

On the values and attitudes of economics students in Portugal

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ABSTRACT Introduction: Several studies regarding the values and attitudes of Economics students have noticed a greater leaning towards the free riding phenomena and the market economy. Are these traits always valid? Do they coexist with other sociological relevant aspects? **Materials and Methods:** A survey was conducted in Lisbon (Portugal) in 2016 with Economics students. In addition to the economic view, it was studied their self-perception at the left-right spectrum and their interest in politics. The results of this survey were compared with previous research on three social groups (young citizens, elder citizens, and other students). The data were statistically analyzed through correlation and factorial analysis tests. **Results:** The research revealed a tendency towards a right-wing self-perception and an increased concern about politics by these Portuguese students. However, these traits were attenuated, because those Economics students converge with other group's values, specially the "young citizens" and the "old citizens". Generally, groups with greater leaning towards free riding are also more inclined to pro-market ideas, right-wing, and interested in politics. Results indicate the existence of other substantially different behavioral components, being one of them correspondent to the variables used to measure "free riding" and an opposite component which we can label "open-mindedness". **Discussion:** As a whole, the results suggest a considerable influence of Economics in the mental framework of these students. Evidence seems to signal a diffuse cultural influence, corresponding to a simplified and impoverished version of the academic field.

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I. Introduction¹

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The research topic of this paper is to explore how studying economics has potentially relevant effects on the social values and attitudes which embody the trust-building processes of contemporary societies. The text is organized according to the following sections: Introduction, Review of literature, Survey data, Tests of association, Factor analysis, and Conclusion.

An important research line has thrived in recent decades of studies focused on the discussion of the potential indoctrination effects of studying economics. In very broad terms, firstly, this research line usually supports that there is a greater inclination among economics students to behave in a more self-centered way, holding a free-ride tendency, attempting to minimize their cooperation with others; and secondly, it also recognizes a greater inclination to be a free-marketer, preferring the private (versus public) economic regulation of the provision of scarce goods and services.

Given the fact that these inclinations for free-riding as well as for free-marketer attitudes are simply relatable to the theoretical framework of mainstream economics, positing the so-called *homo economicus*, or 'rational', interested and individualistic 'representative agent', a sizeable group of debates, referring to the various possible political and moral repercussions of studying economics, has been brought to the Academic Fora. These debates could be said to primarily address the following: a) the moral aspects, regarding the potential ramifications of free-riding tendency; and b) the political dimension of the enhancement

of pro-market attitudes and values. In other words, the conceivable libel, accordingly associated with economics, refers to both the possible corrosion of trust or 'social capital' associated with the nucleus of its message - its propitiation of the so-called 'opportunistic behavior', or its 'character damaging' effects, as Varoufakis (2002, p. 285) puts it, as well as deviation from the formally positive and value-free features that mainstream economics habitually claims to possess.

We should notice that the concept of trust is very important in this context, both regarding facts usually treated within the ambit of economic sociology, and aspects mostly referring to political sociology. Actually, the so-called 'opportunistic' conduct has long ago been identified as a problem by both economics and economic sociology, insofar as it raises the broader question of the so-called "transaction costs" (see Hodgson, 2004; Williamson, 1975; Graça et al., 2016, p. 517). In other terms, the self-interested "rational conduct" usually posited by mainstream economics may also undermine the very assumptions of the aforementioned economic "rationality", inasmuch all market is, one way or another, inevitably embedded in non-market social structures. This is a very important aspect also regarding the framework of political analysis, namely because the fundamental assumptions of democracy, and particular representative democracy, point towards various elements inextricably associated with trust, which impedes the complete marketization of at least some aspects of political life.

II. Review of literature

A substantial number of studies on this research line has been published, and their results constitute an array of the preferences, values, attitudes, and behaviors of economists as well as the economics students in contrast with those of other professionals, the students from other disciplines, and the population as a whole. The most important of these works include Scott & Rothman (1975), Marwell & Ames (1981), Frey (1986), Carter & Irons (1991), Frank & Schulze (2000), Haucap & Just (2004), Faravelli (2007), Cipriani et al. (2009), Wang & Murnighan (2009), and Hole (2013). For further details, see Graça et al. (2020, p. 112-113).

A recurrent topic in these writings is the propensity to discuss the issue of "Nature vs. Nurture": as to whether the economist's basic mind frame mostly precedes academic studies and self-centered people are usually more attracted to economics (self-selection thus being the key factor), or whether such behaviour is considered to be a consequence of the study of economics, whereby these traits are supposedly induced by subliminal, continuous indoctrination (Frank & Schulze, 1998, 2000; Varoufakis, 2002; Haucap & Just, 2004; Sjöberg & Engelberg, 2006; Lanteri, 2008; Elegido, 2009; Wang & Murnighan, 2009; Goossens & Méon, 2010; López-Pérez & Spiegelman, 2012; Fischer et al., 2017). For obvious reasons, the above-mentioned debates are fairly vivid regarding moral aspects, with considerations directly referring to politics being omnipresent as well (Lebaron, 2012; Mautz, 2014; Etzioni, 2015).

More recent research lines have aimed to promote an advanced degree of intricacy into this field. For example: the so-called *factish* aspects of economics teaching (Delgado-Betancourth, 2014), or economics' alleged inclination to mix (thus rendering inextricable) the descriptions of facts with the expressions of beliefs, together with economics' performative traits, or its ability to engender a particular variety of economic situations as self-fulfilled prophecies, economics thus partly moving towards establishing its own scientific validation (see also Ferraro et al., 2005). The dimensions of risk-loving and sensation-seeking, and also the propensity to adopt power-and-achievement values,

have also been highlighted in the generic psycho-sociological characterization of economics students (Gandal & Roccas, 2002; Sjöberg & Engelberg, 2006). Contextual influences on the formation of moral values have similarly been noticed (Hole, 2013), with the same applying for the relevance of peer pressure, perceived group status (Gandal et al., 2004, 2005), social expectations regarding the economic profession, and also the general cultural formation of its practitioners, as well as the moral atmosphere of universities themselves (Hummel et al., 2016; Lenger, 2018; Racko, 2019; Graça et al., 2020). More broadly, the importance of culture, namely national culture, as opposed to both nature and nurture, has also been highlighted (Dzionic-Kozłowska & Rehman, 2017a, 2017b).

These discussions ramify into debates on *curriculum* design: whether there should be more or less pluralism, and what variety of pluralism concretely, all of which represent the fulcrum of interesting arguments (Shabab, 2020; Cioni & Rossi, 2020). The preferences and beliefs of economics students have in turn been carefully identified, with some arguing for the prevalence of the self-selection component concerning preferences, indoctrination nevertheless being dominant regarding beliefs (Espín et al., 2022). Similarly, the importance of the framing of problems has been especially highlighted, namely how frames influence each person's beliefs about the actions and motivations of others. According to Hellmich (2020), frames have been systematically underestimated in this group of analysis, but several more recent theories have highlighted that, although they really have little impact on most people's fundamental preferences, they actually

“influence beliefs about other peoples' intentions and expectations. These expectations have feedback effects on their own behavior, as they trigger strong social emotions, such as guilt or shame [...]. Social emotions seem to have much weight in moral decisions. They provide motivations to behave appropriately. Guilt or shame can effectively set limits to the pursuit of extreme self-interest” (Hellmich, 2020, p. 32).

In other words, the typical economics students are very probably not substantially different from the average citizen with regards their fundamental preferences, although they have a tendency to assume a set of beliefs and preferences, where self-centered behavior is usually taken for granted and normalized. That assumption reconfigures the rules of engagement. If as a rule people behave selfishly, then a rational (but not necessarily egotistic) person tends to behave in the corresponding manner: “When in Rome, do as Romans do”. This proviso is valid for both experimental studies and also research based on real life situations (see also Hertel et al., 2002).

In turn, this trend of research discussions broaches the subject of the importance of “narratives” in the *curricula* of economics and business studies (Banerjee et al., 2020; Shabab, 2020). According to Shabab (2020), whereas the simplistic model of mainstream economics tends to emphasize a *laissez-faire* logic, on the contrary, the recognition of an overwhelming presence of externalities suggests an emphasis on the importance of the State, and also of the dimension of social responsibility in businesses, with rules ceasing to be perceived as mere burdensome regulations: “An economics educator designing a curriculum [...] should take care to invert this narrative and celebrate appropriate regulation as enabling force towards sustainable businesses” (Shabab, 2020, p. 5).

III. Survey data

This paper pursues this train of discussions, and more specifically it aims to identify configurations of political values and attitudes in the Portuguese population, based on a collection of surveys regarding the social building of trust,

which refer to various social groups, for the period spanning the years of 2006, 2009, 2012, and 2016/7. These groups are: the economics and the management students, or “the economists”; the students from various other courses, hereinafter named “other students”; and the general population, hereinafter referred to as “citizens”. The survey of 2006 included 376 economists from Lisbon School of Economics & Management - ISEG, The University of Lisbon - ULisbon, and 312 citizens from two parishes (one urban and one rural) of Greater Lisbon. The survey of 2009 targeted 361 other students of various courses at the University of Lisbon and the Polytechnic Institute of Lisbon. In 2012, another group of 650 economists from ISEG was surveyed.

The last survey, which was carried out in 2016/7, encompassed all the groups: economists and other students enrolled in the 2016/7 academic year, as well as citizens, who participated in a survey in December 2016. It encompassed a total of: 455 students from ISEG; 300 students from other universities and polytechnic schools from Lisbon; 600 citizens residing in Greater Lisbon, in a sample stratified by age, gender, and levels of education. All the surveys adopted the use of a paper-based Survey Questionnaire, apart from 2016 targeting citizens, whose questionnaire was conducted by a telephone survey. Numerous questions were included in the questionnaire, all of which referred to the central issue of the social building of trust. In this paper, we have taken additional care to certify that the questions of the survey were not contiguous, and different numeric scales were used. The citizens were divided into two age groups named: “young citizens” from 18-to-34-year-old ones, and “old citizens” for the ones over 35 years old.

The results of these surveys are consistent with the systematic leaning of economics students towards market economic regulation, and also to a predominantly right-wing self-perception. In previous studies, this pattern was also identified in a vast amount of international literature, and it has also been identified in the case of Portugal, regarding ISEG students. In comparison, the general population evidenced a considerably higher ‘statist’ inclination, and a predominantly ‘centrist’ political self-perception. Students from other courses and schools proved to be the opposite, in that they were even more inclined towards State regulation, and situated the left of citizens, in terms of political self-perception. Citizens also revealed the highest levels of aversion to free-riding in the data for 2006, 2009, and 2012, while economists were clearly the most tolerant towards free-riding behavior. Other students occupied a midway position concerning this aspect. Economists were the most politically-interested group, with citizens adopting a more run-of-the-mill position regarding this feature, whereas other students had very little interest in politics.

The questions addressed in this paper, which include the data for 2016, refer to the following variables: 1) proclivity for free-riding, 2) preferences regarding economic regulation, 3) left-right self-perception, and 4) interest in politics. The first and second variables are those more often used in the group of studies mentioned in the literature review (see above). The third variable is actually intimately connected with the second one, albeit they do not exactly overlap, and we deemed to be justified to measure it independently. Finally, interest in politics represents yet another dimension, which is usually not taken into consideration, yet in our opinion deserving a more attentive reflexion. The proclivity for free-riding was assessed indirectly, through the measurement of the degree of tolerance towards behaviour which can indeed be considered to be *stricto sensu* anti-social, such as: claiming undeserved social benefits, engaging in tax evasion, accepting or proposing bribes, drunk driving, exceeding speed limits, throwing garbage on the streets, and fare evasion. The scale ranged from 1 to 4: “not justified”, “little justification”, “some justification”, “fully justified”. The average of these seven dimensions was taken as a free-riding propensity, or tol-

erance for free-riding (for a further discussion, see Section 5 below). The other three variables were assessed directly. The question referring to the desirable form of economic regulation corresponds to a scale of 1 to 3: 1 for “more state”, 2 for “more 3rd sector”, and 3 for “more market”, which accordingly produced a market-leaning index. Political self-perception was assessed with a left-right alignment, with values ranging from 1 on the left, through to 9 on the right. Finally, interest for politics was measured by using a scale consisting of four categories: “no interest”, “little interest”, “some interest”, “a lot of interest”.

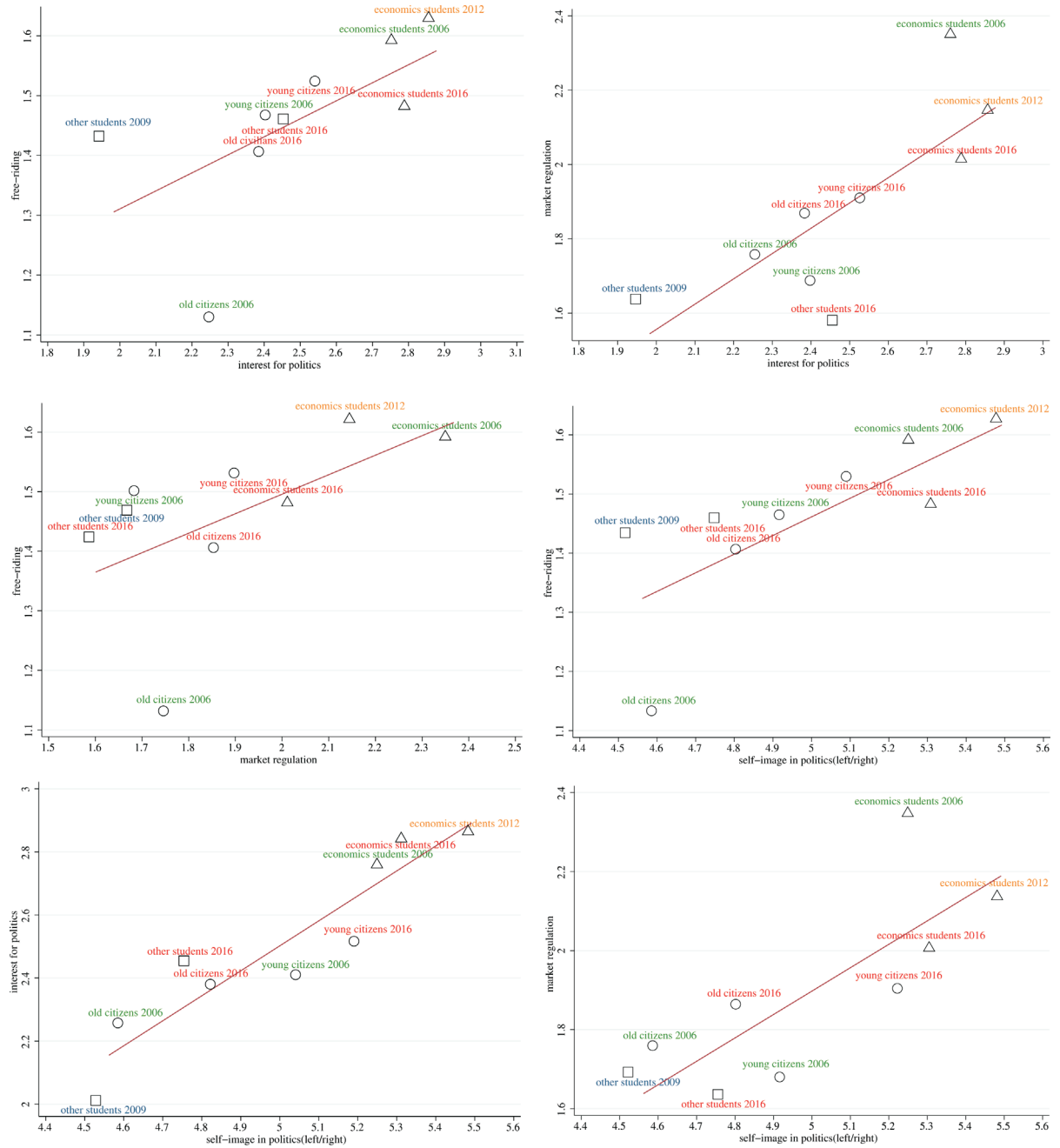
For the data of 2016, many aspects of the previous generic mapping remain valid, although a noticeable convergent trend exists for citizens and economics students: citizens become somewhat less ‘Statist’, and similarly, economics students appear to be less pro-market. Regarding the question of the desirable form of economic regulation, economics students range from a maximum of market-leaning of 2.36 in 2006, through to a value of 2.26 and 2.03, in 2012 and 2016 respectively, whereas all citizens are situated higher up the scale in terms of market-orientation, predominantly young citizens, who range from 1.70 to 1.93, whereas old citizens range from 1.78 to 1.88. Equally important is the observation that the opposite trend is detectable in the case of other students, who move from an already low value of 1.67 in 2006, to an even lower value of 1.60 in 2016. Whereas in 2006 old citizens were clearly an outlier group, mostly on account of their unusually high aversion to free-riding, in 2016 both groups of citizens are simultaneously more tolerant to free-riding and more inclined to market regulation. Economics students become less inclined to market and less prone to free-riding. Other students diverge, becoming the most ‘statist’ of all the groups, and are only slightly more in favour of free-riding than old citizens (Figure 1, center left).

A somewhat consistent, positive relationship exists between tolerance of the various groups for free-riding, their average pro-market inclination, and their political self-perception. Those groups that are more tolerant to free-riding tend to be more right-wing inclined, and also prefer market regulation. Economics students systematically occupy positions in the upper-right part of the figure. However, in 2016, a significant reduction of their tolerance for free-riding and their market-leaning can be observed, as well as a partial reduction in their right-wing inclination (see below). On the other hand, citizens experienced opposite trends, with young citizens in 2016 adopting positions that are practically coincident with those of economists.

Moving to the next dimension of analysis - political self-perception along a left-right alignment, as expected, a higher frequency for values close to the center is verified, especially in the case of citizens, who move from an average value of 4.71 in 2006, to one of 4.97 in 2016. Apart from this swing to the right, young citizens also move from 5.11 to 5.3, whereas old citizens advance from 4.64 to 4.85. In other words, it can be observed that younger groups perceive themselves to be usually more to the right than the older groups, with the entire population gliding to the right. Even other students - which is the group symbolically more to the left of the political spectre - move from 4.59 to 4.76 (Figure 1, center right).

A generic positive relation also exists between tolerance for free-riding and this dimension, whereby an increased right-wing self-perception is typically associated with an augmented tolerance for free-riding. However, the values for 2016 of all groups globally converge towards the middle-of-the-road. Economics students register greater than average values in all three years: 5.31 initially, then 5.51 in 2012, and finally 5.35 in 2016. The two groups of citizens appear to converge towards the model of economists, particularly young citizens, who are actually very close to them in 2016, although economists also become more

Figure 1 - Scatter plots for free-riding, market leaning, left-right self-perception, and interest for politics: Young and Old Citizens, Economics Students, and Other Students



Source: authors' elaboration.

moderate regarding both dimensions. Economics students are located overall to the right of the average citizen, the opposite occurring to other students, who swing to the left both in 2009 and in 2016, although somewhat less in the latter year.

Moving on to considering the dimension of “interest for politics”, once again the overall positive relation with tolerance for free-riding becomes easy to identify (Figure 1, top left). Economists are once more traceable in the upper-right section of the figure, with citizens (particularly young citizens) apparently catching up with that model. However, in 2016 the economists are the most moderate of all, thus blending into a *mêlée*, where they are practically

undistinguishable from young citizens of the same year. Old citizens in 2006 are an outlier group, on account of their extremely low tolerance for free-riding, although they catch up considerably with the mainstream in 2016; other students of 2009 are noteworthy, owing to their exceptionally reduced interest for politics, although they also join the mainstream in 2016.

Moving now to the confrontation of political self-perceptions, with inclinations in terms of economic regulation (Figure 1, bottom right), besides an expectable elective affinity of right-wing with market orientation, and of left-wing with state-leaning, it needs to be highlighted that the exceedingly high pro-market inclination of the economists in 2006 was considerably attenuated in the surveys carried out after the outbreak of the economic crisis (having witnessed the public bailing out of banks and the rapid growth of social public expenditure). However, both young and old citizens move rightwards and towards the market, the first group practically converging with a somewhat 'softened' version of economists in 2016. Other students perceive themselves to be to the left of citizens, and also more in favor of state intervention, moving somewhat to the right (but also slightly in favor of more State) in the last survey.

Another interesting relationship, which is not as expected as the previously-mentioned one, occurs between preferences regarding economic regulation and interest for politics (Figure 1, top right). Clearly, those groups more inclined to a pro-market stance are also usually more interested in politics. Economists are the most interested group in all the years, although citizens, once again especially young ones, tend to catch up. Apart from the feature of economists in 2006 being exceptionally market-inclined, the other relevant aspect is the somewhat outlier position of the other students in 2016, with an unexpectedly high level of political interest, considering their market aversion.

An interest for politics is also positively related with political left-right self-perception, with groups located more to the right usually having a higher political interest, and the opposite for the left (see Figure 1, bottom left). Once again, economists are placed in the upper-right portion of the figure. These results suggest can be interpreted as suggesting that "the lexical resources and the mental framing of economics [have] somehow already 'colonized' the realm of politics, therefore inducing (all other things remaining equal) a bigger inclination of economics students to these activities" (Graça et al., 2020, p. 119-120), in spite of the fact that no increased interest for public matters is really noticeable for economics students. Instead, the crux of the matter seems to be more about average economists perceiving themselves "as naturally endowed with peculiar capacities, thus making them also have a particular, expectable 'vocation' for the exercise of politics" (Graça et al., p. 120). Still, once more in this case, all other groups appear to catch up, especially young citizens. Although the reasons for this evolution are not entirely clear, it seems reasonable to speculate that economists tend to operate as a role model for other people, with citizens moving substantially towards their direction from 2006 to 2016.

IV. Tests of association

Let us now consider the various above-mentioned groups (young and old citizens, economics students, and other students), and establish for each of them correlations for the values of the four variables under consideration: Self-image in Politics, Economic Regulation, Interest for Politics, and Free-Riding. Generically, the relations and trends identified when confronting the aggregate data are confirmed in this group-by-group analysis. It should be noticed that the time dimension is now absent, with each group being considered by referring to the total sum of observations for all years.

Table 1 provides the Pearson's chi-squared statistics for the association between the variables of Self-image in Politics, Interest for Politics, Market Regulation, and Free-Riding for the case of Young Citizens, Old Citizens, Economics Students and Other Students, respectively. The null hypothesis is that the two variables are statistically independent, and the alternative hypothesis corresponds to the variables having an unspecified association or relationship. The test uses cross-tabulation (contingency table), with the distributions of two categorical variables. We computed the chi-squared test statistics for each pair of categories, which reflects the normalized sum of squared deviations between the observed cell counts and expected cell counts. The number of degrees of freedom corresponds to the number of categories minus one in one variable, multiplied by the number of categories minus one in the second variable (for further details, see, Hamilton 2013, for instance). According to the critical values from the chi-squared distribution, significant correlation variables (p-value < 0.05) are observed as follows: between Self-image in Politics and Market Regulation for all groups; between Self-image in Politics and Interest for Politics for Old Citizens, Economics Students and Other Students; between Market Regulation and Interest for Politics, for Young Citizens, Old Citizens and Economics Students; between Free-Riding and Self-image in Politics for Young

Table 1 - Pearson's chi-squared test of independency for Young Citizens, Old Citizens, Economics Students, and Other Students

Young Citizens	Old Citizens	Self-image in Politics (L/R)		Interest for Politics		Market Regulation	
Economics Students	Other Students						
Interest for Politics		25.5 (21) [170]	53.2* (21) [568]				
		58.4* (21) [1267]	61.7* (21) [477]				
Market Regulation		47.5* (14) [168]	38.0* (14) [540]	13.3** (6) [214]	11.2** (6) [650]		
		73.5* (14) [1181]	26.9** (14) [435]	13.4** (6) [1317]	5.4 (6) [533]		
Free-Riding Proxy		33.1** (21) [170]	34.9** (21) [568]	5.8 (9) [217]	32.5* (9) [705]	15.7** (6) [214]	6.5 (6) [650]
		27.2 (21) [1260]	19.6 (21) [470]	16.0 (9) [1442]	15.8 (9) [634]	1.4 (6) [1312]	4.0 (6) [527]

Source: authors' elaboration.

Note: (*) and (**) in chi-squared statistics means significant at the 1% and 5% level, respectively; the number of degrees of freedom observations for each entry is in brackets; the number of observations for each entry is in square brackets. The "benefits" item was used as the Free-Riding proxy for Young Citizens, Old Citizens, and Other Students, as it is the item with the smallest deviation from the mean of the Free-Riding variables. Similarly, the item "fiscal evasion" was used as the Free-Riding proxy for Economics Students.

and Old Citizens; between Free-Riding and Interest for Politics for Old Citizens; and between Free-Riding and Market Regulation for Young Citizens.

One previous observation is needed, bearing in mind that in this case we did not use the values for free-riding, given the fact that this is not a variable with categorical values, but rather an average, which rendered the test for significance impossible. Alternatively, we used a free-riding proxy (see the note to Table 1). Secondly, we must highlight the occurrence of many relevant levels of correlations between the three 'directly political' variables and for all groups. Obviously, this is in itself a rather meaningful aspect, notwithstanding, the partial exception of the fourth variable, free-riding, regarding which this assertion is valid only for citizens. Let us further clarify some important features:

(1) First of all, we should notice the high values of the correlations between Self-image in Politics and Market Leaning, for all groups considered. Although this is, admittedly, an expectable result, it had to be confirmed. Choices regarding economic regulation tend to overlap the left-right divide;

(2) Significant correlations also occur between Interest for Politics and Market Regulation (for YC, OC and ES), and between Interest for Politics and Self-image in Politics (for OC, ES and OS). Interest for Politics is thus neatly correlated with either Self-Image or Market-Leaning, once again for all groups; and with regards Economics Students and Old Citizens, it is indeed correlated with both. People perceiving themselves to be in the right half of the political spectrum, and/or choosing market regulation, are normally more interested for politics than their opposites;

(3) The same observation is valid with regards the correlations between Free-Riding and Market Leaning (for YC), between Free-Riding and Self-Image in Politics (for YC and OC), and also between Free-Riding and Interest for Politics (for OC). Thus, Free-Riding is correlated with at least two of the three 'immediately' political dimensions, and particularly with left-right Self-Image, for all citizens. However, these correlations are somewhat reduced when it comes to students.

These observations seem to validate the conjecture that economics students do actually tend to adopt the *forma mentis* of the so-called "rational agent", and that this group of attitudes, or rather a vulgarized and theoretically simplified version of it, seemingly also operates as a model for young citizens. The propensity for Free-riding is positively correlated with right-wing self-image and/or with pro-market leaning for all citizens, and in the case of young citizens with both. For this group, the more a person is inclined to free-riding, the more pro-market and right-leaning he/she usually is.

People more interested for politics also tend to match those with a right-wing penchant (for economics students, other students, and old citizens), or with a preference for market regulation (in the case of young citizens, old citizens, and economics students). Hence, in the case of these three groups, the higher the interest for politics, the higher the favor given, in most cases to market regulation. Concurrently, a direct connection between free-riding and interest for politics is also observable in the case of old citizens.

Evidently, other dimensions of this psycho-sociological configuration, such as risk-love, sensation-seeking, peer pressure, prevalence of achievement values, perceived group status, and social expectations regarding the economic profession, should also be pondered in the discussion, although the association of economics students with the rational agent's model seems irrefutable. However, economists are obviously also susceptible to being influenced, and it is undeniable that their specific traits (inclination to the market and to the right-wing,

increased interest for politics, and free-riding leaning) have all undergone a considerable reduction in the data of the last survey (2016/7), whatever the causes are for this occurrence, although it is very likely that these include the moral effects of the protracted economic crisis.

Additionally, we must emphasize the fact that positive associations between the four variables considered, which are already perceivable in the initial figures for the average values of the various groups (see above, Figure 1), are also valid within each group, such as indicated by the values for correlations. It allows us to suggest the notion of the social dissemination of a somewhat imprecise mind-set that simultaneously propitiates free-riding, right-wing leaning, and market-regulation; and, slightly disturbingly, also an increased interest for politics. This mindset does not necessarily refer to some sophisticated knowledge of economics, or the coherent, logical consequences of its study, but more likely a conceptually impoverished version of this, to which citizens are apparently rather permeable. Fairly interestingly, though, this does not apply to the group of other students.

As a matter of fact, in the case of other students, it is mostly the contrary that occurs: these undergraduates frequently shift from the values of citizens, or the mainstream, towards directly the opposite direction of economics students, and, in certain cases, they are indeed closer to the values of old citizens, rather than young citizens. This other generic portrait corresponds on average to a diminished interest for politics (with the *proviso* that in 2016 they caught up with the run-of-the-mill values), accompanied by left and State leaning, and also a decreased proclivity for free-riding.

In so much that the mind set of economists, or rather its above-mentioned impoverished version, indeed propagates to other segments of the population, arguably the role of the media should also be brought into discussion. Economic discourse has an understandable inclination to generalize towards non-economists, largely via the emergence of the so-called “economic journalism”, which, at the present time, frames a very large portion of the political debate. Furthermore, it seems reasonable to assume that economists’ attitudes and values are more easily propagated among young citizens in general, at least in part, due to the widespread presence of a group of individualistic, achievement-inclined, care-free, and risk-loving global disposition among youngsters. An oversimplified economics discourse thus tends to be adopted as laypersons’ common sense, especially young people’s common sense.

The culturally dominant model of attitudes subsequently seems to correspond to the one of economics students, rapidly followed by young citizens, being essentially a model that is prone to attitudes of free-riding and exit, although an increased interest for politics is disconcertingly expressed likewise. The other easily detectable model of attitudes, albeit seemingly a culturally secondary one, can be said to broadly correspond to other students adding to old citizens, which essentially indicates a fundamental affinity with dispositions for disbelief and alienation from public matters. In addition, the two groups seemingly merging together in this subaltern mega-group (referring to political traits) diverge drastically with regards “questions of conscience and behavior” (see below).

V. Factor analysis: What exactly is free-riding? Free-riding versus open-mindedness

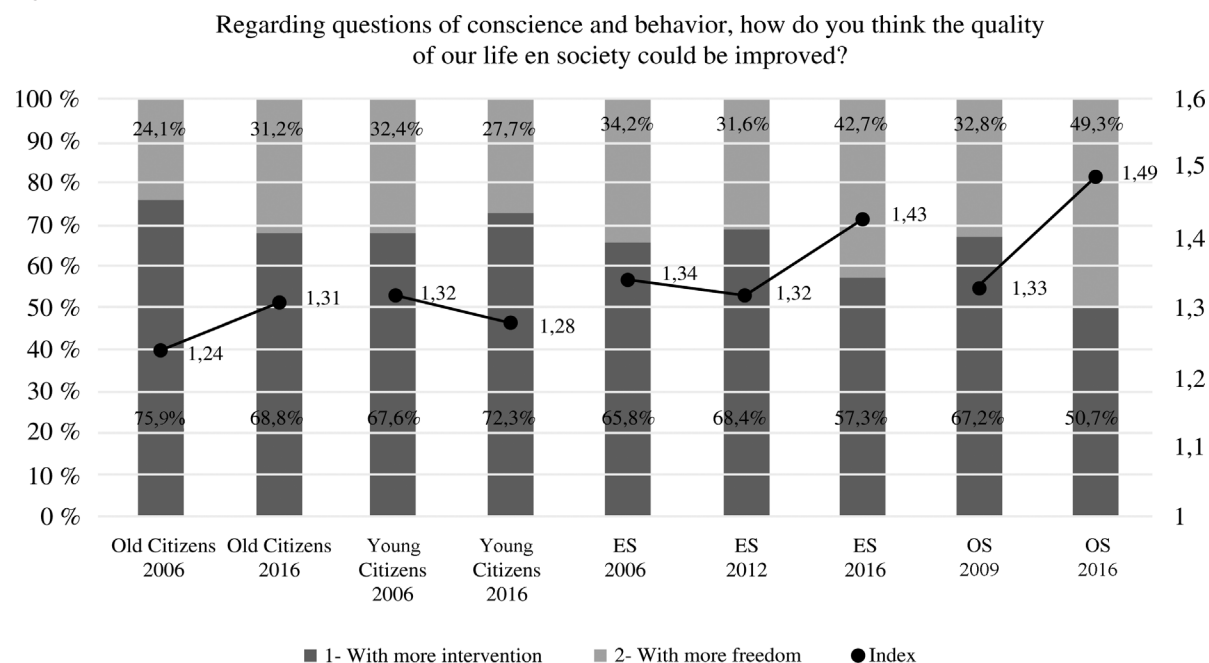
As a matter of fact, one additional aspect worth considering in this characterization of the psycho-sociological profiles of the various groups is the fact that economics students are apparently no more ‘liberal’ than other citizens, at least not more than other students. Indeed, when asked what is the best way to

deal with “questions of conscience and behavior”, either with “more vigorous intervention of law and justice”, or rather by “allowing more freedom and responsibility to people”, economists produce a rather ambiguous pattern of answers, sometimes actually closer to those of citizens (both old and young), as they are usually more inclined to the intervention of law and justice, whereas other students are notably the group that is most resolutely inclined to “more freedom and responsibility”. When assigning 1 to “more intervention”, and 2 for “more freedom”, we obtain an index of tolerance (see Figure 2), which configures a panorama that diverges considerably from the observations for free-riding referred to above.

A number of aspects need to be noticed here. First: citizens are generically more ‘conservative’ (i.e., inclined to more intervention of “law and justice”) than all students, and economics students are also more conservative than other students. Second: a broad trend occurred during the decade of 2006-16, which increasingly favoured more ‘liberal’ (or even ‘radical’) attitudes, rather than ‘conservative’ ones. Third: however, young citizens overall had the opposite evolution, with the same occurring for economics students from 2006 to 2012 (although the data for 2016 are more than compensatory). This seems to indicate that the age factor is less important than education, with regards the propitiation of more permissive/tolerant attitudes. Coherently, and unlike the previous dimensions of our analysis, in this case there is no convergence of young citizens and economics students, and although the latter are consistently in a run-of-the-mill position, there is also a growth in the difference that distances them from other students. On the other hand, and unlike with more directly political aspects, other students (the ‘radical’ group) are drastically distanced from ‘conservative’ old citizens.

This set of observations highlights the need to evidently distinguish what we have identified as being an indulgence for free-riding, or free-riding leaning, as opposed to other inclinations which are susceptible to being formally perceived as “tolerance”, or varieties of tolerance. Admittedly, our measurement of

Figure 2 - Index of tolerance



Source: authors' elaboration.

free-riding consists of a mere average of seven different variables, and this rapid confrontation with the results obtained for “questions of conscience and behavior” immediately underlines the need to simultaneously disentangle the various possible components of our variable for free-riding, and to confront them with other possible notions of tolerance. Having that in mind, we proceeded to use factor analysis for the treatment of the data. Tolerance was measured regarding various types of behaviour that are somewhat susceptible to induce moral reproach. The topics considered were the initial seven variables taken for free-riding leaning, to which we now added nine more, namely: Cannabis (marijuana) smoking, Homosexuality, Abortion, Divorce, Suicide, Casual sex, Adultery, Smoking in public places, and Graffiti. All these variables are expressed by using the same 1 to 4 scale. Table 2 presents the mean values of response for free-riding, open-minded and “hybrid” items.

The results seem to indicate, albeit with nuances for some groups, the existence of various considerably different components: one of them corresponding to the 7 variables used apropos free-riding (which seemingly confirms the consistency of our approach); an opposite component, denoting what we may generically call “open-mindedness”, which is associated with lenience *vis-à-vis* Cannabis (marijuana) smoking, Homosexuality, Abortion, Divorce, Suicide, and Casual sex; and finally, also a third component, which is basically a mixed or hybrid one, that is expressed by attitudes concerning: Adultery, Smoking in public places, and Graffiti. We are then, currently facing a panorama where a component of tolerance for “free-riding” is steadily opposed to another one of “open-mindedness”, with yet a third, more ambiguous or “hybrid” component, finally being added to complete the picture.

It should be noticed that factor analysis, which has here been used to examine the data, attempts to describe the structure of a data set and identify clusters of interrelated variables. Factor analysis describes the covariance relationships

Table 2 - Means of free-riding, open-minded and “hybrid” items for Young Citizens, Old Citizens, Economics Students, and Other Students

Variable	Economics students	Other students	Young citizens	Old citizens
Benefits	1.51	1.42	1.53	1.30
Fiscal evasion	1.49	1.40	1.39	1.31
Marijuana	2.00	2.08	1.70	1.46
Adultery	1.54	1.41	1.41	1.43
Bribe	1.36	1.30	1.42	1.20
Homosexual	2.97	3.29	2.70	2.35
Abortion	2.89	2.83	2.73	2.62
Divorce	3.27	3.25	2.95	2.87
Suicide	1.95	2.00	2.07	1.65
Drive drunk	1.38	1.28	1.39	1.15
Casual sex	2.79	2.66	2.21	1.93
Smoking public	2.11	1.92	1.94	1.50
Speed limit	2.16	1.79	1.87	1.50
Garbage	1.36	1.20	1.34	1.19
Transport ticket	1.79	1.73	1.49	1.30
Graffiti	1.91	2.09	1.89	1.53

Source: authors' elaboration.

among the observed variables in terms of smaller numbers of unobserved latent variables called factors. For more details, refer to Everitt & Dunn (2001) and Johnson & Wichern (2007). We used the principal component factor analysis method to estimate the factor loadings and communalities, which specifically uses square multiple correlations as estimates of the communalities to compute the factor loadings. This procedure drops those factors with eigenvalues less than one. We then performed an orthogonal rotation of the factors using the Varimax method to simplify the factor structure. The goal of this method was to obtain factors with a few large loadings and as many loadings close to zero as possible. Factor loadings greater than 0.4 (in absolute value) were considered significant for factor interpretation purposes (Hair et al., 2010). An acceptable factor solution occurred when all variables had a significant loading on a factor.

After estimation of the parameters by principal-component factor analysis for the different surveyed groups (young citizens, old citizens, economics students, and other students), we then obtained a factor solution for the correlations of the 18 free-riding and open-minded variables. The factor loadings were then transformed, using the Varimax rotation. The principal component factor method retained three factors for both young and old citizens, and four factors for economics students and other students with eigenvalues less than one. For interpretation purposes, we only examine these first factors, which accounted for nearly half of the total variance. Table 3 shows the varimax rotated factor loadings and KMO (Kaiser-Meyer-Olkin) sampling adequacy statistics for young citizens, old citizens, economic students, and other students, respectively. Figure 3 shows the respectively loading plots of the two principal component factors.

In the factor analysis for Young Citizens, the first factor (F1) accounts for 29.7% of the total variance and 49.9% of the common variance. The second factor (F2) accounts for 19.7% of the total variance and 33.2% of the common variance. Finally, the third factor (F3) accounts for 10.1% of the total variance and 16.9% of the common variance. All variables have KMO measures greater than 0.7. The overall KMO measure of the sampling adequacy is 0.87, with a significant Bartlett's test of sphericity (p -value < 0.01), which is a good result for a factor analysis. Using a threshold of ± 0.4 to identify significant loadings, we observed that all variables in the rotated solution had a significant loading on a factor. Factor 1 has 9 variables with significant loadings, Factor 2 has 6 and Factor 3 has 2. Factor 1 links free-riding variables (benefits, tax evasion, bribery, drunk-driving, garbage and transport ticket) with the adultery and marijuana variables. Factor 2 is dominated by open-mindedness variables (marijuana, homosexuality, abortion, divorce, suicide, and casual sex), and Factor 3 is dominated by the "hybrid" variables of graffiti and smoking in public places.

The loadings of the three-factor model for Old Citizens indicate that Factor 1 has large correlations with free-riding and "hybrid" variables, Factor 2 is a general open-mindedness factor, and Factor 3 expresses free-riding. For economics students, Factor 1 represents the open-minded students, Factor 2 reflects free-riding and "hybrid" students, and Factors 3 and 4 appear to be more related to free-riding students. For other students, Factor 1 is a general open-mindedness factor, Factor 2 loads highly on free-riding variables, Factor 3 is a miscellaneous factor, and Factor 4 is highly correlated with benefits and fiscal evasion.

Bearing in mind the entire data, we need to recognize a number of group specificities. For instance, in the cases of Young Citizens, only graffiti and smoking in public places correspond to the third component, given that adultery joins the seven formally associated with free-riding. For Old Citizens, benefits, tax evasion, and bribery should all be considered to correspond to the third, "hybrid" component. For Economics Students, besides adultery, tax evasion and

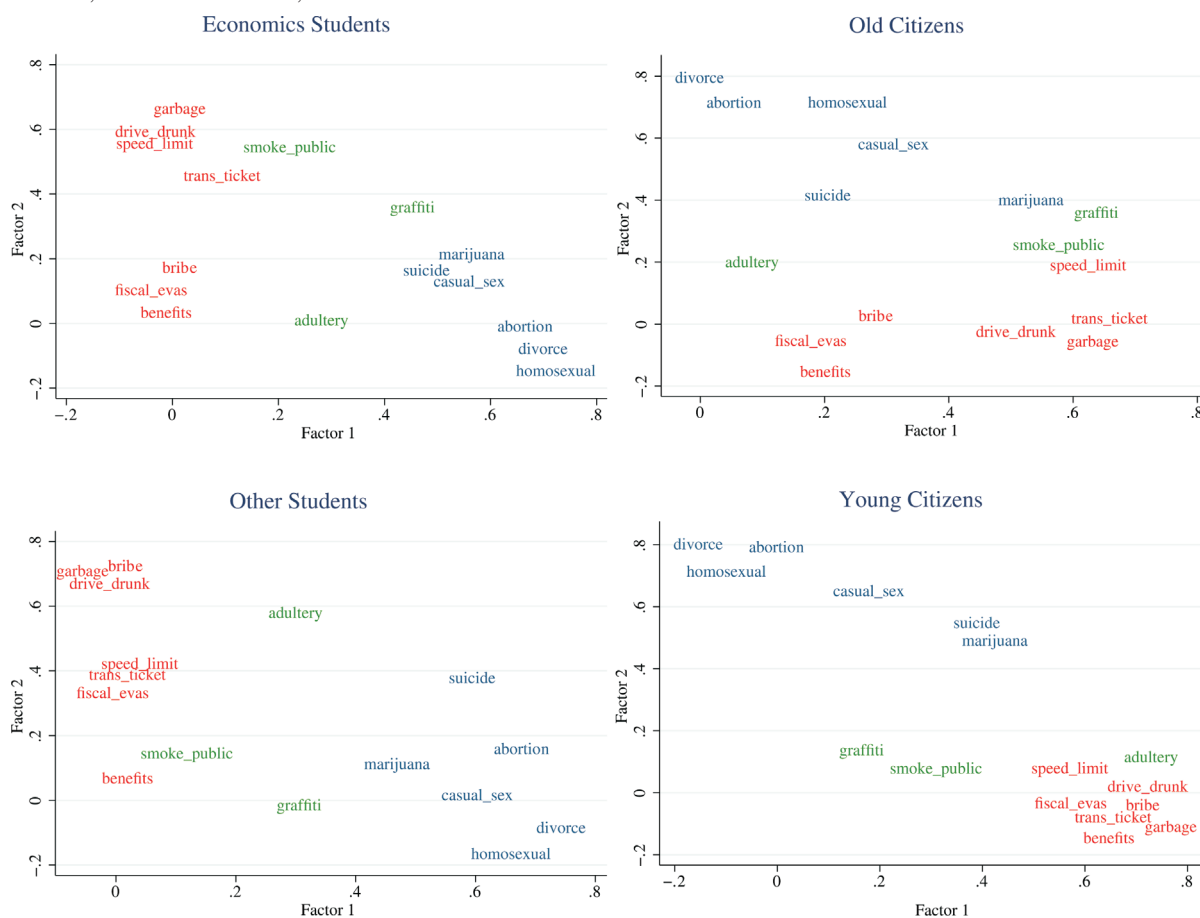
Table 3 - Factor analysis of free-riding, open-minded and “hybrid” items for Young Citizens, Old Citizens, Economics Students, and Other Students

Variable	Young Citizens				Old Citizens				Economics Students				Other Students					
	F1	F2	F3	KMO	F1	F2	F3	KMO	F1	F2	F3	F4	KMO	F1	F2	F3	F4	KMO
Benefits	0.65			0.92			0.62	0.86				0.76	0.73				0.85	0.70
Fiscal evasion	0.67			0.93			0.69	0.88			0.54	0.47	0.77				0.60	0.83
Marijuana	0.43	0.53		0.88	0.54	0.44		0.93	0.57				0.83	0.47		0.46		0.88
Adultery	0.80			0.89			0.67	0.83			0.63		0.81		0.62			0.87
Bribe	0.76			0.90			0.76	0.89			0.67		0.82		0.77			0.86
Homosexual		0.72		0.81		0.76		0.84	0.73				0.79	0.75				0.78
Abortion		0.84		0.74		0.75		0.81	0.74				0.81	0.74				0.84
Divorce		0.84		0.75		0.83		0.77	0.76				0.77	0.80				0.75
Suicide		0.59		0.84		0.46		0.94	0.54				0.88	0.60	0.42			0.87
Drive drunk	0.82			0.89	0.59		0.54	0.91		0.59			0.81	0.60	0.71			0.85
Casual sex		0.69		0.84		0.62		0.86	0.57				0.84	0.61				0.89
Smoking public			0.64	0.90		0.68		0.92		0.58			0.83		0.65			0.89
Speed limit	0.58			0.90		0.71		0.93		0.60			0.81		0.42	0.52		0.87
Garbage	0.78			0.91		0.69		0.87		0.69			0.79		0.69			0.87
Transport ticket	0.66			0.88		0.74		0.90		0.50			0.84		0.43	0.51		0.88
Graffiti			0.82	0.79		0.64		0.90	0.45	0.40			0.80		0.53			0.86
Eigenvalue	4.74	3.15	1.61		3.38	2.98	2.72		2.94	2.17	1.73	1.31		2.93	2.77	1.84	1.34	
Proportion (%)	29.7	19.7	10.1		21.1	18.6	17.0		18.4	13.6	10.8	8.2		18.3	17.3	11.5	8.4	
Cumulative (%)	29.7	49.4	59.5		21.1	39.7	56.7		18.4	32.0	42.8	51.0		18.3	35.6	47.1	55.5	

Source: author's elaboration.

Note: Factor loadings less than 0.4 (in absolute value) have been excluded. Number of observations included: 216 (Young Citizens), 685 (Old Citizens), 1251 (Economics Students) and 559 (Other Students). Overall KMO measure of sampling adequacy: 0.87 (Young Citizens), 0.88 (Old Citizens), 0.81 (Economics Students) and 0.84 (Other Students).

Figure 3 - Loading plots of free-riding (in red), open-minded (in blue) and “hybrid” (in green) items for Young Citizens, Old Citizens, Economics Students, and Other Students



Source: authors' elaboration.

bribery also match the “hybrid” component. Then, there is yet another (fourth) component that is identifiable, which correspondent to benefits and fiscal evasion. For Other Students, besides graffiti and smoking in public places, marijuana, speed limit, and garbage also match the third component, and there is also a fourth one, which is associated with benefits and tax evasion. It is important to notice the fact that benefits and fiscal evasion seem to denote a sub-group within the seven variables taken as free-riding proxies, at least referring to Economics Students and Other Students.

Nevertheless, overall, the difference became clearly established between two significantly different groups of varieties referring to tolerance, one of which concerns free-riding proxies, while the other one corresponds to what we generically designated as open-mindedness.

VI. Conclusions

Many studies have discussed the pervasiveness of free-riding traits in economics students, as well as their pro-market inclination. In this paper, we added the dimensions of left-right self-perception and interest for politics to the empirical literature. The above-mentioned traits have been mostly confirmed in our 2016 survey, together with the prevalence of a right-of-the-center political self-perception and an increased interest for politics. However, some of these features were considerably attenuated in relation to previous surveys (2006,

2009 and 2012). On the other hand, economics students arguably tend to operate as role models for other groups, especially young citizens, who clearly converge with them. Consequently, data for 2016 expresses a trend for a merging towards a middle-of-the-road scenario, with the partial exception of other students, who continue to be 'Statist', left-leaning, and considerably less inclined to free-riding than their economic counterparts. However, other students catch up with the run-of-the-mill when it comes to interest for politics.

Generically, groups more inclined to free-riding are also more pro-market and right-inclined, and also more interested in politics. Similarly, there is a positive relationship between each pair of the other three variables. Economics students have high values for all four aspects, in spite of a certain lessening of their distinctiveness in 2016. The evolution particularly of young citizens seems to indicate the diffuse, but growing influence of a mind frame which largely corresponds to a conceptually impoverished version of mainstream economics, especially with regards the individualistic and power-and-achievement aspects of the psycho-sociological portrait of economics students.

This characterization, which is based on the scatterplots for all the groups and contemplates the four dimensions, was subsequently confirmed by the correlation analysis for each of the four groups (young and old citizens, economists, and other students), suggesting the broad social dissemination of dispositions which simultaneously propitiate free-riding, right-wing, and market leaning, and also an improved interest for politics. More than a coherent disposition consciously based on any possible in-depth knowledge of economics, we are seemingly facing here a very simplified version of the understanding of this discipline, to which citizens, and particularly young citizens, are greatly prone. However, other students are not so persuaded, as they are consistently more 'Statist', more left-inclined, less free-riding prone, and also less interested in politics than their economic counterparts, although they are more tolerant with regards moral issues.

Finally, cluster analysis clarified the generic difference between the predisposition to tolerance that is expressed in the group of variables used as free-riding proxies, and the dispositions which we have broadly designated as open-mindedness. On the whole, the set of seven free-riding variables seems to be endowed with a high degree of consistence, and is clearly distinguishable from the open-mindedness group, notwithstanding the incidence of a third factor which we named as "hybrid", the occurrence of occasional shifts of some variables from one factor to another, depending on the group considered, and, in the cases of students, the presence of a further fourth factor, which is directly associated with specifically economic components of free-riding, namely: undue claiming of social benefits and fiscal evasion.

Admittedly, many possible venues of research remained outside the scope of our discussion, such as: the Nature vs. Nurture problem, the *factish* or performative aspects of economics teaching, risk-loving, sensation-seeking, power-and-achievement values, social expectations regarding economists, contextual influences in morals, the importance of framings, the relevance of narratives, all of which are questions that are undeniably worth much more consideration. Nevertheless, the aspects we brought to the debate seem to warrant deserved consideration, and they should be included in the group of questions under analysis. On the whole, our research suggests at least a certain influence of economics in the mind-framing of its students, although the shifts over the years also highlight the need to be prudent. The evidence seems to point to a diffuse cultural influence, correspondent to a simplified, conceptually impoverished version of the discipline, which substantially conditions also laypersons' perceptions.

In terms of *curricula* design, and admitting the existence of large portions of *terra incognita* in this field of research, approaches underscoring disciplinary diversity, together with emphasis on the theoretical and *doctrinaire* pluralism of the traditions of economics, seem to be highly recommendable. In this context, mention is due in conclusion to a recent essay by Huei-Chun Su and David Colander, according to whom the education of economists should have as model certainly the plumber, able to ‘get things done’, or have policies successfully implemented, but even more so the “general contractor”, similarly able to discuss the goals that inspire them. As J. M. Keynes put it:

“[T]he master-economist must possess a rare combination of gifts. [...] He must be mathematician, historian, statesman, philosopher - in some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. He must study the present in the light of the past for the purposes of the future. No part of man’s nature or his institutions must lie entirely outside his regard. He must be purposeful and disinterested in a simultaneous mood; as aloof and incorruptible as an artist, yet sometimes as near the earth as a politician” (Keynes cit. in Su & Colander, 2021, p. 27).

This trend of opinions fits perfectly the consciously interdisciplinary, indeed transdisciplinary or even “trespassing” character of this paper. Although our main focus was empirical, we are conscious of a number of theoretical implications that we could only refer occasionally in this text. Undoubtedly, these discussions deserve to be pursued in various other occasions and contexts, adding also the input of more recent empirical research. In spite of economics teaching being our center of interest, we also acknowledge that the very *momentum* of research and the train of thought so associated suggest the need to consider elements that go well beyond the strict aspects of economics teaching, and indeed point to the imperative of analysing broader cultural influences of neoliberalism, namely those correspondents to the social influence of mainstream media, and the ‘manufacturing of consent’ so associated. That must be the *fulcrum* of interest of future researches.

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References

- Banerjee, M., Zlatkin-Troitschanskaia, O. & Roepel, J. (2020) Narratives and their impact on students’ information seeking and critical online reasoning in higher education economics and medicine. *Frontiers in Education*, 5(570625), pp. 1-17. DOI: 10.3389/feduc.2020.570625
- Carter, J.R. & Irons, M.D. (1991) Are economists different, and if so, why? *Journal of Economic Perspectives*, 5, pp. 171-177. DOI: 10.1257/jep.5.2.171
- Cipriani, G.P., Lubian, D. & Zago, A. (2009) Natural born economists? *Journal of Economic Psychology*, 30(3), pp. 455-468. DOI: 10.1016/j.joep.2008.10.001
- Cioni, M. & Rossi, M.A. (2020) Whither pluralism in economics education? New empirical evidence. *Quaderni del Dipartimento di Economia Politica e Statistica*, 844, p. 1-19.
- Delgado-Betancourth, S.X. (2014) Rethinking economics education: challenges and opportunities. *Workplace*, 23, pp. 48-56.
- Dzionaek-Kozłowska, J. & Rehman, S.N. (2017a) Attitudes of economics and sociology students towards cooperation. A cross-cultural study. *Economics and Sociology*, 10(4), pp. 124-136. DOI: 10.14254/2071-789X.2017/10-4/10
- Dzionaek-Kozłowska, J. & Rehman, S.N. (2017b) Indoctrination, preselection or culture? Economic education and attitudes towards cooperation. *Gospodarka Narodowa. The Polish Journal of Economics*, 292(6), pp. 57-77. DOI: 10.33119/GN/100739

- Elegido, J. (2009) Business education and erosion of character. *African Journal of Business Ethics*, 4(1), pp. 16-24. DOI: <https://doi.org/10.15249/4-1-57>
- Espín, A.M., Correa, M. & Ruiz-Villaverde, A. (2022) Economics students: self-selected in preferences and indoctrinated in beliefs. *International Review of Economics Education*, 39, pp. 1-7. DOI: 10.1016/j.iree.2021.100231
- Etzioni, A. (2015) The moral effects of economic teaching. *Sociological Forum*, 30(1), pp. 228-233. DOI: 10.1111/socf.12153
- Everitt, B. & Dunn, G. (2001) *Applied multivariate data analysis, 2th edition*. London: Hodder Arnold.
- Faravelli, M. (2007) How context matters: a survey-based experiment on distributive justice. *Journal of Public Economics*, 91(7-8), pp. 1399-1422. DOI: 10.1016/j.jpubeco.2007.01.004
- Ferraro, F., Pfeffer, J. & Sutton, R.I. (2005) Economics language and assumptions: how theories can become self-fulfilling. *The Academy of Management Review*, 30(1), pp. 8-24. DOI: 10.2139/ssrn.521883
- Fischer, M., Kauder, B., Potrafke, N. & Ursprung, H.W. (2017) Support for free-market policies and reforms: does the field of study influence students' political attitudes? *European Journal of Political Economy*, 48, pp. 180-190. DOI: 10.1016/j.ejpoleco.2016.07.002
- Frank, B. & Schulze, G.G. (1998) How tempting is corruption? More bad news about economists. *Diskussionsbeiträge aus dem Institut für Volkswirtschaftslehre*, 520(164), pp. 1-13.
- Frank, B. & Schulze, G.G. (2000) Does economics make citizens corrupt? *Journal of Economic Behavior and Organization*, 43(1), pp. 101-113. DOI: 10.1016/S0167-2681(00)00111-6
- Frey, B.S. (1986) Economists favour the price system - who else does? *Kyklos*, 39, pp. 537- 563. DOI: 10.1111/j.1467-6435.1986.tb00677.x
- Gandal, N. & Roccas, S. (2002) *Good neighbours / bad citizens: personal value priorities of economists. Discussion Paper No. 3660*. CEPR Press, pp. 1-13. Available in: <https://cepr.org/publications/dp3660>
- Gandal, N., Roccas, S., Sagiv, L. & Wrzesniewski, A. (2004) Personal value priorities of economists. *Human Relations*, 58(10), pp. 1227-1252. DOI: 10.1177/0018726705058911
- Goossens, A. & Méon, P.-G. (2010) The impact of studying economics, and other disciplines, on the belief that voluntary exchange makes everyone better off. *CEB. Working Paper n. 12*. [online] Brussels: Solvay Brussels School of Economics and Management. Available in: <https://ideas.repec.org/p/sol/wpaper/10-012.html>. Acesso em: 24 de julho. 2022.
- Graça, J.C., Lopes, J.C. & Correia, R.G. (2016) Economics education: literacy or mind framing? Evidence from a survey on the social building of trust in Portugal. *Análise Social*, 51(220), pp. 516-542.
- Graça, J.C., Caiado, J. & Correia, R.G. (2020) Sociopolitical values, attitudes and behaviors of Portuguese economics students. *Sociologia: Problemas e Práticas*, 92, pp. 111-132. DOI: 10.7458/SPP20209213699
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2010) *Multivariate data analysis. 7th edition*. Upper Saddle River: Prentice Hall.
- Hamilton, L. (2013) *Statistic with Stata: Version 12. 8th edition*. Boston: Brooks/Cole.
- Haucap, J. & Just, T. (2004) Not guilty? Another look at the nature and nurture of economics students. *European Journal of Law and Economics*, 29, pp. 239-254. DOI: 10.1007/s10657-009-9119-5
- Hellmich, S.N. (2020) Social psychological aspects of "making" economists: a review of the nature versus nurture debate. *Citizenship, Social and Economics Education*, 19(1), pp. 23-50. DOI: 10.1177/2047173420908068
- Hertel, G., Aarts, H. & Zeelenberg, M. (2002) What do you think is 'fair'? Effects of ingroup norms and outcome control on fairness judgments. *European Journal of Social Psychology*, 32(3), pp. 327-341. DOI: 10.1002/ejsp.92
- Hodgson, G.M. (2004) Opportunism is not the only reason why firms exist: why an explanatory emphasis on opportunism may mislead management strategy. *Industrial and Corporate Change*, 13(2), pp. 401-418. DOI: 10.1093/icc/dth016
- Hole, A.D. (2013) How do economists differ from others in distributive situations? *Nordic Journal of Political Economy*, 38(4), pp. 1-30.
- Hummel, K., Pfaff, D. & Rost, K. (2016) Does economics and business education wash away moral judgment competence? *Journal of Business Ethics*. 150, pp. 559-577. DOI: 10.1007/s10551-016-3142-6
- Johnson, R. & Wichern, D. (2007) *Applied multivariate statistical analysis. 6th edition*. Hoboken: Prentice-Hall.
- Lanteri, A. (2008) (Why) Do selfish people self-select in economics? *Erasmus Journal for Philosophy and Economics*, 1(1), pp. 1-23. DOI:10.23941/ejpe.v1i1.1
- Lebaron, F. (2012) A formação dos economistas e a ordem simbólica mercantil. *Revista Espaço de Diálogo e Desconexão*, 4(2), pp.1-35. DOI: 10.32760/1984-1736/REDD/2012.v4i2.5176
- Lenger, A. (2018) Socialization in the academic and professional field: revealing the Homo Oeconomicus Academicus. *Historical Social Research*, 43 (3), pp. 39-62. DOI: 10.12759/hsr.43.2018.3.39-62
- López-Pérez, R. & Spiegelman, E. (2012) Do economists lie more? *Economic analysis - working paper series*. Working Paper n. 4 [online]. Madrid: Universidad Autonoma de Madrid. Available in: https://repositorio.uam.es/bitstream/handle/10486/662716/Economcis%20Lie_L%C3%B3pez_EAWPS_2012.pdf?sequence=1. Accessed in: Jul. 24, 2022.
- Marwell, G. & Ames, R.E. (1981) Economists free ride, does anyone else?: experiments on the provision of public goods. *Journal of Public Economics*, 15(3), pp. 295-310. DOI: 10.1016/0047-2727(81)90013-X
- Mautz, F.C. (2014) *El pensamiento de los estudiantes de economía en Chile*. Thesis to qualify for the Master in Economic Analysis. Santiago: Universidad de Chile.
- Racko, G. (2019) The values of economics. *Journal of Business Ethics*, 154, pp. 35-48. DOI: 10.1007/s10551-017-3442-5
- Scott, J.H. & Rothman, M.P. (1975) The effect of an introductory economics course on student political attitudes. *Journal of Economic Education*, 6(2), pp. 107-112. DOI: 10.2307/1182461

- Shabab, C.R. (2020) A PRiME perspective on economics curriculum design. *Emerald Open Research*, 2(38), pp. 1-13. DOI: 10.35241/emeraldopenres.13779.1
- Sjöberg, L. & Engelberg, E. (2006) Attitudes to economic risk-taking, sensation seeking and values of business students specializing in finance. *Business administration*. Working Paper, n. 3. [online] Stockholm: Center for Risk Research. Available in: <<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.658.1789&rep=rep1&type=pdf>>. Accessed in: Jul. 24, 2022.
- Su, H.-C. & Colander, D. (2021) The economist as scientist, engineer or plumber? *Journal of the History of Economic Thought*, 43(2), pp. 297-312. DOI: 10.1017/S1053837220000231
- Varoufakis, Y. (2002) *Foundations of economics: a beginner's companion*. 2th edition. London and New York: Taylor & Francis e-Library.
- Wang, L. & Murnighan, J.K. (2009) Economics and greed. In *22nd Annual International Association of Conflict Management Conference*. Kyoto, Japan.
- Williamson, O.E. (1975) *Markets and hierarchies: analysis and anti-trust implications. A study in the economics of internal organization*. New York: Free Press.

Valores e atitudes dos estudantes de Economia em Portugal

Palavras-chave: estudantes; ideologia esquerda e direita; interesse pela política; regulação do mercado; *survey*

RESUMO Introdução: Vários estudos sobre os valores e atitudes dos estudantes de Economia têm notado sua maior inclinação para o parasitismo (*free riding*) e para a regulação pelo mercado. Estes traços são sempre válidos? Eles coexistem com outros aspectos sociologicamente relevantes? **Materiais e Métodos:** Foi realizado um *survey* em Lisboa (Portugal) em 2016 com estudantes de Economia. Foram pesquisadas, além da visão econômica, a autopercepção desses indivíduos no espectro esquerda-direita e o interesse pela política. Os resultados desse inquérito foram comparados com pesquisas anteriores sobre outros três grupos sociais (cidadãos jovens, cidadãos idosos e outros estudantes). Os dados foram analisados estatisticamente por testes de correlação e análise fatorial. **Resultados:** A pesquisa revelou uma tendência para uma autopercepção de direita e um interesse acrescido pela política por parte desses estudantes portugueses. Entretanto, essas características foram atenuadas, pois os estudantes de economia convergem com os valores dos outros grupos, em especial os “jovens adultos” e os “adultos idosos”. Genericamente, grupos mais inclinados ao parasitismo são também mais pró-mercado e de direita e mais interessados na política. Os resultados indicam a existência de outros componentes atitudinais consideravelmente diferentes, um deles correspondendo às variáveis utilizadas com o propósito de mensurar o “*free riding*” e um componente oposto que podemos chamar genericamente de “*open-mindedness*”. **Discussão:** No conjunto, os resultados sugerem uma influência considerável da Economia no enquadramento mental desses estudantes. As evidências parecem sinalizar uma influência cultural difusa, correspondente a uma versão simplificada e conceitualmente empobrecida da disciplina.



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