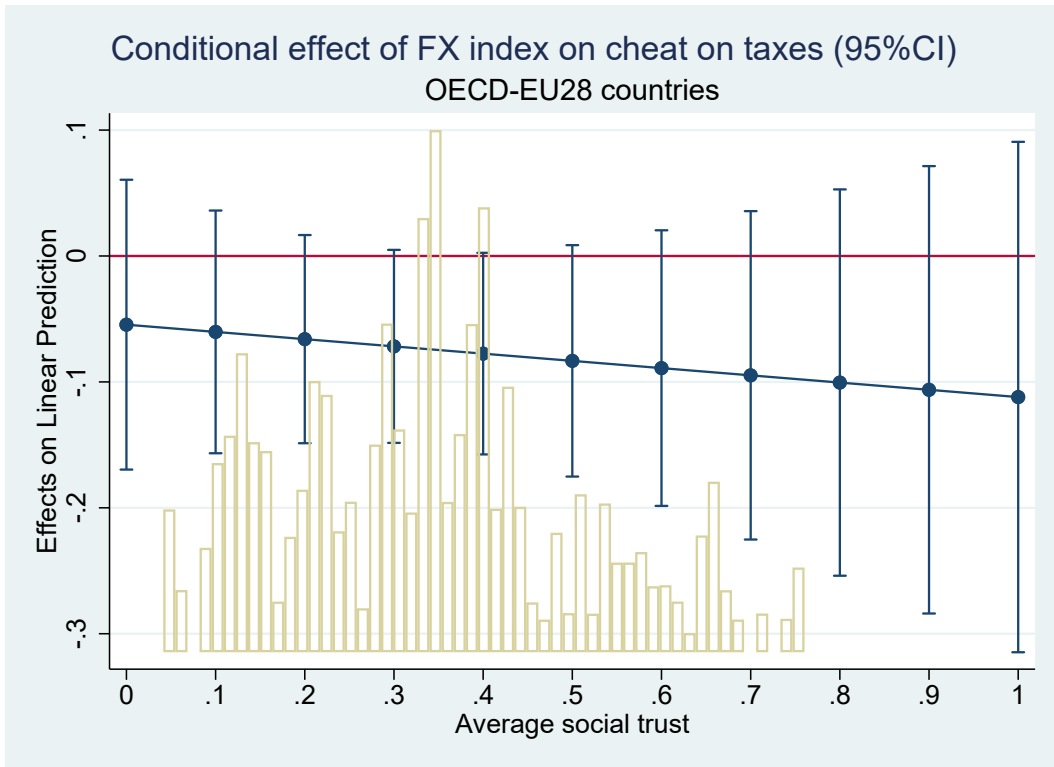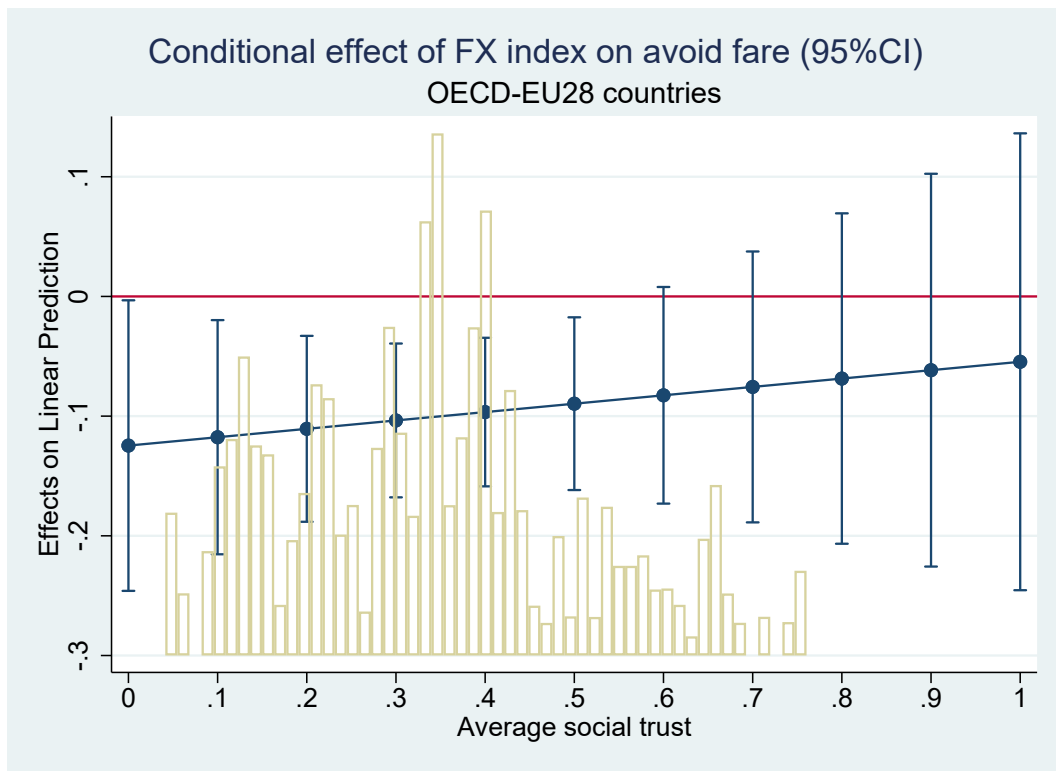OECD-EU28 countries

Figure 4: Marginal effects of flexicurity on the attitudes to cheat public transports.

## 4.2 Trusters vs Non-Trusters

To furtherly investigate the role of social trust on individuals' civic attitudes in the process of welfare state reform, we repeat our analysis dividing our sample into a subset made of "trusting" individuals and a sub-sample of "non-trusting" individuals. We split the sample into the two subsets according to the values assumed by the dummy variable SOCIAL TRUST[4]. In Table 4, information about the role of trust on reforms making the welfare state closer to the flexicurity model can be obtained from the comparison of the results between the two sub-samples. At a first observation we can notice that in general the signs for the different covariates do not differ when estimating the effect on the sample of trusters and non-trusters. However, some slight and significant differences in the magnitudes can be noticed. Specifically, it seems that being female, having children, being in good health, being religious or politically left-oriented are factors associated with lower tendencies to accept any form of anti-social behavior among trusters than among non-trusters. On the other hand, being highly educated and having a high level of income seems to produce stronger effects on civic attitudes across the non-trusters than across trusters. As for the FX index, these results confirm our previous findings: the coefficients associated with increases in flexicurity degrees are negative and statistically significant, at least at the 5% level. Shifting welfare state institutions towards the Danish flexicurity model is, once again, found to be associated with an improvement in the levels of civicness. Also, comparing the estimates performed on the sample of trusters and non-trusters we can see how, for all the specifications considered, the effects are, equal across the two groups, or even stronger for non-trusters in certain cases. That is to say that in low trust evironments enhancing labor market flexibility and expanding unemployment insurance is at least as much as beneficial on civic attitudes as in high trust contexts. This evidence reinforces the idea that the lack of high levels of social trust should not be considered as the cultural determinant for the resistance to implement flexicurity-inspired reforms observed in certain countries. According to these results flexicurity does not determine erosion processes of civic attitudes for any level of trust and therefore, its implementability does not depend on this cultural trait.

---

[4]We call "trusters" the individuals for whom SOCIAL TRUST=1, and "non-trusters" those for whom SOCIAL TRUST=0.

Table 3: Trusters vs non-trusters estimates - OECD and EU28 countries

| VARIABLES | (1) Cheat tax | (2) Cheat benefits | (3) Avoid fare | (4) Cheat tax | (5) Cheat benefits | (6) Avoid fare |
|---|---|---|---|---|---|---|
| | Social trust = 1 | | | Social trust = 0 | | |
| Female | -0.310*** | -0.112*** | -0.0951*** | -0.270*** | -0.114*** | -0.0639** |
| | (0.0292) | (0.0155) | (0.0217) | (0.0357) | (0.0220) | (0.0266) |
| Age 15-30 | 0.375*** | 0.497*** | 0.848*** | 0.384*** | 0.450*** | 0.687*** |
| | (0.0358) | (0.0347) | (0.0433) | (0.0463) | (0.0553) | (0.0740) |
| Age 60+ | -0.408*** | -0.306*** | -0.540*** | -0.403*** | -0.354*** | -0.487*** |
| | (0.0270) | (0.0310) | (0.0355) | (0.0286) | (0.0332) | (0.0348) |
| Self-employed | 0.289*** | -0.0309 | 0.0211 | 0.202*** | 0.0160 | 0.00298 |
| | (0.0509) | (0.0271) | (0.0292) | (0.0593) | (0.0467) | (0.0333) |
| Unemployed | 0.171** | 0.212** | 0.0965 | 0.0902*** | 0.201*** | 0.135*** |
| | (0.0724) | (0.0869) | (0.0809) | (0.0311) | (0.0489) | (0.0398) |
| Income_low | 0.0177 | 0.131*** | 0.127*** | -0.00500 | 0.126*** | 0.132*** |
| | (0.0333) | (0.0401) | (0.0366) | (0.0323) | (0.0453) | (0.0459) |
| Income_high | 0.114*** | -0.0102 | -0.0137 | 0.0995** | -0.00562 | -0.0152 |
| | (0.0274) | (0.0272) | (0.0221) | (0.0393) | (0.0338) | (0.0304) |
| Education_low | -0.0143 | 0.0886 | -0.0226 | -0.0134 | 0.0636 | -0.0805 |
| | (0.0695) | (0.0664) | (0.0639) | (0.0333) | (0.0600) | (0.0574) |
| Education_high | -0.106*** | -0.114*** | 0.0789 | -0.0724** | -0.232*** | -0.0945* |
| | (0.0349) | (0.0337) | (0.0499) | (0.0283) | (0.0451) | (0.0507) |
| Children 1 or 2 | 0.00303 | -0.0354* | -0.103*** | -0.0475** | -0.0868*** | -0.133*** |
| | (0.0250) | (0.0199) | (0.0241) | (0.0196) | (0.0161) | (0.0230) |
| Good health | -0.0785*** | -0.0632** | -0.0406 | -0.0347 | -0.0526** | -0.0440** |
| | (0.0286) | (0.0288) | (0.0261) | (0.0222) | (0.0211) | (0.0216) |
| Religious | -0.319*** | -0.136*** | -0.321*** | -0.287*** | -0.0986*** | -0.266*** |
| | (0.0342) | (0.0300) | (0.0304) | (0.0333) | (0.0315) | (0.0330) |
| Left orientation | -0.0200 | 0.0288*** | 0.0338*** | 0.00333 | 0.0174* | 0.0105 |
| | (0.0132) | (0.00719) | (0.00847) | (0.00790) | (0.00869) | (0.00934) |
| Life control | -0.0425*** | -0.0488*** | -0.0352*** | -0.0357*** | -0.0307*** | -0.0243*** |
| | (0.00690) | (0.00748) | (0.00832) | (0.00646) | (0.00712) | (0.00530) |
| FX index | -0.0578 | -0.107*** | -0.0985*** | -0.0845** | -0.109*** | -0.0988** |
| | (0.0422) | (0.0280) | (0.0332) | (0.0321) | (0.0386) | (0.0414) |
| Log_GDPPC | -0.173 | 0.492** | 0.169 | -0.124 | 0.733** | 0.0725 |
| | (0.239) | (0.209) | (0.255) | (0.227) | (0.349) | (0.229) |
| Constant | 5.006** | -2.246 | 0.677 | 4.103** | -3.932 | 1.884 |
| | (2.263) | (1.908) | (2.266) | (1.973) | (3.050) | (2.015) |
| Observations | 53,442 | 53,508 | 54,265 | 88,689 | 88,067 | 89,721 |
| Number of categories | 39 | 39 | 39 | 39 | 39 | 39 |
| R-squared | 0.090 | 0.138 | 0.123 | 0.085 | 0.123 | 0.107 |

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Time and country fixed-effects are used

# 5 Conclusions

This analysis brings new empirical evidence to the debate about welfare state reforms and their impact on individuals' engagement with social norms. We challenge the idea that the implementation of welfare state reforms increasing the degree of flexicurity, is *per se* responsible of a process of erosion of individuals' civic attitudes toward welfare state provisions. Accordingly, when exposed to larger welfare benefits, people would be incentivized to abuse of the welfare state provisions. If generalized to a sufficient number of individuals, these behaviors would undermine the sustainability of the social security scheme, unless the community is characterized by high standards of social trust and civic attitudes. We show that this hypothesis does not hold true for welfare state reforms inspired to the model of flexicurity: if social transfers expansions are accompanied by measures flexibilizing labor markets, the individual attitudes to cheat on welfare provisions are not increased, independently from the levels of social trust. As a matter of fact, we observe that increasing flexicurity degrees is associated to a reduction in uncivic attitudes, both in groups of individuals with low social trust and in groups of individuals with higher trust. Our empirical

analysis shows that the stock of social trust is not the cultural trait, on which the existence of a crowding-out effect of flexicurity on civic attitudes depends on. Our evidence also shows that previous institutional heterogeneity across countries matters to a very little extent: introducing additional flexicurity is in any case associated to a reduction of uncivic attitudes, and differences in past welfare state designs only affect the intensity of this reduction. Especially for those countries with an history of low market flexibility and low social protection, the introduction of further flexicurity is associated with improvements in individual civic attitudes, even when levels of social trust are particularly low. While we do not argue that there is a causal link between increases in the country-level flexicurity degrees and the reduction in the individual attitudes to behave antisocially, we stress that the introduction of additional flexicurity is not associated to any lessening in individuals' civic attitudes. Consequently, the political argument against the reform of the welfare state toward increasing degrees of flexicurity because of the existence of a "self-destructive" welfare state (Algan, Y. and Cahuc, P., 2006; Heinemann, 2008) does not seem to be supported from this empirical evidence. Low levels of social trust should not be considered as the responsible factor impeding the implementation of flexicurity models in Mediterranean and Continental European countries, which we deem to be perfectly viable if on the base of cultural considerations. Instead, we believe that the incapability of taking such reforms in these countries may be the result of other political and institutional dynamics. Trying to speculate, the process of reform of welfare state designs may be the object of political competition for the establishment of present and future power positions (Van Kersbergen, 2002). Also, previous political power relations, interest groups, demography, and the presence of diffused cognitive biases that favor the immobility of the status quo of the welfare state may be concurring elements to the resistance for welfare state reforms going in certain directions.

# Acknowledgements

# References

**Alesina, A. and E. La Ferrara**, "Who trusts others?," *Journal of Public Economics*, 2002, *85* (2), 207–234.

**Algan, Y. and Cahuc, P.**, "Civic attitudes and the design of labor market institutions: which countries can implement the Danish flexicurity model?," *IZA Discussion Paper Series*, 2006, *No. 1928.*

**Algan, Y. and P. Cahuc**, "Civic virtue and labor market institutions," *American Economic Journal: Macroeconomics*, 2009, *1* (1), 111–45.

**Andersen, T. M.**, "A flexicurity labor market during recession," *IZA World of Labor*, 2015.

**Andersen, T. M. and Svarer, M.**, "Flexicurity—labour market performance in Denmark," *CESifo Economic Studies*, 2007, *53* (3), 389–429.

**Andriani, L., R. Bruno, E. Douarin, and P. Stepien-Baig**, "Is tax morale culturally driven?," *Journal of Institutional Economics*, 2020, pp. 1–18.

**Arts, W. Van Oorschot W.and**, "The social capital of European welfare states: the crowding out hypothesis revisited," *Journal of European Social Policy*, 2005, *15* (1), 5–26.

**Berggren, N. and Bjørnskov, C.**, "The Market-Promoting and Market-Preserving Role of Social Trust in Reforms of Policies and Institutions," *Southern Economic Journal*, 2017, *84* (1), 3–25.

**Bergh, A.**, "Hayekian welfare states: Explaining the coexistence of economic freedom and big government," *Journal of Institutional Economics*, 2020, *16* (1), 1–12.

**Bergh, A. and C. Bjørnskov**, "Historical trust levels predict the current size of the welfare state," *Kyklos*, 2011, *64* (1), 1–19.

**Bergh, A. and C. Bjørnskov**, "Trust, welfare states and income equality: Sorting out the causality," *European Journal of Political Economy*, 2014, *35*, 183–199.

**Berinsky, A. J.**, "Telling the truth about believing the lies? Evidence for the limited prevalence of expressive survey responding," *The Journal of Politics*, 2018, *80* (1), 211–224.

**Bernal-Verdugo, L. E., D. Furceri, and D. Guillaume**, "Labor market flexibility and unemployment: new empirical evidence of static and dynamic effects," *Comparative Economic Studies*, 2012, *54* (2), 251–273.

**Bertrand, M. and S. Mullainathan**, "Do people mean what they say? Implications for subjective survey data," *American Economic Review*, 2001, *91* (2), 67–72.

**Bjørnskov, C.**, "Determinants of generalized trust: A cross-country comparison," *Public Choice*, 2007, *130* (1-2), 1–21.

**Bjørnskov, C. and G. T. Svendsen**, "Does social trust determine the size of the welfare state? Evidence using historical identification," *Public Choice*, 2013, *157* (1-2), 269–286.

**Blanchard, O. and J. Wolfers**, "The role of shocks and institutions in the rise of European unemployment: the aggregate evidence," *The Economic Journal*, 2000, *110* (462), C1–C33.

**Boeri, T. and Conde-Ruiz, J. and Galasso, V.**, "The political economy of flexicurity," *Journal of the European Economic Association*, 2012, *10* (4), 684–715.

**Boje, T. P. and M. Strandh**, "Different worlds of volunteering and informal care in Europe," in "Second Annual ESPAnet Conference, Fribourg" 2005, pp. 22–24.

**Card, D., R. Chetty, and A. Weber**, "The spike at benefit exhaustion: Leaving the unemployment system or starting a new job?," *American Economic Review*, 2007, *97* (2), 113–118.

**Chung, H.**, "Measuring flexicurity: Precautionary notes, a new framework, and an empirical example," *Social Indicators Research*, 2012, *106* (1), 153–171.

**Clark, A. K. and M. A. Eisenstein**, "Interpersonal trust: An age–period–cohort analysis revisited," *Social Science Research*, 2013, *42* (2), 361–375.

**Dingemans, E. and E. Van Ingen**, "Does religion breed trust? A cross-national study of the effects of religious involvement, religious faith, and religious context on social trust," *Journal for the Scientific Study of Religion*, 2015, *54* (4), 739–755.
*European Values Study and World Values Survey: Joint EVS/WVS 2017-2021 Dataset (Joint EVS/WVS)*

***European Values Study and World Values Survey: Joint EVS/WVS 2017-2021 Dataset (Joint EVS/WVS)**, 2021. JD Systems Institute WVSA. Dataset Version 1.1.0, doi:10.14281/18241.11.*

**Feldmann, H.**, *"The unemployment effects of labor regulation around the world," Journal of Comparative Economics, 2009, 37 (1), 76–90.*

**Feldstein, M.**, *"Rethinking social insurance," American Economic Review, 2005, 95 (1), 1–24.*

**Forbes, K. F. and E.M. Zampelli**, *"The impacts of religion, political ideology, and social capital on religious and secular giving: evidence from the 2006 Social Capital Community Survey," Applied Economics, 2013, 45 (17), 2481–2490.*

**Heinemann, F.**, *"Is the welfare state self-destructive? A study of government benefit morale," Kyklos, 2008, 61 (2), 237–257.*

**Heinemann, F. and B. Tanz**, *"The impact of trust on reforms," Journal of Economic Policy Reform, 2008, 11 (3), 173–185.*

**Hillman, A. L.**, *"Expressive behavior in economics and politics," European Journal of Political Economy, 2010, 26 (4), 403–418.*

**Kääriäinen, J. and H. Lehtonen**, *"The variety of social capital in welfare state regimes–a comparative study of 21 countries," European Societies, 2006, 8 (1), 27–57.*

**Kersbergen, K. Van**, *"The politics of welfare state reform," Swiss Political Science Review, 2002, 8 (2), 1–19.*

**Kumlin, S. and B. Rothstein**, *"Investing in social capital: the impact of welfare state institutions," in "Annual Meeting of the American Political Science Association" 2003.*

**Kumlin, S. and B. Rothstein**, *"Making and breaking social capital: The impact of welfare-state institutions," Comparative political studies, 2005, 38 (4), 339–365.*

**Künemund, H. and M. Rein**, *"There is more to receiving than needing: theoretical arguments and empirical explorations of crowding in and crowding out," Ageing & Society, 1999, 19 (1), 93–121.*

**Lemieux, T., B. Fortin, and P. Frechette**, *"The effect of taxes on labor supply in the underground economy,"* The American economic review, 1994, pp. 231–254.

**Letki, N.**, *"Investigating the roots of civic morality: Trust, social capital, and institutional performance,"* Political Behavior, 2006, 28 (4), 305–325.

**Lindbeck, A.** , *"Hazardous Welfare-State Dynamics,"* American Economic Review, 1995, 85 (2), 9–15.

**Lindbeck, A.**, *"The welfare state and the employment problem,"* The American Economic Review, 1994, 84 (2), 71–75.

**Lindbeck, A.**, *"Welfare state disincentives with endogenous habits and norms,"* The Scandinavian Journal of Economics, 1995, pp. 477–494.

**Lindbeck, A., S. Nyberg, and J. Weibull**, *"Social norms and economic incentives in the welfare state,"* The Quarterly Journal of Economics, 1999, 114 (1), 1–35.

**Ljunge, M.**, *"Increasing demands on the welfare state? Trends in behavior and attitudes,"* CESifo Economic Studies, 2011, 57 (4), 605–622.

**Moellman, N. and D. Tarabar**, *"Economic freedom reform: does culture matter?,"* Journal of Institutional Economics, 2021, p. 1–19.

**Newton, K., D. Stolle, and S. Zmerli**, *"Social and political trust,"* The Oxford handbook of social and political trust, 2018, 37, 961–976.

**Nicolaysen, B. B.**, *"Voluntary service provision in a strong welfare state,"* MZES-Mannheimer Zentrum für Europäische Sozialforschung, Working Papers, 2001, Nr. 35.

**Phillips, K. and R. Eamets**, *"Approaches to flexicurity: EU Models,"* European Foundation for the Improvement of Living and Working Conditions, 2007. Retrieved from *https://www.eurofound.europa.eu/publications/report/2007/working-conditions/approaches-to-flexicurityeu-models*.

**Pitlik, H. and M. Rode**, *"Radical Distrust: Are Economic Policy Attitudes Tempered by Social Trust?,"* Social Indicators Research, 2020, pp. 1–22.

**Posner, R. A.**, *"Taxation by regulation,"* The Bell Journal of Economics and Management Science, 1971, pp. 22–50.

**Putnam, R. D., R. Leonardi, and R. Y. Nanetti**, *Making democracy work: Civic traditions in modern Italy*, Princeton university press, 1994.

**Rothstein, B.**, *"Social capital in the social democratic welfare state,"* Politics & Society, 2001, 29 (2), 207–241.

**Rothstein, B.**, *"Social capital, economic growth and quality of government: The causal mechanism,"* New Political Economy, 2003, 8 (1), 49–71.

**Rothstein, B. and Uslaner, E. M.**, *"All for all: Equality, corruption, and social trust,"* World politics, 2005, 58 (1), 41–72.

**Sahnoun, M. and C. Abdennadher**, *"Labor market institutions and performance economic within trial labor market models: flexibility, rigidity, and flexicurity,"* The Review of Black Political Economy, 2019, 46 (2), 99–129.

**Salamon, L. M. and S. W. Sokolowski**, *"Institutional roots of volunteering," in "The values of volunteering," Springer, 2003, pp. 71–90.*

**Scarpetta, S.**, *"Assessing the role of labour market policies and institutional settings on unemployment: A cross-country study," OECD Economic studies, 1996, 26 (1), 43–98.*

**Schwadel, P. and M. Stout**, *"Age, period and cohort effects on social capital," Social Forces, 2012, 91 (1), 233–252.*

**Sharkh, M. A.**, *"Are there optimal global configurations of labour market flexibility and security?: Tackling the" flexicurity" oxymoron," Technical Report, International Labour Organization 2008.*

**Sutter, M. and M. G. Kocher**, *"Trust and trustworthiness across different age groups," Games and Economic Behavior, 2007, 59 (2), 364–382.*

**Tangian, A. S.**, *"Defining the flexicurity index in application to European countries," WSI-Diskussionspapier, 2004.*

**Uslaner, E. M.**, *The moral foundations of trust, Cambridge University Press, 2002.*

**Zhou, J.**, *"Danish for all? Balancing flexibility with security: the flexicurity model," 2007.*

# Appendix A: FX index robustness checks

We dedicate this paragraph to test the capability of our FX index to capture the crucial aspects of flexicurity policies. To this purpose, we use the 2020 version of the Comparative Welfare States Dataset (CWS) by Huber and Stephens[5] which provides an array of country-level welfare state, economic, institutional, political, policy, and demographic indicators. The CWS includes information on 22 developed economies from 1960-2018. Among others, the dataset contains 18 variables relative to social security like unemployment benefits' generosity, public expenditure for social benefits, public expenditure for ALMP, and 10 variables about labor market flexibility, like the presence of minimum national wages, EPL strictness, types of employment. The advantage of these new variables is that they do not express aggregate dimensions, as the components of the FX index do, and are capable to transmit very specific information about the particular attributes of flexicurity.

In Table A1 we study the pairwise correlations between the FX index and its two sub-components with each one of the variables relative to social security, labor market flexibility and ALMP from the CWS. Recall that higher "Transfers and subsidies" scores indicate lower social spending and that higher "Labor market regulations" scores indicate lower labor market regulation. Therefore we expect negative correlations coefficients in order to express positive associations between the FX components and the variables from the CWS. The main concern for our indicator was that it does not contain any direct information about the set of "activation" and training policies which characterise the Danish model of flexicurity. From Table A1 we show, among others, correlation levels higher than 50% among the FX index sub-components and public expenditure on unemployment benefits, ALMPs, job training, EPL for temporary and permanent employees. Overall, the two components of the FX index capture to a good extent the majority of the variables in Table A1 thus, we can be confident that our FX index is a good proxy for the country-level degree of flexicurity.

---

[5]David Brady, Evelyne Huber, and John D. Stephens, Comparative Welfare States Data Set, University of North Carolina and WZB Berlin Social Science Center, 2020

Table A1: Flexicurity components and FX index cross correlations.

| Variables | FX index | Transfers and subsidies | Labor market regulations |
|---|---|---|---|
| FX index | 1.000 | (-) | (-) |
| Transfers and subsidies | -0.771 | 1.000 | (-) |
| | (0.000) | | |
| Labor market regulations | 0.449 | 0.222 | 1.000 |
| | (0.000) | (0.000) | |
| **Social benefits** | | | |
| Overall benefit generosity | -0.035 | -0.688 | -0.654 |
| | (0.000) | (0.000) | (0.000) |
| Unemployment benefits generosity | -0.137 | -0.251 | -0.316 |
| | (0.000) | (0.000) | (0.000) |
| Pension generosity. | 0.388 | -0.521 | -0.165 |
| | (0.000) | (0.000) | (0.000) |
| Unemployment replacement rate | -0.055 | -0.294 | -0.288 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure for social benefits other than social transfers in kind | 0.050 | -0.766 | -0.631 |
| | (0.000) | (0.000) | (0.000) |
| Expenditure on incapacity related benefits | -0.078 | -0.548 | -0.553 |
| | (0.000) | (0.000) | (0.000) |
| Total public expenditure on health | 0.226 | -0.301 | -0.078 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on family benefits | -0.004 | -0.449 | -0.402 |
| | (0.229) | (0.000) | (0.000) |
| Public expenditure on ALMP | -0.113 | -0.657 | -0.664 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on unemployment benefits | 0.074 | -0.549 | -0.439 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on housing benefits | 0.190 | -0.163 | 0.011 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on other social benefits | 0.115 | 0.111 | 0.201 |
| | (0.000) | (0.000) | (0.000) |
| Total public social expenditure | 0.160 | -0.807 | -0.581 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on public employment services | 0.076 | -0.419 | -0.311 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on job training | -0.270 | -0.522 | -0.689 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on employment incentives | 0.083 | -0.472 | -0.354 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on direct job creation | -0.223 | -0.453 | -0.589 |
| | (0.000) | (0.000) | (0.000) |
| Public expenditure on early retirement benefits | -0.072 | -0.573 | -0.5730 |
| | (0.000) | (0.000) | (0.000) |
| **Labor market flexibility** | | | |
| National minimum wage | 0.282 | 0.347 | 0.520 |
| | (0.000) | (0.000) | (0.000) |
| Mws | 0.257 | 0.400 | 0.547 |
| | (0.000) | (0.000) | (0.000) |
| Unemployment rate | 0.083 | -0.347 | -0.243 |
| | (0.000) | (0.000) | (0.000) |
| Part time employment | 0.426 | 0.067 | 0.410 |
| | (0.000) | (0.000) | (0.000) |
| Temporary employment | 0.228 | -0.118 | 0.099 |
| | (0.000) | (0.000) | (0.000) |
| Employment protection | -0.194 | -0.679 | -0.825 |
| | (0.000) | (0.000) | (0.000) |
| EPL strictness | -0.165 | -0.729 | -0.858 |
| | (0.000) | (0.000) | (0.000) |
| OECD EPL strictness | -0.173 | -0.711 | -0.779 |
| | (0.000) | (0.000) | (0.000) |
| EPL for permanent employment | -0.072 | -0.726 | -0.710 |
| | (0.000) | (0.000) | (0.000) |
| Temporary employed | -0.242 | -0.518 | -0.663 |
| | (0.000) | (0.000) | (0.000) |

# Appendix B: Further results

To give further robustness to our results, we test our model on a set of countries neither belonging to the EU28 nor to the OECD. Table B1 shows the results of Equation 1 and 2 while Table B2 shows the results when dividing the sample between trusters and non-trusters. Both tables confirm our main result: in no case we find that additional flexicurity crowds-out attitudes. The negative coefficients instead, point toward the possibility that flexicurity designs can strengthen existing civic attitudes. The presence or absence of social trust does not seem to affect the final outcome.

Table B1: Estimates on the whole WVS sample.

| VARIABLES | (1)<br>Cheat Benefits | (2)<br>Avoid Fare | (3)<br>Cheat Taxes | (4)<br>Cheat Benefits | (5)<br>Avoid Fare | (6)<br>Cheat Taxes | (7)<br>Cheat Benefits | (8)<br>Avoid fare | (9)<br>Cheat taxes |
|---|---|---|---|---|---|---|---|---|---|
| Female | -0.0822*** | -0.0625*** | -0.211*** | -0.0822*** | -0.0626*** | -0.211*** | -0.0822*** | -0.0626*** | -0.211*** |
|  | (0.0152) | (0.0179) | (0.0237) | (0.0152) | (0.0179) | (0.0237) | (0.0151) | (0.0179) | (0.0237) |
| Age 15-30 | 0.370*** | 0.538*** | 0.319*** | 0.369*** | 0.537*** | 0.318*** | 0.368*** | 0.537*** | 0.318*** |
|  | (0.0334) | (0.0441) | (0.0274) | (0.0331) | (0.0442) | (0.0274) | (0.0328) | (0.0442) | (0.0273) |
| Age 60+ | -0.347*** | -0.484*** | -0.394*** | -0.349*** | -0.485*** | -0.396*** | -0.348*** | -0.485*** | -0.396*** |
|  | (0.0259) | (0.0302) | (0.0235) | (0.0260) | (0.0304) | (0.0233) | (0.0261) | (0.0304) | (0.0233) |
| Self-employed | -0.0105 | -0.0146 | 0.139*** | -0.00710 | -0.0127 | 0.140*** | -0.00262 | -0.0135 | 0.140*** |
|  | (0.0294) | (0.0285) | (0.0346) | (0.0305) | (0.0281) | (0.0344) | (0.0311) | (0.0272) | (0.0342) |
| Unemployed | 0.161*** | 0.0926** | 0.124*** | 0.163*** | 0.0944*** | 0.125*** | 0.159*** | 0.0953*** | 0.125*** |
|  | (0.0514) | (0.0359) | (0.0356) | (0.0506) | (0.0348) | (0.0344) | (0.0493) | (0.0344) | (0.0335) |
| Income_low | 0.0376 | 0.0574 | -0.0339 | 0.0472 | 0.0615* | -0.0303 | 0.0493 | 0.0612* | -0.0303 |
|  | (0.0389) | (0.0383) | (0.0352) | (0.0388) | (0.0354) | (0.0330) | (0.0382) | (0.0349) | (0.0323) |
| Income_high | 0.0795** | 0.0765** | 0.156*** | 0.0782** | 0.0735** | 0.156*** | 0.0757** | 0.0740** | 0.156*** |
|  | (0.0345) | (0.0344) | (0.0364) | (0.0344) | (0.0348) | (0.0372) | (0.0333) | (0.0343) | (0.0368) |
| Education_low | 0.103** | 0.0561 | 0.0739* | 0.107*** | 0.0557 | 0.0761* | 0.107** | 0.0557 | 0.0761* |
|  | (0.0399) | (0.0415) | (0.0426) | (0.0396) | (0.0371) | (0.0387) | (0.0406) | (0.0368) | (0.0388) |
| Education_high | -0.149*** | -0.0714** | -0.0390 | -0.158*** | -0.0769** | -0.0423* | -0.156*** | -0.0771** | -0.0424* |
|  | (0.0369) | (0.0354) | (0.0258) | (0.0363) | (0.0360) | (0.0247) | (0.0367) | (0.0359) | (0.0249) |
| Children 1 or 2 | -0.0516*** | -0.0854*** | -0.0157 | -0.0503*** | -0.0849*** | -0.0151 | -0.0490*** | -0.0851*** | -0.0151 |
|  | (0.0162) | (0.0202) | (0.0155) | (0.0165) | (0.0205) | (0.0154) | (0.0167) | (0.0204) | (0.0155) |
| Good health | -0.0722*** | -0.0604*** | -0.0551** | -0.0707*** | -0.0602*** | -0.0544*** | -0.0726*** | -0.0598*** | -0.0543*** |
|  | (0.0216) | (0.0189) | (0.0213) | (0.0209) | (0.0178) | (0.0202) | (0.0210) | (0.0182) | (0.0204) |
| Religious | -0.0592 | -0.203*** | -0.222*** | -0.0588 | -0.203*** | -0.222*** | -0.0590 | -0.203*** | -0.222*** |
|  | (0.0385) | (0.0350) | (0.0341) | (0.0373) | (0.0346) | (0.0339) | (0.0363) | (0.0347) | (0.0339) |
| Left orientation | 0.00544 | 0.00841 | -0.00491 | 0.00600 | 0.00851 | -0.00466 | 0.00614 | 0.00848 | -0.00466 |
|  | (0.00941) | (0.00867) | (0.00813) | (0.00910) | (0.00807) | (0.00771) | (0.00900) | (0.00801) | (0.00768) |
| Life control | -0.0356*** | -0.0274*** | -0.0388*** | -0.0350*** | -0.0272*** | -0.0385*** | -0.0343*** | -0.0274*** | -0.0385*** |
|  | (0.00639) | (0.00520) | (0.00507) | (0.00583) | (0.00517) | (0.00481) | (0.00572) | (0.00532) | (0.00485) |
| Social trust | 0.00223 | 0.0637** | 0.000273 | -0.0143 | 0.0563* | -0.00622 | -0.0141 | 0.0562* | -0.00623 |
|  | (0.0328) | (0.0295) | (0.0301) | (0.0313) | (0.0294) | (0.0263) | (0.0313) | (0.0294) | (0.0263) |
| AST |  |  |  | 1.418* | 0.778 | 0.541 | 1.195 | 0.820 | 0.550 |
|  |  |  |  | (0.781) | (0.927) | (0.806) | (0.796) | (0.793) | (0.723) |
| FX index | -0.131*** | -0.171*** | -0.149*** | -0.139*** | -0.170*** | -0.152*** | -0.0494 | -0.187*** | -0.155** |
|  | (0.0418) | (0.0411) | (0.0447) | (0.0429) | (0.0423) | (0.0451) | (0.0662) | (0.0649) | (0.0656) |
| Log_GDPPC |  |  |  | 0.270 | 0.273 | 0.0893 | 0.264 | 0.274 | 0.0894 |
|  |  |  |  | (0.253) | (0.192) | (0.229) | (0.261) | (0.191) | (0.229) |
| FX index*AST |  |  |  |  |  |  | -0.274 | 0.0511 | 0.0103 |
|  |  |  |  |  |  |  | (0.168) | (0.192) | (0.182) |
| Constant | 2.323*** | 2.158*** | 2.779*** | -0.251 | -0.238 | 1.907 | -0.141 | -0.257 | 1.904 |
|  | (0.148) | (0.144) | (0.197) | (2.132) | (1.502) | (1.887) | (2.204) | (1.501) | (1.893) |
| Observations | 226,007 | 227,151 | 225,930 | 226,007 | 227,151 | 225,930 | 226,007 | 227,151 | 225,930 |
| Number of categories | 87 | 87 | 86 | 87 | 87 | 86 | 87 | 87 | 86 |
| R-squared | 0.117 | 0.103 | 0.075 | 0.118 | 0.104 | 0.075 | 0.118 | 0.104 | 0.075 |

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Time and country fixed-effects are used

Table B2: Trusters vs non-trusters estimates on whole sample of countries

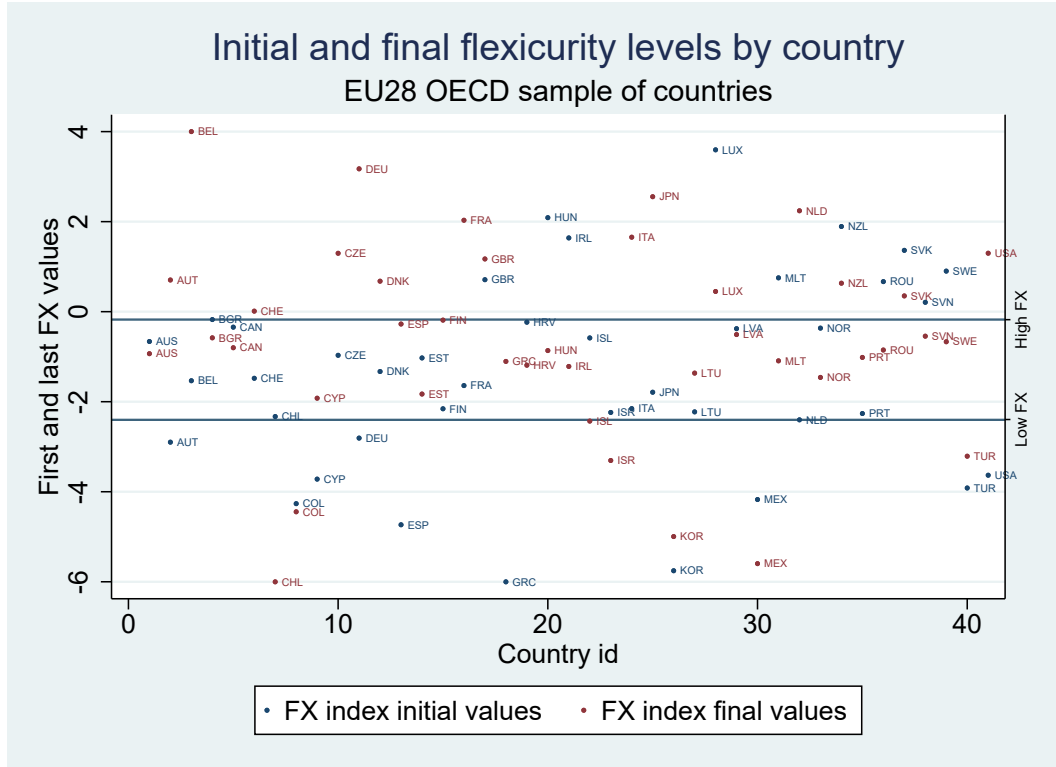| VARIABLES | (1)<br>Cheat tax | (2)<br>Cheat benefits | (3)<br>Avoid fare | (4)<br>Cheat tax | (5)<br>Cheat benefits | (6)<br>Avoid fare |
|---|---|---|---|---|---|---|
| | Social trust = 1 | | | Social trust = 0 | | |
| | | | | — | | |
| Female | -0.250*** | -0.0895*** | -0.0869*** | -0.188*** | -0.0834*** | -0.0558*** |
| | (0.0265) | (0.0154) | (0.0193) | (0.0236) | (0.0178) | (0.0184) |
| Age 15-30 | 0.345*** | 0.437*** | 0.655*** | 0.312*** | 0.343*** | 0.496*** |
| | (0.0285) | (0.0317) | (0.0563) | (0.0280) | (0.0333) | (0.0424) |
| Age 60+ | -0.405*** | -0.314*** | -0.528*** | -0.408*** | -0.360*** | -0.455*** |
| | (0.0277) | (0.0320) | (0.0375) | (0.0273) | (0.0295) | (0.0316) |
| Self-employed | 0.191*** | -0.0658* | -0.0140 | 0.117*** | 0.000219 | -0.0152 |
| | (0.0467) | (0.0347) | (0.0306) | (0.0320) | (0.0318) | (0.0295) |
| Unemployed | 0.199*** | 0.206*** | 0.106** | 0.113*** | 0.147*** | 0.0971*** |
| | (0.0572) | (0.0573) | (0.0513) | (0.0355) | (0.0499) | (0.0368) |
| Income_low | -0.0314 | -0.00630 | 0.0457 | -0.0267 | 0.0490 | 0.0589 |
| | (0.0324) | (0.0517) | (0.0383) | (0.0335) | (0.0372) | (0.0366) |
| Income_high | 0.149*** | 0.0208 | 0.0428 | 0.167*** | 0.0901** | 0.0903** |
| | (0.0308) | (0.0344) | (0.0337) | (0.0487) | (0.0435) | (0.0431) |
| Education_low | 0.0941 | 0.138*** | 0.0674 | 0.0862** | 0.0977** | 0.0493 |
| | (0.0575) | (0.0514) | (0.0477) | (0.0415) | (0.0435) | (0.0436) |
| Education_high | -0.0930*** | -0.117*** | 0.0161 | -0.00330 | -0.138*** | -0.106*** |
| | (0.0296) | (0.0311) | (0.0419) | (0.0276) | (0.0443) | (0.0356) |
| Children 1 or 2 | -0.0204 | -0.0509** | -0.105*** | -0.0223 | -0.0454** | -0.0811*** |
| | (0.0231) | (0.0222) | (0.0246) | (0.0166) | (0.0202) | (0.0225) |
| Good health | -0.0750*** | -0.0785*** | -0.0739*** | -0.0368* | -0.0624*** | -0.0515** |
| | (0.0275) | (0.0269) | (0.0248) | (0.0211) | (0.0233) | (0.0207) |
| Religious | -0.258*** | -0.123*** | -0.281*** | -0.220*** | -0.0378 | -0.183*** |
| | (0.0352) | (0.0351) | (0.0315) | (0.0382) | (0.0444) | (0.0417) |
| Left orientation | -0.0187* | 0.0114 | 0.0203* | -0.00258 | 0.00105 | 0.00103 |
| | (0.0105) | (0.0108) | (0.0106) | (0.00919) | (0.0107) | (0.0103) |
| Life control | -0.0485*** | -0.0540*** | -0.0337*** | -0.0373*** | -0.0332*** | -0.0297*** |
| | (0.00831) | (0.00911) | (0.00865) | (0.00545) | (0.00658) | (0.00601) |
| FX index | -0.111** | -0.123*** | -0.145*** | -0.168*** | -0.126*** | -0.171*** |
| | (0.0513) | (0.0380) | (0.0391) | (0.0404) | (0.0420) | (0.0431) |
| Log_GDPPC | 0.180 | 0.372* | 0.345 | -0.0674 | 0.0267 | 0.0550 |
| | (0.236) | (0.218) | (0.232) | (0.251) | (0.283) | (0.236) |
| Constant | 1.744 | -0.691 | -0.672 | 3.088 | 2.125 | 1.826 |
| | (2.127) | (1.904) | (1.976) | (1.979) | (2.208) | (1.861) |
| | | | | | | |
| Observations | 77,091 | 77,363 | 77,679 | 167,071 | 166,816 | 167,692 |
| Number of categories | 87 | 87 | 86 | 87 | 87 | 86 |
| R-squared | 0.079 | 0.134 | 0.115 | 0.077 | 0.106 | 0.097 |

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Time and country fixed-effects are used

# Appendix C: Welfare state designs' path dependency

We acknowledge from the existing literature that two forces are at work: first, that labor market and social security institutions change over time but the directions in which their reform can move onto are to some extent dependent on past institutional designs (*path dependency*) (Van Kersbergen, 2002). Second, over the long-run individuals' behaviors tend to adapt to changing welfare state legislation and its incentives (Ljunge, 2011). In light of these two assumptions, we can reasonably expect that the responsiveness of individuals' civic attitudes to increasing flexicurity degrees could be influenced by a country's welfare state previous designs. To try to empirically verify this statement, we divide our sample into three clusters of countries (high, average and low FR), according to their initial degree of flexicurity displayed in the dataset at our disposal (e.g. the FX index for Spain in 1980). The *low flexicurity* and *high flexicurity* clusters are generated by grouping the countries whose first FX index occurrence is respectively below the 25th and above the 75th percentile of the first FX index observations in time. The countries whose first FX value is in between the 25th and 75th percentile are grouped in the *average flexicurity* group.

Figure C1: Initial and final flexicurity values - OECD EU28 countries



**Initial and final flexicurity levels by country**
EU28 OECD sample of countries

• FX index initial values   • FX index final values

In Figure C1 the blue dots indicate the first observed FX values by country and the red dots indicate the most recent available value of FX for those same countries. Thus, the vertical distance between the blue and the red dots shows the variation in the flexicurity levels over time for each country. The relative position of the blue dots to the blue lines in the graph shows the belonging of countries to each one of the three groups (for instance: Great Britain belongs to the high FX group; Italy belongs to the average FX group; Mexico belongs to the low FX group). Running a specification analogous to the one in Equation 2, we check whether flexicurity reform have a differentiated outcome on civic attitudes depending on past welfare state designs. First we take OLS estimates with time and country fixed-effects on each one of the three subgroups of countries (Table C2), and then we estimate the marginal effects using the average country-level of social trust as conditioning factor[6]. Figures C2, C3 and C4 show the marginal effects by country group for each one of the dependent variables. Analogously to the previous figures, the yellow histograms represent the frequency distribution of average social trust for each one of the three different subgroups. From the joint analysis of Figure C2, C3, and C4 the takeaway message is that introducing higher degrees of flexicurity does not shrink the existing levels of individual engagement with social norms, it rather appears as a contributing factor to the citizens' responsibilization. When looking more in depth at the results we notice that for countries in the *Average FR* group the analysis is entirely independent from average social trust, as there is no significant change of coefficients' signs for its whole distribution. As for countries

---

[6]We show only results for the OECD-EU28 set of countries. Results for the whole sample are analogous to those here displayed and are available upon request to the authors.

belonging to the high flexicurity cluster, it seems that additional degrees of flexicurity are particularly reductive of uncivic behaviors when levels of trust are relatively low, while the effect becomes positive for higher values of average trust. The fact that the marginal effects coefficients are negative for the *low FX* group, even when average trust is particularly low, constitutes a strong finding against the idea that flexicurity would not be viable for countries with low levels of social trust on the base of cultural and behavioral reasons. Overall, this analysis shows that the effect of additional degrees of flexicurity does not crowd-out civic attitudes independently from any previous institutional context, yet differences in the magnitude of the effects arise among the three different groups of countries. In any case it should not produce detrimental effects on the aggregated levels of social responsibility.

Table C1: Estimates on 3 sub-groups of OECD EU28 sample by historical flexicurity levels.

| VARIABLES | (1) Cheat benefits | (2) Avoid fare | (3) Cheat taxes | (4) Cheat benefits | (5) Avoid fare | (6) Cheat taxes | (7) Cheat benefits | (8) Cheat benefits | (9) Cheat benefits |
|---|---|---|---|---|---|---|---|---|---|
| | High FR | | | Low FR | | | Average FR | | |
| Female | -0.0764** | -0.0792** | -0.380*** | -0.139*** | -0.139*** | -0.170*** | -0.0867*** | -0.111*** | -0.364*** |
| | (0.0278) | (0.0275) | (0.0354) | (0.0376) | (0.0376) | (0.0387) | (0.0162) | (0.0321) | (0.0466) |
| Age 15-30 | 0.676*** | 0.928*** | 0.456*** | 0.343*** | 0.343*** | 0.314*** | 0.510*** | 0.855*** | 0.398*** |
| | (0.0804) | (0.119) | (0.0461) | (0.0763) | (0.0763) | (0.0730) | (0.0463) | (0.0552) | (0.0448) |
| Age 60+ | -0.263*** | -0.489*** | -0.290*** | -0.348*** | -0.348*** | -0.350*** | -0.338*** | -0.516*** | -0.449*** |
| | (0.0505) | (0.0693) | (0.0559) | (0.0289) | (0.0289) | (0.0281) | (0.0476) | (0.0546) | (0.0423) |
| Self-employed | 0.0345 | -0.00747 | 0.312*** | -0.0175 | -0.0175 | 0.109* | -0.00687 | 0.00420 | 0.378*** |
| | (0.0662) | (0.0873) | (0.0473) | (0.0521) | (0.0521) | (0.0506) | (0.0431) | (0.0439) | (0.0819) |
| Unemployed | 0.397*** | 0.211*** | 0.205* | 0.0845 | 0.0845 | 0.0629* | 0.299*** | 0.174*** | 0.169*** |
| | (0.0999) | (0.0597) | (0.109) | (0.0703) | (0.0703) | (0.0321) | (0.0457) | (0.0571) | (0.0429) |
| Income_low | 0.0866 | 0.0884 | -0.0639 | 0.158** | 0.158** | -0.0172 | 0.107** | 0.162*** | 0.0664 |
| | (0.0643) | (0.0524) | (0.0551) | (0.0569) | (0.0569) | (0.0236) | (0.0411) | (0.0267) | (0.0497) |
| Income_high | -0.137*** | -0.0372 | 0.0425* | -0.00453 | -0.00453 | 0.0804 | -0.00969 | -0.0194 | 0.114** |
| | (0.0373) | (0.0382) | (0.0228) | (0.0446) | (0.0446) | (0.0666) | (0.0376) | (0.0400) | (0.0427) |
| Education_low | 0.0930 | -0.224** | -0.108* | 0.0153 | 0.0153 | -0.0411 | 0.0850 | -0.105** | -0.00327 |
| | (0.105) | (0.0879) | (0.0510) | (0.0794) | (0.0794) | (0.0507) | (0.0492) | (0.0496) | (0.0600) |
| Education_high | -0.189** | 0.0177 | -0.102** | -0.235** | -0.235** | -0.115*** | -0.127*** | 0.0678* | -0.0608 |
| | (0.0677) | (0.0557) | (0.0393) | (0.0771) | (0.0771) | (0.0341) | (0.0314) | (0.0351) | (0.0441) |
| Children 1 or 2 | -0.106*** | -0.101* | 0.0313 | -0.0778*** | -0.0778*** | -0.0623* | -0.0378* | -0.0760** | 0.0394 |
| | (0.0169) | (0.0450) | (0.0513) | (0.0201) | (0.0201) | (0.0290) | (0.0183) | (0.0279) | (0.0237) |
| Good health | -0.0619 | 0.0294 | -0.00493 | -0.0605* | -0.0605* | -0.0566 | -0.0564** | -0.0265* | -0.0507** |
| | (0.0360) | (0.0283) | (0.0174) | (0.0284) | (0.0284) | (0.0424) | (0.0260) | (0.0143) | (0.0199) |
| Religious | -0.129* | -0.326*** | -0.371*** | -0.150*** | -0.150*** | -0.261*** | -0.0680** | -0.239*** | -0.263*** |
| | (0.0615) | (0.0707) | (0.0669) | (0.0451) | (0.0451) | (0.0551) | (0.0321) | (0.0337) | (0.0413) |
| Left orientation | 0.0301 | 0.0121 | -0.0218 | 0.0123 | 0.0123 | 0.0110* | 0.0233*** | 0.0268** | -0.0210 |
| | (0.0167) | (0.0139) | (0.0345) | (0.0122) | (0.0122) | (0.00595) | (0.00808) | (0.0116) | (0.0131) |
| Life control | -0.0336** | -0.0226* | -0.0504*** | -0.0351** | -0.0351** | -0.0445*** | -0.0377*** | -0.0246*** | -0.0247** |
| | (0.0113) | (0.00993) | (0.00726) | (0.0115) | (0.0115) | (0.00948) | (0.00949) | (0.00852) | (0.00916) |
| Social trust | -0.0695* | -0.0294 | -0.107** | 0.0283 | 0.0283 | 0.0656 | -0.0857 | 0.0578 | -0.102** |
| | (0.0358) | (0.0448) | (0.0387) | (0.0897) | (0.0897) | (0.0682) | (0.0525) | (0.0353) | (0.0442) |
| AST | -2.689** | 1.386 | -0.138 | 1.286 | 1.286 | 2.112** | 1.490 | 0.753 | -0.714 |
| | (0.808) | (1.417) | (1.521) | (1.695) | (1.695) | (0.703) | (1.426) | (0.615) | (0.467) |
| FX index | -0.643** | -0.0910 | -0.568 | -0.102 | -0.102 | -0.125 | -0.0729 | -0.0365 | -0.0468 |
| | (0.199) | (0.359) | (0.307) | (0.0883) | (0.0883) | (0.0728) | (0.146) | (0.0715) | (0.0999) |
| Log_GDPPC | -0.371** | -0.534 | -0.646*** | 1.733** | 1.733** | 0.0740 | 0.411 | 0.157 | 0.119 |
| | (0.124) | (0.372) | (0.0871) | (0.578) | (0.578) | (0.456) | (0.247) | (0.151) | (0.237) |
| FX index*AST | 1.015** | 0.163 | 1.093* | -0.172 | -0.172 | -0.277** | -0.139 | 0.00558 | 0.0938 |
| | (0.318) | (0.514) | (0.515) | (0.267) | (0.267) | (0.120) | (0.349) | (0.156) | (0.185) |
| Constant | 6.789*** | 6.393* | 9.463*** | -12.89** | -12.89** | 1.274 | -1.977 | 0.479 | 2.572 |
| | (0.999) | (3.397) | (0.920) | (5.318) | (5.318) | (3.784) | (2.244) | (1.359) | (2.231) |
| | | | | | | | | | |
| Observations | 19,757 | 19,794 | 19,804 | 54,211 | 54,211 | 54,522 | 58,609 | 58,783 | 58,749 |
| Number of countries | 9 | 9 | 9 | 10 | 10 | 10 | 20 | 20 | 20 |
| R-squared | 0.107 | 0.118 | 0.083 | 0.134 | 0.134 | 0.070 | 0.141 | 0.108 | 0.095 |

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

Figure C2: Marginal effects of flexicurity on the attitudes to cheat on government benefits by initial levels of FX - OECD EU28 sample.
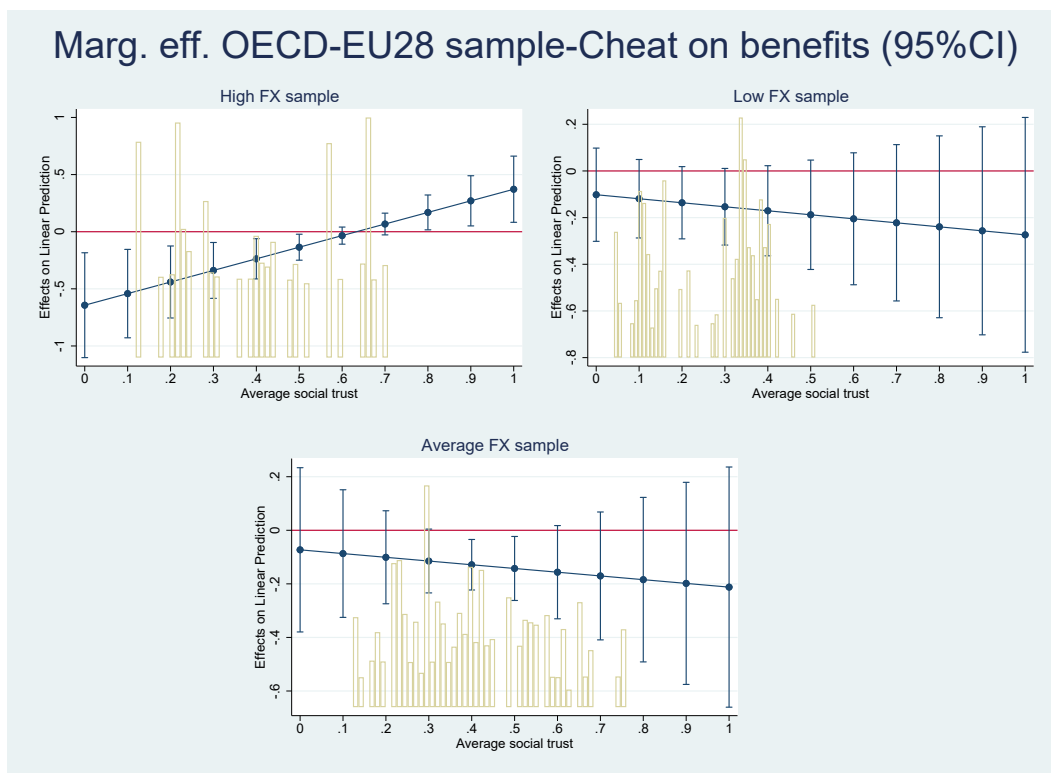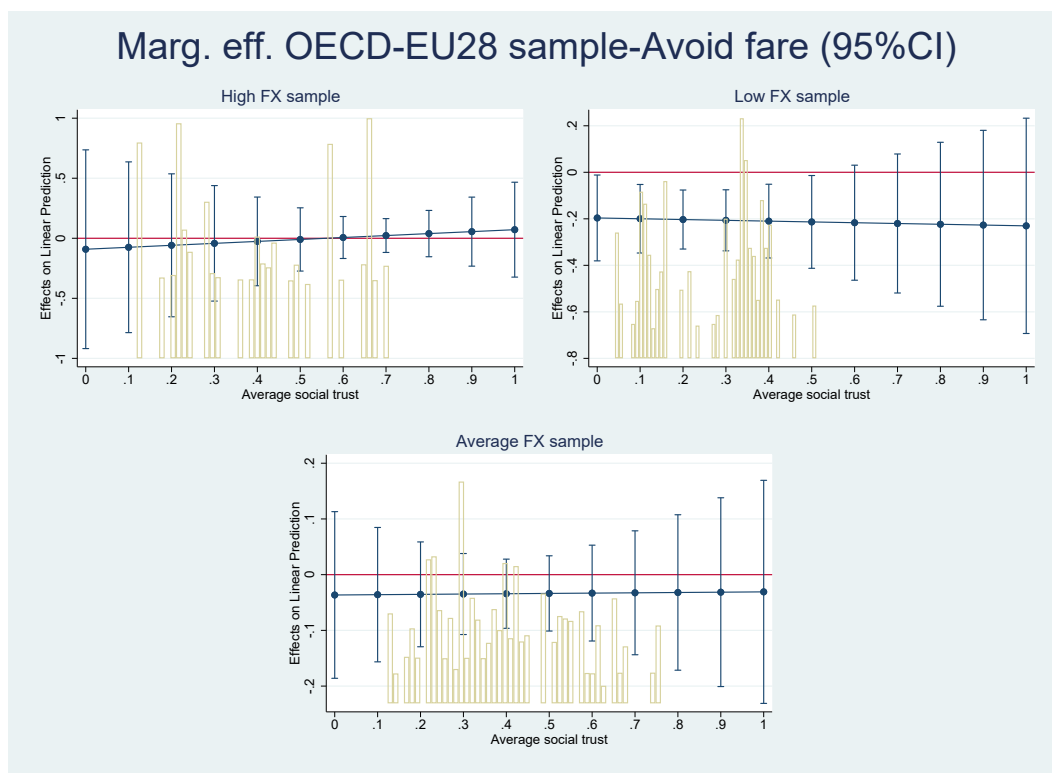


Figure C3: Marginal effects of flexicurity on the attitudes to cheat on taxes by initial levels of FX - OECD EU28 sample.

Figure C4: Marginal effects of flexicurity on the attitudes to cheat on public transports by initial levels of FX - OECD EU28 sample.



Marg. eff. OECD-EU28 sample-Avoid fare (95%CI)

# Appendix D: Some remarks on respondents' expressiveness

In this paragraph we briefly address the issue of respondents' expressiveness. Do people truly behave as they declare to do in the surveys? What are the factors that may drive an individual to respond to the survey differently from what he or she behaves in reality? In this sense, an expressive response is given when one respondent declares an answer to a survey question which is not consistent with his or her real behavior. In other words the surveyed "lies to the survey". As emerges from the work of several scholars, expressiveness mainly arises because of the combination of two factors: first, respondents do not incur any cost for the answers they provide (Bertrand and Mullainathan, 2001) and may potentially express responses which are not consistent with their actual behaviors in the attempt to self-confirm their identity. Second, people receive "Expressive-utility" from responding in a way which substantiates their personal identity or set of beliefs (Hillman, 2010). For instance, people receive expressive utility when confirming their trustworthiness, generosity, religiousness and so on. If responding to the survey does not imply any cost, expressive responses could be diffused and may potentially reduce the reliability of the survey itself. However, scholars have also found that the incidence of expressive responses is rather small, especially in the context of politics, where survey responses reflect quite well the real preferences of the mass public (Berinsky, 2018).

We address the potential problem of expressiveness by repeating the experiments on a sub-sample of observations that excludes individuals who may be more likely to express expressive responses because of their personal, social and cultural profile. In the specific, we consider the following survey questions:

1. How important is in your life: Friends

2. How important is in your life: Family

3. How important is in your life: Religion

4. Which qualities do you consider to be especially important in children: Feeling of responsibility

5. Which qualities do you consider to be especially important in children: Tolerance and respect for other people

6. Level of income: High

7. Level of income: Low

Questions 1 to 3 were answered on a scale from 1 to 4 where 1 meant "Very important" and 4 meant "Not at all important". We re-coded these variables into dummies 0-1, where 1 reflected answers greater than 3 and 0 answers smaller or equal to 3. Questions 4 and 5

were responded on a 1-2 scale, where 1 indicated that the surveyed considered the quality in matter as important, 2 alternatively. Again, we re-coded these variables into 0-1 dummies. Finally, questions 6 and 7 were responded on a 0-1 scale, where 1 indicated enjoying either high or low income, 0 differently. At this point, we simply calculated the average value of the summation of the above-mentioned variables in their dummy version. We chose to discard all the individual observations with a value higher than the average. Doing so we eliminate from the analysis those individuals who are more likely to reply with expressive responses, and thus we limit the possibility that the our data suffer from expressiveness. We repeat our estimations according to Equation 1 and 2 on the whole sample of available countries. Results in Table D1 confirm our previous findings: in eight out of nine specifications considered, additional flexicurity significantly reduces the likelihood of considering uncivic behaviors as acceptable. Also, marginal effects in Figures D1,D2, and D3 go in this direction showing significant and negative coefficients, independently from the average values of social trust.

Table D1: Estimates on a sample excluding potentially expressive respondents.

| VARIABLES | (1) Cheat Benefits | (2) Avoid Fare | (3) Cheat Taxes | (4) Cheat Benefits | (5) Avoid Fare | (6) Cheat Taxes | (7) Cheat Benefits | (8) Avoid fare | (9) Cheat taxes |
|---|---|---|---|---|---|---|---|---|---|
| | *Non-expressive individuals* | | | | | | | | |
| Female | -0.0800*** | -0.0702*** | -0.223*** | -0.0798*** | -0.0700*** | -0.223*** | -0.0799*** | -0.0700*** | -0.223*** |
| | (0.0157) | (0.0215) | (0.0272) | (0.0158) | (0.0213) | (0.0271) | (0.0157) | (0.0213) | (0.0272) |
| Age 15-30 | 0.367*** | 0.541*** | 0.342*** | 0.367*** | 0.541*** | 0.342*** | 0.366*** | 0.541*** | 0.342*** |
| | (0.0360) | (0.0437) | (0.0298) | (0.0353) | (0.0438) | (0.0298) | (0.0351) | (0.0438) | (0.0297) |
| Age 60+ | -0.357*** | -0.489*** | -0.410*** | -0.360*** | -0.491*** | -0.412*** | -0.358*** | -0.491*** | -0.411*** |
| | (0.0303) | (0.0314) | (0.0256) | (0.0301) | (0.0315) | (0.0251) | (0.0299) | (0.0314) | (0.0250) |
| Self-employed | -0.0259 | -0.0241 | 0.159*** | -0.0242 | -0.0228 | 0.160*** | -0.0197 | -0.0228 | 0.161*** |
| | (0.0326) | (0.0305) | (0.0355) | (0.0333) | (0.0305) | (0.0353) | (0.0337) | (0.0305) | (0.0354) |
| Unemployed | 0.191*** | 0.100** | 0.141*** | 0.194*** | 0.100** | 0.143*** | 0.189*** | 0.100** | 0.142*** |
| | (0.0656) | (0.0420) | (0.0411) | (0.0656) | (0.0410) | (0.0412) | (0.0642) | (0.0405) | (0.0402) |
| Income_low | 0.0430 | 0.0548 | -0.0188 | 0.0487 | 0.0578 | -0.0158 | 0.0482 | 0.0578 | -0.0160 |
| | (0.0472) | (0.0439) | (0.0339) | (0.0469) | (0.0427) | (0.0333) | (0.0461) | (0.0428) | (0.0333) |
| Income_high | 0.116** | 0.0991** | 0.230*** | 0.112*** | 0.0963** | 0.227*** | 0.110*** | 0.0963** | 0.227*** |
| | (0.0455) | (0.0458) | (0.0508) | (0.0424) | (0.0438) | (0.0498) | (0.0409) | (0.0433) | (0.0494) |
| Education_low | 0.0624 | -0.00501 | 0.0388 | 0.0724** | 0.00170 | 0.0454 | 0.0703* | 0.00169 | 0.0446 |
| | (0.0386) | (0.0342) | (0.0360) | (0.0362) | (0.0314) | (0.0334) | (0.0376) | (0.0315) | (0.0336) |
| Education_high | -0.150*** | -0.0784** | -0.0375 | -0.160*** | -0.0868** | -0.0434 | -0.159*** | -0.0868** | -0.0432 |
| | (0.0420) | (0.0362) | (0.0305) | (0.0425) | (0.0365) | (0.0297) | (0.0430) | (0.0365) | (0.0299) |
| Children 1 or 2 | -0.0678*** | -0.101*** | -0.0259 | -0.0664*** | -0.100*** | -0.0250 | -0.0650*** | -0.100*** | -0.0247 |
| | (0.0197) | (0.0225) | (0.0180) | (0.0195) | (0.0224) | (0.0178) | (0.0195) | (0.0225) | (0.0178) |
| Good health | -0.0833*** | -0.0613*** | -0.0741*** | -0.0791*** | -0.0587*** | -0.0718*** | -0.0821*** | -0.0587*** | -0.0726*** |
| | (0.0217) | (0.0209) | (0.0252) | (0.0213) | (0.0201) | (0.0241) | (0.0212) | (0.0202) | (0.0242) |
| Religious | -0.0186 | -0.172*** | -0.182*** | -0.0218 | -0.175*** | -0.184*** | -0.0218 | -0.175*** | -0.184*** |
| | (0.0435) | (0.0355) | (0.0367) | (0.0400) | (0.0349) | (0.0361) | (0.0382) | (0.0349) | (0.0359) |
| Left orientation | 0.00342 | 0.00683 | -0.00702 | 0.00425 | 0.00742 | -0.00650 | 0.00406 | 0.00741 | -0.00655 |
| | (0.00903) | (0.00824) | (0.00772) | (0.00884) | (0.00794) | (0.00758) | (0.00869) | (0.00797) | (0.00759) |
| Life control | -0.0412*** | -0.0300*** | -0.0427*** | -0.0399*** | -0.0292*** | -0.0420*** | -0.0391*** | -0.0292*** | -0.0418*** |
| | (0.00706) | (0.00534) | (0.00525) | (0.00641) | (0.00525) | (0.00511) | (0.00623) | (0.00536) | (0.00517) |
| Social trust | 0.0477 | 0.0914*** | 0.0225 | 0.0230 | 0.0760** | 0.00856 | 0.0240 | 0.0760** | 0.00881 |
| | (0.0391) | (0.0344) | (0.0350) | (0.0366) | (0.0338) | (0.0301) | (0.0366) | (0.0338) | (0.0302) |
| AST | | | | 1.986** | 1.271 | 1.116 | 1.732** | 1.270 | 1.053 |
| | | | | (0.870) | (0.904) | (0.790) | (0.868) | (0.818) | (0.751) |
| FX index | -0.128*** | -0.164*** | -0.143*** | -0.151*** | -0.179*** | -0.155*** | -0.0290 | -0.179*** | -0.128* |
| | (0.0412) | (0.0386) | (0.0446) | (0.0450) | (0.0425) | (0.0478) | (0.0709) | (0.0675) | (0.0672) |
| Log_GDPPC | 0.147 | 0.210 | 0.0491 | 0.281 | 0.300 | 0.123 | 0.264 | 0.300 | 0.119 |
| | (0.262) | (0.222) | (0.258) | (0.251) | (0.197) | (0.249) | (0.261) | (0.199) | (0.253) |
| FX index*AST | | | | | | | -0.367* | -0.00160 | -0.0827 |
| | | | | | | | (0.186) | (0.196) | (0.185) |
| Constant | 1.162 | 0.485 | 2.386 | -0.528 | -0.621 | 1.456 | -0.314 | -0.620 | 1.502 |
| | (2.107) | (1.793) | (2.120) | (2.108) | (1.538) | (2.062) | (2.207) | (1.559) | (2.100) |
| | | | | | | | | | |
| Observations | 149,918 | 150,760 | 149,854 | 149,918 | 150,760 | 149,854 | 149,918 | 150,760 | 149,854 |
| R-squared | 0.114 | 0.104 | 0.079 | 0.116 | 0.104 | 0.080 | 0.117 | 0.104 | 0.080 |
| Number of countries | 87 | 87 | 86 | 87 | 87 | 86 | 87 | 87 | 86 |

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Time and country fixed-effects are used

Figure D1: Marginal effects of flexicurity on the attitudes to cheat on government benefits.
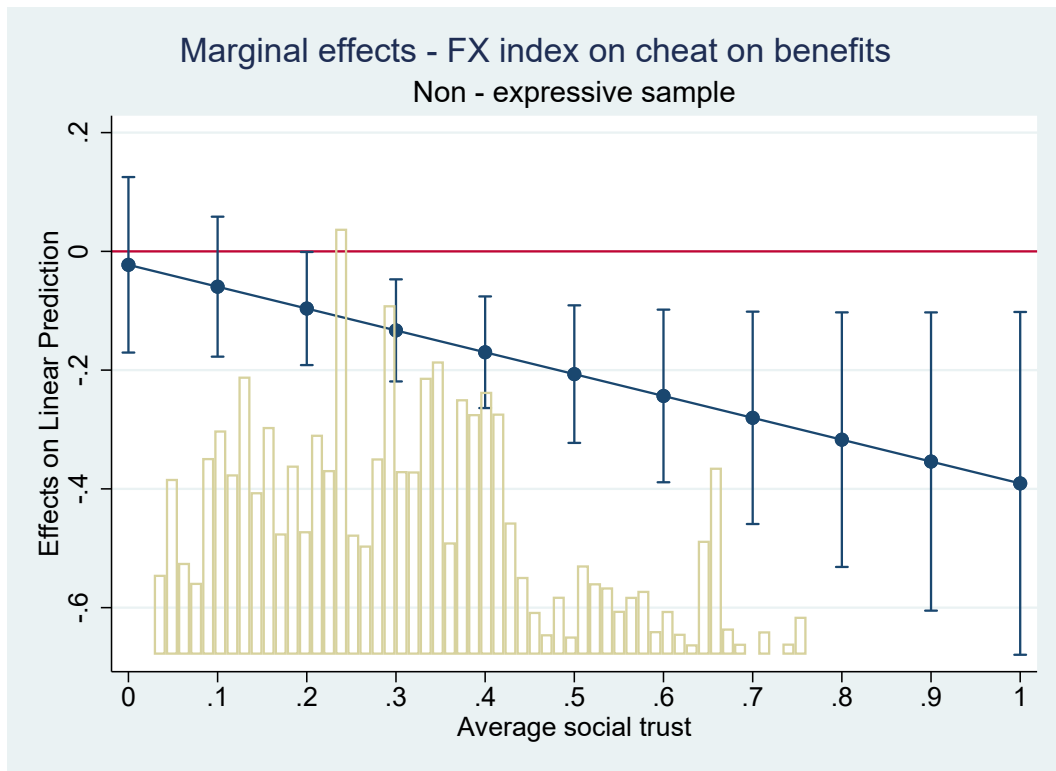


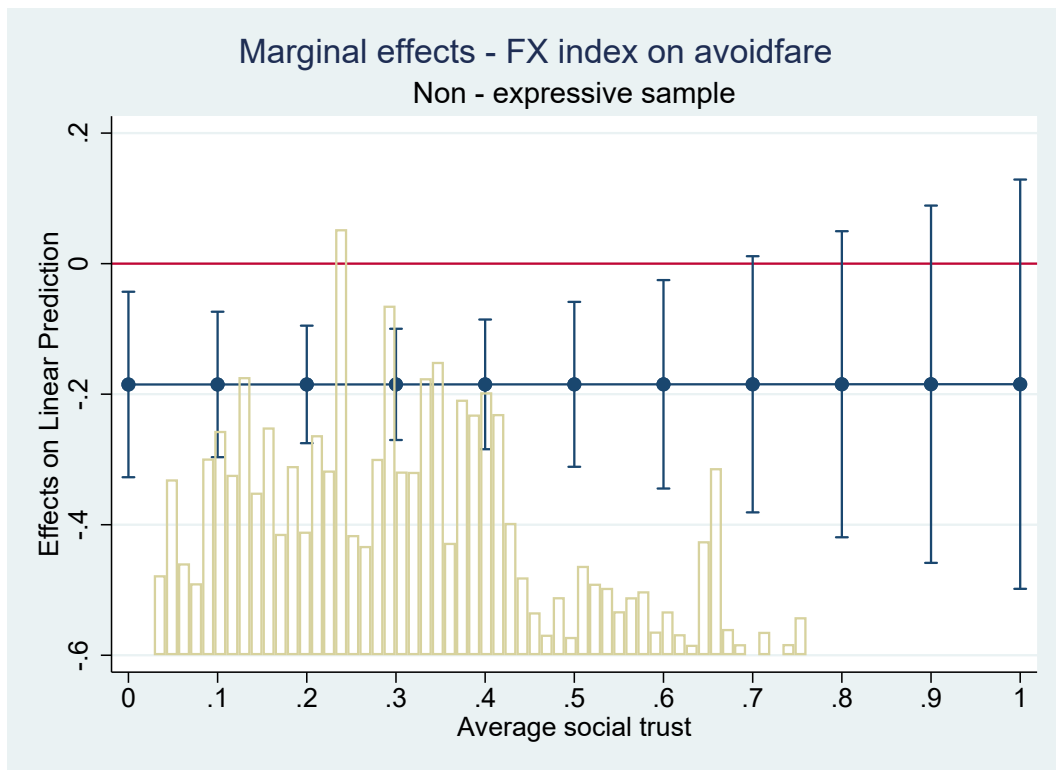Figure D2: Marginal effects of flexicurity on the attitudes to cheat on public transports.

Figure D3: Marginal effects of flexicurity on the attitudes to cheat on taxes.



Marginal effects - FX index on cheat on taxes

Non - expressive sample