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# Preferences for Government Interventions in the Economy: Does Gender Matter? 

Matteo Migheli*


#### Abstract

The extant economics literature finds relevant differences in preferences between men and women, with the former more supportive to competition than the latter. Using survey data for twelve Western European countries this paper shows that, when asked about their preferences for the government intervention in the economy, the two genders express significantly different preferences. While women would increase regulation and social responsibility of the government, they are not opponents of competition. Nevertheless, as the number of women in leading positions in politics and business grows, the world could become more regulated and more social-oriented. The analysis also shows that the gender-related differences depend on country-specific socio-economic factors.


Keywords: preferences; competition; regulation; gender

JEL Classification: H89, J18, Z19

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## I. Introduction

The world economic crisis of the last years opened a wide debate on its causes and on the possible remedies. Several economists and commentators have argued that a major cause of the crisis has been the "excessive" deregulation of the markets, and a sort of "wild competition" originated from it. Relying on the extant literature on gender and economics, some have suggested that an increasing participation of women in the economic decision processes would help to bring more regulation and control to the markets. As a consequence, the probability that another crisis arises form an excess of deregulation would decrease, because of the women's propensity to competition that appears generally weaker than men's. Indeed, according to several authors, women would tend to favour regulation to a larger extent than men, and to shy away from "purely" competitive environments (Croson and Gneezy, 2009).

In the next section, I will present and discuss three streams of economics and law literature. These show that women and men have different preferences over a large set of legal and economic matters, and that these differences appear in courts' decisions and in voting behaviour. Taken together, the extant literature suggests that: 1) one of the most significant gender difference in economics is about competition:
women tend to prefer less competition than men in studies in labour and financial economics. 2) Women evaluate some regulatory and legal issues differently than men, and behave consequently. This entails different gender-related decisions in courts verdicts and different voting behaviour in referenda. The main question of this paper is whether women and men have different preferences for competition also at a macro level, i.e. whether they prefer legal regulations that be more or less in favour of competitive markets. As the next section will show, different preferences generally translate into different actions

Governments are decisional bodies, whose structure is not very far from that of a judicial court: a relatively small number of deciders vote on proposals of acts, which aim at reforming, changing or innovating the existent legislation. The number of female ministers in governments and parliaments is increasing, especially in Western countries. Therefore, it is relevant to understand whether men and women would like to regulate market competition differently. This would indeed help to predict the policy directions of governments, considering the number of their female components.

The extant researches on gender-related preferences for competition restrict their focus on a few (either geographic or social) variables, what does not allow for a generalisation of the results obtained. Moreover, they generally are experimental works, which explore very focused and very restricted fields (such as competition in the workplace). In the present work I consider twelve Western European countries, and a number of socio-economic factors (age, education, employment status etc.), which allow for broad (though not general) conclusions. Given the delicateness of the topic, however, the is restricted to a specific area (Western Europe) in order to limit the differences in economic policies, culture, and politics to a reasonable extent.

The results of the paper show that men and women differ in their preferences for competition. Although both men and women are on average in favour of competition per se, women prefer a more regulated environment than men. This difference and its magnitude are very robust to the introduction of several controls. Ana analysis of the possible causes of this phenomenon suggests that it more a consequence of nurture than of nature (i.e. genetics). Although these results do not entail that women would vote against political programmes that aim at promoting an increase in competition, they suggest two considerations. 1) The evidence form the other works is consistent with that from the World Value Survey. 2) The women's preferences for environments with a low intensity of competition is not confined to specific situations (as in a lab in the case of experimental works), but is a matter of more general attitudes and preferences, which may determine changes in policies, as the number of women involved in the decisional processes grows.

## II. Related literature

Several works in economics and law show that the two genders have different attitudes towards the law and perceive legal norms differently. Considering piracy of digital products, for example, Chiang and Djeto (2007 and 2008) find that female undergraduate students are less likely to illegally reproduce or download digital material than their male mates are. Similarly, women are also less likely than men to share burned CDs and digital material illegally reproduced (Kini et al., 2000, Kwong et al., 2003 and Kini, et al., 2004). Torgler and Valev (2010) find that women are more averse than men to tax evasion and corruption, and observe a positive correlation between being female and tax morale (Torgler, 2003 and 2004 and LagoPeñas and Lago-Peñas, 2010), what induces more compliance with the law.

The extant literature also shows that women and men adopt different behaviours when they act as judges. For example, Eckel and Grossman (1996) perform an experiment on punishment and conclude that "men are more likely than women to make decisions on principle." ${ }^{1}$ Gryski et al. (1986) and Allen and Wall (1993) analysed trials for sex discrimination in U.S. state supreme courts. They found that female judges are

[^0]more likely than males to support the plaintiffs. Songer and Crews-Meyer (2000) found gender differences in trials for obscenity ${ }^{2}$ and death penalty cases; Similarly, Peresie (2005) shows that courts with at least one female judge are more likely to make a pro-plaintiff decision in trials for sexual harassment or gender discrimination than courts composed only by male judges. McCall (2005) shows that judges' gender is a predictor of decisions in police brutality disputes and McCall and McCall (2007) find that gender matters in controversies that involve the Fourth Amendment. However, the empirical evidence on this issue is mixed. Other studies do not find significant gender differences (Walker and Barrow, 1985; Seagal, 2000 and Westergren, 2004), whereas Collins et al. (2010) find mixed evidence. In particular, they show that women's decisions in courts differ from men's especially in criminal cases, while they find no difference in labour cases. What this literature shows is that a gender effect exists in courts' decision-making, and that this depends also on the matter of the trial case.

The effects of gender in economics have been more and more studied in the last years ${ }^{3}$. Croson and Gneezy (2009) review more than one hundred articles and find that in general: 1) women are more risk averse than men ${ }^{4}$, 2) women shy away from competition when compared to men ${ }^{5}$, and 3 ) women's preferences are more context-specific than men's. A crucial finding is the attitude of women towards competition, since it can be relevant not only for their individual choices, but can influence policies at macro level. Furthermore, while trying to avoid competition, women tend to choose cooperation in economic relations (Croson and Gneezy, 2009) and to emphasise the role of altruism, especially when the cost of giving is high (Andreoni and Vesterlund, 2001). Gneezy et al. (2003) analyse gender-related behaviours in competitive environments, and conclude that, in general, women compete less than men, but that they compete more in single-gender than in mixed-gender groups (although the gap between the

[^1]two genders persists). Also Gneezy and Rustichini (2004), in a study on competition and gender with young children, confirm these results.

Barber and Odean (2001) suggest that these differences in the attitude towards competition may be due to a general (innate) overconfidence of males. However Gneezy et al. (2009) claim that the phenomenon is (mainly) caused by social stereotypes. They find that in matriarchal societies women show attitudes towards competition analogous to those of men in patriarchal societies and vice versa ${ }^{6}$. Hence, irrespectively of the motivation (either nature or nurture or both), there is general agreement on the fact that men and women reveal different attitudes and preferences for competition. However the implications and the practical consequences of this finding are not fully clear. Are women generally adverse to competition or are they so only in particular cases? Do women dislike competition only when they are (or would be) directly involved in it, or is their aversion more general? If called to vote a law which promotes competition, would a woman vote differently than a man?

Some articles provide a partial (and often incidental) answer to these questions. Firebaugh and Sandu (1998) show that Romanian women were less prone than men to support the transition to the free market at the early stages of the process. Thalmann (2004) finds that in a referendum on three proposals for levying taxes on fossil energy the abstention of women was significantly larger than that of men. Kalthenthaler et al. (2006) analyse the support to the economic reforms in several Eastern European countries at the beginning of the transition, and find that women were in general less prone than men to approve and sustain the privatisation of the state-owned enterprises. Bornstein and Lanz (2008) find that the percentage of yes-votes in three referenda on environmental taxation in Switzerland increases with the participation rate of women. Eventually Migheli (2010) reaches similar conclusions analysing China and

[^2]India (again, two transition economies ${ }^{7}$ ). However the studies that include also gender in the analysis are very rare and do not focus specifically on this variable. As a consequence they hardly provide general results.

The works summarised above clearly show the existence of a gender effect in several areas of interest for economists, but why should differences in preferences for competition and regulation be relevant? Williamson (1994) points out that a policy, in order to be effective, must come from a visionary leadership, be implemented by a coherent team and meet the support of the public. The importance of this third aspect is also confirmed by some theoretical models (Rodrik, 1996; Drazen, 2000 and Roland, 2002) and by empirical works, which show that policies and people's support to them go hand in hand (Fidrmuc, 2000, and Alesina et al., 2001, 2004). In modern democracies, the population evaluates the policies implemented by governments ex-post, and the future programmes ex-ante, through the electoral process. If preferences over relevant economic issues differ systematically between the two genders, there may be important consequences both during electoral campaigns and during the design of the policies at government and parliamentary level. In addition, as a consequence of the increasing number of women in the cabinets and in the parliaments ${ }^{8}$, it is likely that governments will adopt policies which will create a "soft" rather than a "hard" competitive environment.

The median voter theorem (Hotelling, 1929 and Black, 1948) provides more ground for this possible outcome and offers a relevant basis to retrieve policy implications from the results of the this paper. At the end of a legislature, the consensus and the approval for the work of the outgoing government generally determines its re-election, or a political change. The median voter theorem says that the winner of an electoral competition depends on the decision of the median voter. In turn, this means that, if the

[^3]competing parties know the median voter's preferences, they can adjust their policies to get her ballot. Recent works find that the introduction of women's suffrage has increased the public social spending (Lott, 1999 and Aidt and Dellal, 2008), and that women generally prefer larger governments than men (Cavalcanti and Tavares. 2011). This is consistent with the claim that different preferences translate into different regulations and public interventions in the economy. Moreover the authors' result would support the thesis of the median voter theorem, if the median women actually prefers more public intervention in the economy than the median men. There may be several reasons for this to be true in the reality of facts. On the one hand women have historically been less protected than men in the labour market and, more in general, in the society. As a consequence they may have developed stronger preferences for public protection, and may ask for more public aid, when incurring in a negative event such unemployment or divorce (Edlund and Pande, 2002).

The results of the inquiry show that women actually have stronger preferences than men for public intervention in the governance of the economy and also that they consider competition less beneficial for the society than men do.

## III. Data and methodology

This paper uses survey data (from the World Value Survey) to investigate whether women's preferences for competition, regulation, and public provision of goods and services in the market differ from men's systematically. We can interpret the preference for the government intervention in one of the forms mentioned before as a step towards "collectivism" as opposed to "competition". The idea is that the intervention of the government as a regulator and/or as a producer (which acts as a collective decider on the behalf of the population) represents a cooperative way to govern the economy as opposed to the individualistic governance typical of competition. The analysis focuses on Western European countries and the data are from the 2004 wave of the World Value Survey.

The variables of interest are four and correspond to as many questions, which are reported below. The interviewees were requested to rate their agreement/disagreement with a couple of given sentences between 0 (full disagreement) and 10 (full agreement): "Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between." The first of these couples of statements aims at capturing the opinion about competition in general: "Competition is good. It stimulates people to work hard and develop new ideas vs. Competition is harmful. It brings the worst in people". The second couple asks the interviewee to express her preferences about who (between the government and the individuals) should own the firms: "Private ownership of business should be increased vs. Government ownership of business should be increased". Closely related to these, the second-lo-last couple of sentences asks the respondents about their preferences over the intervention of the government as a regulator of the market: "The state should give more freedom to firms vs. The state should control firms more effectively". Last, but not least, I consider also the preference between "People should take more responsibility to provide for themselves vs. The government should take more responsibility to ensure that everyone is provided for".

We can interpret the answers to the first couple of sentences as the respondent's general opinion about competition. The last three couples focus on three different (although partially related) interventions of a government in the economy: direct ownership of firms, regulation, and responsibility for ensuring that everyone is provided with essential goods and services (something in between of direct production and regulation). If it is true that women support competition less than men, then I would expect their preferences to be in favour of (some form of) public intervention more than men's. The analysis of all the dimensions of a market economy considered here goes beyond a simple inquiry on gender-related preferences for competition; it encompasses also other issues that, while related to competition, are not
necessarily ascribable to the funding principles of competition or of market economy. In other words this paper aims also at understanding whether and to which extent the general aversion to competition is consistent with and linked to other characteristics of a market economy.

In addition to the gender of the respondent, the other controls included in the analysis are: age and its square, income, education, employment status, attitude towards religion, religious membership, marital status and number of children.

Age and its squared value control for the fact that people of different ages, having different personal and historical experiences, could have different preferences. Moreover, these may change during life: Hayo (1999) finds a U-shaped relationship between age and the support for market reforms in Eastern Europe. Income may be relevant, as the lower it is, the more a person needs public aids: this may induce people with low incomes to prefer the government to intervene heavily in the economy. The WVS reports the household's income divided into ten country-specific classes; although this division is somewhat arbitrary, it is constructed so to account for the different levels of per-capita income in different countries ${ }^{9}$. This helps to deal with the problem generated by the absolute differentials between countries and that of the contribution given by the other members of the household. Education is another major factor that may affect the preferences for competition: among others Orazem and Vodopivec (1995), Brainerd (1998) and Hayo (2004) provide evidence that a free and competitive market rewards human capital. Therefore, people with high education should/could be more in favour of competition than those with a low stock of human capital. Education is measured through a dummy capturing the highest level reached by the responder (primary - used as the reference category - secondary vocational, preparatory-to-university secondary, university or higher) instead of the number of years spent in education, obtained by summing up the legal durations of each grade. The reason is that the European countries have different systems,

[^4]which involve different durations for the same educational level. Hence, the use of the level rather than of the number of years renders the variable and the interpretation of its coefficient more homogeneous. I also control for the employment status: indeed, it is likely that the unemployed and the self-employed differ in their preferences for competition, given their different goals and needs. The employment status originates four dummies: self-employed, full-time employee (used as the reference category), part-time employee and unemployed. Religiosity and the specific religion may influence the preferences of an individual for competition, because of the specific moral rules. Grier (1997), Guiso et al. (2003) and Alesina et al. (2004) find that economic attitudes and religion-related variables correlate significantly. Eventually the marital status and the number of children may affect preferences, as single individuals and large families could be in need of public aids (and thus looking for the intervention of the government) more than married people and small households. In order to analyse the gender effect more in detail than with only the inclusion of a dummy, I also interact gender with the individual controls. This allows understanding whether the influence of a given control depends also on the gender of the subject.

The countries included in the sample are: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Spain, Sweden, and the United Kingdom. These represent all the major EU countries and are those for which all the considered controls are recorded in the wave of the WVS considered here. Table I and the magnitudes of the samples at the bottom of Tables IV, V, VI and VII indicate the presence of several missing values in the econometric analyses. In particular, the preferences over the ownership of firms was not recorded in Sweden and in Belgium. Therefore these countries are omitted in the regressions presented in Table V. In other cases some interviewees did not answer some of the questions, generating missing values. Before running the regressions, the distribution of these missing data was analysed and it was found to be almost homogeneous across countries and proportional to the other controls ${ }^{10}$. This is confirmed by the regressions. The standard errors contained in the tables, indeed,

[^5]are almost constant for all of the samples. This suggests that the dropped observations did not influence the underlying distributions. As a conclusion, the missing values do not bias the analyses in a relevant way, and therefore I decided to use the widest sample as possible for each of the variables of interest, in order to maximise the goodness and the robustness of the results.

Estimates are obtained using OLS computed with STATA10. Although the dependent variable is categorical, the number of categories (ten) is sufficiently large to render OLS as good as ordered probit for estimation (Ferrer-i-Carbonell and Frijters, 2004). The advantage of using OLS is that estimates are directly readable as elasticities, whereas the interpretation of nine marginal effects could be not very straightforward.

## IV. Results

The first three tables present descriptive statistics for the sample, while the others report the results of the ordered probit regressions. From Table I we notice that all the means (but one) are lower than the median point (5). This suggests that, on average, in the considered countries both men and women consider competition rather good than harmful; they think that private rather than government ownership of business should be increased, that the state should give more freedom to the firms rather than controlling them more effectively, and, eventually, that people rather than government should take more responsibility to provide for themselves (although the women's average here is slightly larger than the median point). Besides this, it emerges another fact: with respect to all of the four aspects considered, women are always less pro-market than men ${ }^{11}$. These first finding is actually consistent with Lott (1999), Aidt and Dallal (2008) and Cavalcanti and Tavares (2011). It suggests also that, while the fundamentals of a market economy are not questioned, the female electorate would prize moderate rather than extreme pro-

[^6]market policies. In other words the female electors would ask for some level of social protection and market regulation higher than the males would.

Table II shows that preferences are subject to some geographical variability. In particular it highlights: 1) the presence of heterogeneity between countries and the fact that not in all of them the preferences significantly differ with gender; and 2) that in some countries the average of the population is positioned to the right of the median point of the scale of preference. This last result, in particular, indicates that in some countries people prefer an increase rather than a decrease of regulation (for instance in Ireland, Italy and in the Netherlands) and that in some cases the two genders are positioned one to the left and the other to the right of the median point (again this is an interesting point, in the light of the median voter theorem). The figures in the table also suggest some other worthwhile remarks. First preferences are not geo-culturally clustered; i.e. in spite of the geographical variability, the figures do not identify "Nordic" or "Mediterranean" clusters. Second, even when the means are not statistically significant, the figures relative to the female sub-sample are always larger than those of the male subsample, providing further confirmation for the findings of the paper.

Table II also reports a couple of indicators of employment protection ${ }^{12}$ and regulation of firms ${ }^{13}$. There is a positive correlation between the level of employment protection (the larger the figure, the more the workers are protected) and the opinion that competition is harmful (6.23\%, significant at 99\% level). Similarly the level of employment protection correlates positively with the preference for increasing the responsibility of the government in the provision of basic goods and services (10.78\%, significant at 99\% level). The correlation between the second indicator (the larger the figure, the more regulated the firms are) and the preference for increasing regulation is positive ( $8.51 \%$, significant at $99 \%$ level), as well as that

[^7]between the index and the opinion that competition is harmful ( $8.23 \%$, significant at $99 \%$ level). Eventually there is a positive correlation between the preference for increasing the responsibility of the government in the provision of basic goods and services and the level of firm regulation (20.49\%, significant at 99\% level), and this latter variable and the preference for increasing the state ownership of firms $(4.17 \%$, significant at $99 \%$ level). These figures suggest that the implemented policies actually tend to mirror the preferences of the population. Indeed, while it is true that the correlation coefficients are not very large, we should keep in mind that the implemented policies depend on a number of factors, that are not all captured by the variables used to calculate those coefficients. Hence, rather than their absolute magnitudes, the high statistical significance ${ }^{14}$ and the sign (consistent with the hypotheses of the paper) should be stressed. Eventually Table III presents the descriptive statistics for the controls used in the regressions.

For the sake of brevity ${ }^{15}$, Tables IV, V and VI report the results of the regressions only for the variable of interest (gender). For each country included in the sample, three models ${ }^{16}$ are estimated:

$$
\text { (1) } y_{i}=\alpha_{0}+\alpha_{1} \text { male }_{i}+\varepsilon_{i}
$$

$$
\begin{align*}
y_{i}=\alpha_{0} & +\alpha_{1} \text { male }_{i}+\alpha_{2} \text { age }_{i}+\alpha_{3} \text { age }_{i}^{2}+\alpha_{4} \text { completed_vocational }_{i}  \tag{2}\\
& +\alpha_{5} \text { completed_secondary }_{i}+\alpha_{6} \text { completed_university }_{i}+\alpha_{6} \text { income }_{i} \\
& +\alpha_{7} \text { part }- \text { time_employed }_{i}+\alpha_{8} \text { self_employed }_{i} \\
& +\alpha_{8} \text { married_or_living_w_partner }_{i}+\alpha_{9} \text { widow }_{i}+\alpha_{10} \text { divorced }_{i} \\
& +\alpha_{11} \text { number_of_children }_{i}+\varepsilon_{i}
\end{align*}
$$

[^8]\[

$$
\begin{aligned}
y_{i}=\alpha_{0} & +\alpha_{1} \text { male }_{i}+\alpha_{2} \text { age }_{i}+\alpha_{3} \text { age }_{i}^{2}+\alpha_{4} \text { completed_vocational }_{i} \\
& +\alpha_{5} \text { completed_secondary }_{i}+\alpha_{6} \text { completed_university }_{i}+\alpha_{6} \text { income }_{i} \\
& +\alpha_{7} \text { part }- \text { time_employed }_{i}+\alpha_{8} \text { self_employed }_{i} \\
& +\alpha_{8} \text { married_or_living_w_partner }_{i}+\alpha_{9} \text { widow }_{i}+\alpha_{10} \text { divorced }_{i} \\
& +\alpha_{11} \text { number_of_children }_{i}+\alpha_{12} \text { religious }_{i}+\alpha_{13} \text { atheist }_{i}+\alpha_{14} \text { catholic }_{i}+\alpha_{15} \text { jew }_{i} \\
& +\alpha_{16} \text { muslim }_{i}+\varepsilon_{i}
\end{aligned}
$$
\]

where $y_{i}$ is the outcome variable, i.e. the answer to one of the questions of the WWS presented in the previous section.

The opinion about competition is the dependent variable of the regressions presented in Table IV. Gender is significant in almost all the countries and the specifications considered: men have a better opinion of competition than women. The coefficients and the standard errors are almost constant across the specifications, what highlights the robustness of this result. There are some noticeable country differences. In particular, France and Greece do not display any gender effect, whereas this is biggest in Italy and Germany. Moreover the gender effect is not robust to different specifications, and, namely, to the inclusion of a set of socio-demographic controls. In Austria and Belgium the effect disappears in specification (3). In the Netherlands and in the United Kingdom, whereas the gender effect is always statistically significant at conventional levels, this significance decreases as new controls are included in the regression. However, the results shown in this table are in line with the extant literature that finds that women tend to shy away from competition.

Table V reports the gender effect for preferences relative to the government ownership of firms (Table V). Again women tend to prefer a more regulated market than men. Also in this case the effect is not constant across countries. Again we find the largest gender effect in Germany and Italy, while Spain does not feature any, and the other countries display some gender effect. The results for this variable are more
robust to different specifications. France is the only country, where no gender effect is found. Unfortunately, the information is missed for some countries. In Table VI the results relative to the preferences over firm regulations are reported. The gender variable is always significant and, while some significance is lost from model 1 to model 3, its levels remain high, testifying robustness. Again we can notice that in Belgium, France and Spain the significance of the effect always remains below the conventional thresholds. Austria and the Netherlands display the strongest gender effect (i.e. the largest coefficients).

Eventually a gender effect of magnitude comparable to that of the other tables emerges also in Table VII, where the presented regressions analyse the preferences over the government's responsibility to ensure the provision of basic goods and services to the population. Here the gender dummy is generally highly significant in all the three models. Once more Italy has (one of) the largest coefficients, whereas France does not display any significant effect.

Overall, we have noticed that, where we find a significant effect, women are always less in favour of a competitive market structure than men are. This supports what other works have found using experiments related to the market structures or analysing micro-datasets on individual preferences in referenda, judgments, etc. However, the heterogeneity between countries that belong to the same political, economic, and - more broadly speaking - also cultural area deserves some deeper analysis. At a first sight, no clear pattern seems to emerge. Whereas France and Belgium (almost) never present significant gender effects, other countries always do, and others display it only in some cases. The tables do not show any precise geographical or cultural reason for this. Nor living in a Mediterranean country or in a Nordic country appears to explain the differences. In addition, the legal origin ${ }^{17}$ (which is, for example, Roman for France, Spain and Italy) does not help.

[^9]In order to better understand the differences between the countries, the dependent variables of

Tables IV, V, VI and VII are regressed on a set of country-specific indicators. Also in this case I display OLS coefficients ${ }^{18}$. The country-specific indicators are: Gini index ${ }^{19}$, per-capita GDP, male and female unemployment rates ${ }^{20}$, the ratio between these rates, percentage of public expenditure that finances social services ${ }^{21}$, net immigration index ${ }^{22}$, and the country's legal origin ${ }^{23}$. All these - but the legal origin - are from the OECD statistical reports, and represent variables that are very likely to influence people's preferences for the public intervention in the economy. We can notice that, ceteris paribus, the countries with high GDP per capita and high Gini index tend to prefer more public intervention than the countries where these two indicators are low. These two variables are also those with the largest coefficients amongst the controls used. The interaction terms highlight that women are more sensitive than men to low levels of income per capita and to high levels of inequality ${ }^{24}$. In other words, where income is low, women are more pro-intervention than men, and the same holds in the countries with high inequality. This suggests that, in countries with (relatively) low incomes and high inequality, the women tend to rely on the public intervention more than men do. Females are more sensitive than males to inequality and apparently believe that this is a result of competition and that the government should intervene more to reduce it. Conversely, as GDP per capita increases, men are more prone than women to consider competition harmful and to ask more regulation of the market. However, as GDP per capita increases, women are more likely than men to ask for more public coverage of the basic needs of the population.

The combined and gender-dependent effects of the income per capita and of the Gini index help to understand the observed differences between countries. In particular, we observe that the Gini index has

[^10]the strongest effect among the regressors used. We should therefore expect women to be less in favour of a competitive market in countries with high Gini index. However, this effect should be mitigated by a (relatively) high income per capita. Let us consider, for example, France, which does not display any significant gender effect in Tables IV - VII. Here the GDP per capita is medium-high $(\$ 29,550)$, and the inequality is relatively low (0.288). A simple computation of the combined effect of these two variables shows that the gender effect in France should approach zero. Italian women are between the most adverse to competition compared to Italian men. Indeed, Italy has a high level of inequality (0.352) and a medium income $(\$ 28,140)$. The two genders respond differently also to other indicators. However, the magnitudes of these effects are smaller and provide minor contributions to the explanation of the phenomenon.

In sum this paper presents three main results: 1) in some countries men and women display different preferences for competition and public intervention in the economy; 2) these differences are driven by the fact that men and women perceive socio-economic phenomena differently and 3 ) inequality and the level of income per capita are the main drivers of the gender-specific differences in preferences.

An alternative interpretation of the results presented in the previous tables grounds on the evidence provided by Fisman and O'Neill (2009). The two authors find that women consider success more likely as a matter of luck than of effort, when compared to men on the same topic ${ }^{25}$. Assuming this result, it is not surprising that women look for more public insurance than men. The public intervention in the economy is also finalised to pool the risks, so to protect the individual from reversals of luck ${ }^{26}$. Therefore women should be (as they actually appear to be) more supportive than men of public intervention in the economy.

[^11]
## V. Conclusions

The evidence presented in this paper provides support to the literature on the gender-related differences in preferences for competition; so doing it broadens and generalises the previous conclusions of the extant works, and also sheds some light on the magnitude of the gender effect. In fact, given the increasing number of women among the components of governments, parliaments and boards of directors, one might expect changes in policies in favour of less competition and more cooperation. Women tend to reveal more cooperative and less competitive than males, when their preferences are elicited in different frameworks and when interviewed in general surveys such the World Value Survey used in the present work.

This paper analyses the individual opinion about competition per se and the preferences with respect to four crucial aspects of a market economy. Women are less prone than men to support competition, however the differences between the two genders are not homogeneously spread. The results presented in the paper suggest that women appear to favour a "soft" version of competition: a market where the government plays a relevant role as regulator and provider of essential goods and services to the most disadvantaged classes. This is not a treat for the current market structure and will not undermine the basis of competition and of the market economy. Moreover, the differences appear to be the consequences of the socio-economic environment and of how men and women perceive it and react to some variables such as the level of inequality and the level of income.

We could also interpret the results of the paper in terms of votes both of the electors over the candidates' programmes and of the members of a parliament over a proposal of law. The second case, in particular, is the most relevant, as women vote at general elections since decades (and thus the elected governments are already the expression also of their vote), but nowadays their presence in the legislative assemblies is growing. This means that the future economic policies and laws will represent more and more
the women's preferences and that an increase in the market regulation and in the social security expenditure is a possible and likely scenario for the future. A policy recommendation and a consideration emerge from the analysis. First, if the governments wish to reduce the gender-related differences they should work to reduce the inequality. Of course, this might not be a major goal of (some of) the governments. In such a case, as the number of women in ministries and political bodies increases, in the countries characterised by high inequality and low income we should expect policies that increase the intervention of the public hand in the economy. If these policies will aim at reducing the inequality (what should happen if women are really more adverse to inequality than men are), then the gender differences detected in this paper shall "naturally" disappear.

Before concluding, I would like to add some comments on causality and identification. The analysis presented here is more descriptive than causal, for several reasons. First, the available data are in crosssectional and not in panel format; second, although gender is exogenous, the results suggest appear driven by the interaction between gender and socio-economic variables. This is exclusive rather than supportive of a pure genetic gender effect, and renders the analysis more descriptive than causal. However, it is possible to claim that some causality is still present in the analyses. A further observation is that gender is a welldefined and exogenous variable, what helps to get strong estimates. However, different literatures have shown that gender correlates with several social and economic decisions, behaviours and outcomes. Consequently, in a regression the effect of gender is affected also by these unobservable correlates, what renders the gender effect difficult to quantify with precision. However, the coefficients presented in this paper are relatively large in magnitude. This suggests that, although the exact dimension of the phenomenon cannot be assessed, the sign and the order of magnitude of the "pure" effect should not be very different from those presented in the previous tables.

Finally, as usual, any generalisation of results requires abundance of cautiousness; however the robustness of the gender dummy to the introduction of several controls and interaction variables, together
with the extant literature on the gender effect, suggests that the difference is more of nurture than of nature. In such a case, the effects of the women's accession to relevant economic, political and cultural positions will be much stronger in the developing than in the developed countries, as a consequence of the larger discrimination suffered by women in the former than in the latter. The fight to inequality could pass also through this mechanism.

## References

- Aidt, Toke S. and Bianca Dallal (2008). "Female Voting Power: the Contribution of Women's Suffrage to the Growth of Social Spending in Western Europe (1861-1960)" Public Choice, 134(3-4): 391 - 417.
- Alesina, Alberto, Edward L. Gleaser and Bruce Sacerdote (2001). "Why Does Not the U.S. Have a European-Style Welfare System?" Brookings Papers on Economic Activity 2001(2): 187 - 222.
- Alesina, Alberto, Rafael Di Tella and Robert J. McCulloch (2004). "Inequality and Happiness: Are Americans and Europeans Different?" Journal of Public Economics, 88(9-10): 2009 - 2042.
- Allen, David W. and Diane E. Wall (1993). "Role Orientations and Women State Supreme Court Justices" Judicature, 156(1): 159 - 165.
- Andreoni, James and Lise Vesterlund (2001). "Which Is the Fair Sex? Gender Differences in Altruism" The Quarterly Journal of Economics, 116(1): 293 - 312.
- Baber, Brad M. and Terrance Odean (2001). "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investments" The Quarterly Journal of Economics, 116(1): 261 - 292.
- Black, Duncan (1948). "On the Rationale of Group Decision-Making" Journal of Political Economy, 56(1): 23-34.
- Bornstein, Nicholas and Bruno Lanz (2008). "Voting on the Environment: Price or Ideology? Evidence from Swiss Referendums" Ecological Economics, 67: 430-440.
- Brainerd, Elizabeth (1998). "Winners and Losers in Russia's Economic Transition" The American Economic Review, 88(5): 1094-1116.
- Cavalcanti, Tiago V. de V. and José Tavares (2011). "Women Prefer Lager Governments: Growth, Structural Transformation, and Government Size" Economic Inquiry, 49(1): 155-171.
- Chiang, Eric P. and Djeto Assane (2007). "Determinants of Music Copyright Violations on the University Campus" Journal of Cultural Economy, 31(3): 187 - 204.
- Chiang, Eric P. and Djeto Assane (2008). "Music Piracy among Students on the University Campus: Do Males and Females React Differently?" Journal of Socio-Economics, 37(4): 1371 1380.
- Collins, Paul M. Jr, Kenneth L. Manning and Robert A. Carp (2010). "Gender, Critical Mass and Judicial Decision Making" Law and Policy, 32(2): 260-281.
- Croson, Rachel and Uri Gneezy (2009). "Gender Differences in Preferences" Journal of Economic Literature, 47(2): 448-474.
- Davis, Shannon N. and Theodore N. Greenstein (2009). "Gender Ideology: Components, Predictors and Consequences" Annual Review of Sociology, 35(1): 87-105.
- Djankov, Simeon, Caralee McLiesh and Andrei Shleifer (2007). "Private Credit in 129 Countries" Journal of Financial Economics, 84(2): 299 - 329.
- Drazen, Allan (2000). "The Political Business Cycle after 25 Years" NBER Macroeconomics Annual, Cambridge, MA: MIT Press.
- Edlund, Lena and Rohini Pande (2002). "Why Have Women Become Left-Wing? The Political Gender Gap and the Decline in Marriage" The Quarterly Journal of Economics, 117(3): 917 961.
- Eckel, Catherine C. and Philip J. Grossman. 1996. "The Relative Price of Fairness: Gender Differences in a Punishment Game" Journal of Economic Behavior \& Organization, 30(2): 143 158.
- Eckel, Catherine C. and Philip J. Grossman (2008). "Men, Women, and Risk Aversion: Experimental Evidence" in Handbook of Experimental Economics Results, chapter 113, Amsterdam: Elsevier Science.
- Ferrer-i-Carbonell, Ada and Paul Frijters (2004). "How Important Is Methodology for the Estimates of the Determinants of Happiness?" The Economic Journal, 144: 641-659.
- Fidrmuc, Jan (2000). "Political Support for Reforms: Economics of Voting in Transition Countries" European Economic Review, 44(8): 1491 - 1513.
- Firebaugh, Glenn and Dumitru Sandu (1998). "Who Supports Marketization and Democratization in Post-Communist Romania?" Sociological Forum, 13(3): 521-541.
- Fisman, Raymond and Maura O'Neill (2009). "Gender Differences in the Beliefs on the Returns to Effort: Evidence from the World Value Survey" Journal of Human Resources, 44(4): 858 870.
- Fryer, Roland and Steven Levitt (2010). "An Empirical Analysis of the Gender Gap in Mathematics" American Economic Journal: Applied Economics, 2(2): 210 - 240.
- Gneezy, Uri, Muriel Niederle and Aldo Rustichini (2003). "Performance in Competitive Environments: Gender Differences" The Quarterly Journal of Economics, 118(3): 1049 - 1074.
- Gneezy, Uri and Aldo Rustichini (2004). "Gender and Competition at a Young Age" The American Economic Review, 94(2): 377-381.
- Gneezy, Uri, Kenneth L. Leonard and John A. List (2009). "Gender Differences in Competition: Evidence from a Matrilineal and a Patriarchal Society" Econometrica, 77(5): 1637-1664.
- Grier, Robin (1997). "The Effect of Religion on Economic Development: a Cross National Study of 63 Former Colonies" Kyklos, 50(1): 47-62.
- Gryski, Gerard S., Eleanor C. Main and William J. Dixon (1986). "Models of State High Court Decision Making in Sex Discrimination Cases" Journal of Politics, 48(1): 143-155.
- Guiso, Luigi, Paola Sapienza and Luigi Zingales (2003). "People’s Opium? Religion and Economic Attitudes" Journal of Monetary Economics, 50(1): 225 - 282.
- Hayo, Bernd (1999). "Micro and Macro Determinants of Public Support for Market Reforms in Eastern Europe" ZEI Working Papers no. B25.
- Hayo, Bernd (2004). "Public Support for Creating a Market Economy in Eastern Europe" Journal of Comparative Economics, 34(4): 720-744.
- Hotelling, Harold (1929). "Stability in Competition" The Economic Journal, 39(153): 41 - 57.
- Kaltenthaler, Carl C., Tephen J. Ceccoli and Andrew Michta (2006). "Explaining Individual-Level Support for Privatization in European Post-Soviet Economies" European Journal of Political Research, 45(1): 1-29.
- Lago-Peñas, Ignacio and Santiago Lago-Peñas (2010). "The determinants of Tax Morale in Comparative Perspective: Evidence from European Countries" European Journal of Political Economy, 26(4): 441-453.
- Lott, John R. (1999). "How Dramatically Did Women's Suffrage Change the Size and Scope of Government?" Journal of Political Economy, 107(6): 1163 - 1198.
- McCall, Madhavi (2005). "Court Decision Making in Police Brutality Cases, 1990-2000" American Politics Research, 33(1): 56-80.
- McCall, Madhavi and Michael A. McCall (2007). "How Far Does the Gender Gap Extend? Decision Making of State Supreme Courts in Fourth Amendment Cases" Social Science Journal, 44(1): $67-82$.
- Migheli, Matteo (2010). "Supporting the Free and Competitive Market in China and India: Differences and Evolution over the Time" Economic Systems, 34(1): 73-90.
- Migheli, Matteo (2012). "The Transition of People's Preferences for the Intervention of the Government in the Economy of Re-Unified Germany" Portuguese Economic Journal, 11(2): 101 $-126$.
- Miller, Jane E. and Yana van der Meulen Rodgers (2008). "Economics Importance and Statistical Significance: Guidelines for Communicating Empirical Research" Feminist Economics, 14(2): 117 $-149$.
- Niederle, Muriel and Lise Vesterlund (2007). "Do Women Shy away from Competition? Do Men Compete too much?" The Quarterly Journal of Economics, 122(3): 1067 - 1101.
- Niederle, Muriel and Lise Vesterlund (2010). "Explaining the Gender Gap in Math Test Scores: the Role of Competition" Journal of Economic Perspectives, 24(2): 129 - 144.
- Orazem, Peter and Milan Vodopivec (1995). "Winners and Losers in Transition: Returns to Education, Experience and Gender in Slovenia" The World Bank Economic Review, 9(2): 201 230.
- Peresie, Jennifer L. (2005). "Female Judges Matter: Gender and Collegial Decisionmaking in the Federal Appellate Courts" The Yale Law Journal, 114(7): 1759 - 1790.
- Rodrik, Dani (1996). "Understanding Economic Policy Reforms" Journal of Economic Literature, 34(1): 9-41.
- Roland, Gérard (2002). "The Political Economy of Transition" Journal of Economic Perspectives, 16(1): $29-50$.
- Seagal, Jennifer A. (2000). "Representative Decision Making on the Federal Bench: Clinton's District Court Appointees" Political Research Quarterly, 137(1): 142 - 147.
- Smarzynska Javorcik, Beata and Mariana Spatareanu (2005). "Do Foreign Investors Care about Labor Market Regulations?" Review of World Economics, 141(3): 375-403.
- Songer, Donald R. and Susan Haire (1992). "Integrating Alternative Approaches to the Study of Judicial Voting: Obscenity Cases in the U.S. Courts of Appeal" American Journal of Political Science, 36(4): 963 - 982.
- Songer, Donald R. and Kelley A. Crews-Meyer (2000). "Does Judge Gender Matter? DecisionMaking in State Supreme Courts" Social Science Quarterly, 81(3): 751-762.
- Thalmann, Philippe (2004). "The Public Acceptance of Green Taxes: 2 Million Voters Express Their Opinion" Public Choice, 119: 179-217.
- Torgler, Benno (2003). "To Evade Taxes or not the Evade: That Is the Question" Journal of Socio-Economics, 32(3): 283-302.
- Torgler, Benno (2004). "Tax Morale in Asian Countries" Journal of Asian Economics, 15(2): 237 $-266$.
- Torgler, Benno and Neven T. Valev (2010). "Gender and Public Attitudes Toward Corruption and Tax Evasion" Contemporary Economic Policy, 28(4): 554 - 568.
- Walker, Thomas G. and Deborah J. Barrow (1985). "The Diversification of the Federal Bench: Policy and Process Ramifications" Journal of Politics, 47(2): 596-617.
- Westergren, Sarah (2004). "Gender Effects in the Courts of Appeal Revisited: the Data since 1994" Georgetown Law Journal, 92: 689-708.
- Williamson, John (Ed.) (2004). The Political Economy of Policy Reform, Washington, DC: Institute for International Economics.

|  | Men | Women |
| :---: | :---: | :---: |
| "Competition is good" vs. "competition is harmful" | 3.77 | 4.11 |
| Standard errors | 0.031 | 0.034 |
| "Private ownership of business should be increased" vs. "Government ownership should be increased" | 3.93 | 4.29 |
| Standard errors | 0.040 | 0.037 |
| "The State should give more freedom to firms" vs. "The state should control firms more effectively" | 4.53 | 4.90 |
| Standard errors | 0.040 | 0.036 |
| "People should take more responsability to provide for themselves" vs. "The Government should take more responsibility" | 4.67 | 5.04 |
| Standard errors | 0.038 | 0.035 |


|  | Opinion on competition |  |  | Preference for state ownership of firms |  |  | Preference for regulation of firms |  |  | Opinion on government responsibility on social provisions |  |  | Employment protection ${ }^{1}$ | Regulation of firms ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Significance | Males | Females | Significance | Males | Females | Significance | Males | Females | Significance |  |  |
| Austria | $\begin{gathered} 3.00 \\ (0.09) \end{gathered}$ | $\begin{gathered} 3.37 \\ (0.09) \end{gathered}$ | *** | $\begin{gathered} 3.17 \\ (0.10) \end{gathered}$ | $\begin{gathered} 3.48 \\ (0.09) \end{gathered}$ | *** | $\begin{gathered} \hline 3.73 \\ (0.12) \end{gathered}$ | $\begin{gathered} 4.41 \\ (0.11) \end{gathered}$ | *** | $\begin{gathered} 3.72 \\ (0.12) \end{gathered}$ | $\begin{gathered} 4.16 \\ (0.11) \end{gathered}$ | *** | 2.05 | 0.31 |
| Belgium | $\begin{gathered} 4.49 \\ (0.13) \end{gathered}$ | $\begin{gathered} 4.89 \\ (0.12) \end{gathered}$ | *** |  |  |  | $\begin{gathered} 5.36 \\ (0.15) \end{gathered}$ | $\begin{gathered} 5.69 \\ (0.13) \end{gathered}$ | ** | $\begin{gathered} 4.94 \\ (0.14) \end{gathered}$ | $\begin{gathered} 5.05 \\ (0.12) \end{gathered}$ |  | 2.35 | 0.41 |
| Finland | $\begin{aligned} & 4.09 \\ & (0.12) \end{aligned}$ | $\begin{gathered} 4.39 \\ (0.12) \end{gathered}$ | ** | $\begin{gathered} 3.79 \\ (0.11) \end{gathered}$ | $\begin{gathered} 4.25 \\ (0.11) \end{gathered}$ | *** | $\begin{gathered} 4.44 \\ (0.13) \end{gathered}$ | $\begin{gathered} 4.78 \\ (0.13) \end{gathered}$ | ** | $\begin{gathered} 4.26 \\ (0.14) \end{gathered}$ | $\begin{gathered} 4.72 \\ (0.13) \end{gathered}$ | *** | 2.05 | 0.38 |
| France | $\begin{gathered} 4.46 \\ (0.15) \end{gathered}$ | $\begin{gathered} 4.66 \\ (0.15) \end{gathered}$ |  | $\begin{gathered} 3.72 \\ (0.12) \end{gathered}$ | $\begin{gathered} 3.82 \\ (0.13) \end{gathered}$ |  | $\begin{gathered} 4.72 \\ (0.16) \end{gathered}$ | $\begin{gathered} 5.03 \\ (0.16) \end{gathered}$ | * | $\begin{gathered} 3.66 \\ (0.13) \end{gathered}$ | $\begin{gathered} 3.97 \\ (0.15) \end{gathered}$ | * | 2.95 | 0.45 |
| Germany | $\begin{gathered} 3.21 \\ (0.11) \end{gathered}$ | $\begin{gathered} 3.82 \\ (0.10) \end{gathered}$ | *** | $\begin{gathered} 3.82 \\ (0.12) \end{gathered}$ | $\begin{gathered} 4.28 \\ (0.10) \end{gathered}$ | *** | $\begin{gathered} 4.24 \\ (0.14) \end{gathered}$ | $\begin{gathered} 4.74 \\ (0.12) \end{gathered}$ | *** | $\begin{gathered} 4.08 \\ (0.14) \end{gathered}$ | $\begin{gathered} 4.51 \\ (0.11) \end{gathered}$ | *** | 2.35 | 0.38 |
| Greece | $\begin{aligned} & 4.16 \\ & (0.14) \end{aligned}$ | $\begin{gathered} 4.22 \\ (0.11) \end{gathered}$ |  |  |  |  | $\begin{gathered} 5.50 \\ (0.15) \end{gathered}$ | $\begin{gathered} 5.75 \\ (0.12) \end{gathered}$ | * | $\begin{gathered} 5.63 \\ (0.14) \end{gathered}$ | $\begin{gathered} 5.66 \\ (0.11) \end{gathered}$ |  | 1.48 | 0.49 |
| Ireland | $\begin{gathered} 3.73 \\ (0.13) \end{gathered}$ | $\begin{gathered} 3.81 \\ (0.11) \end{gathered}$ |  | $\begin{gathered} 4.02 \\ (0.13) \end{gathered}$ | $\begin{gathered} 4.28 \\ (0.12) \end{gathered}$ | * | $\begin{gathered} 5.17 \\ (0.15) \end{gathered}$ | $\begin{gathered} 4.99 \\ (0.12) \end{gathered}$ |  | $\begin{gathered} 4.29 \\ (0.14) \end{gathered}$ | $\begin{gathered} 4.70 \\ (0.13) \end{gathered}$ | ** | 1.63 | 0.25 |
| Italy | $\begin{gathered} 3.77 \\ (0.11) \end{gathered}$ | $\begin{gathered} 4.53 \\ (0.10) \end{gathered}$ | *** | $\begin{gathered} 3.75 \\ (0.10) \end{gathered}$ | $\begin{gathered} 4.47 \\ (0.09) \end{gathered}$ | *** | $\begin{gathered} 4.64 \\ (0.13) \end{gathered}$ | $\begin{gathered} 5.10 \\ (0.11) \end{gathered}$ | *** | $\begin{gathered} 5.27 \\ (0.12) \end{gathered}$ | $\begin{gathered} 5.92 \\ (0.11) \end{gathered}$ | *** | 2.15 | 0.51 |
| Netherlands | $\begin{aligned} & 4.37 \\ & (0.15) \end{aligned}$ | $\begin{gathered} 4.76 \\ (0.13) \end{gathered}$ | ** | $\begin{gathered} 4.10 \\ (0.14) \end{gathered}$ | $\begin{gathered} 4.61 \\ (0.12) \end{gathered}$ | *** | $\begin{gathered} 5.06 \\ (0.16) \end{gathered}$ | $\begin{gathered} 5.69 \\ (0.13) \end{gathered}$ | *** | $\begin{gathered} 4.79 \\ (0.16) \end{gathered}$ | $\begin{gathered} 5.02 \\ (0.15) \end{gathered}$ |  | 2.20 | 0.31 |
| Spain | $\begin{gathered} 4.10 \\ (0.10) \end{gathered}$ | $\begin{gathered} 4.45 \\ (0.09) \end{gathered}$ | *** | $\begin{gathered} 5.50 \\ (0.14) \end{gathered}$ | $\begin{gathered} 5.54 \\ (0.14) \end{gathered}$ |  | $\begin{gathered} 5.09 \\ (0.16) \end{gathered}$ | $\begin{gathered} 5.39 \\ (0.13) \end{gathered}$ | * | $\begin{gathered} 6.19 \\ (0.10) \end{gathered}$ | $\begin{gathered} 6.44 \\ (0.10) \end{gathered}$ | ** | 3.10 | 0.53 |
| Sweden | $\begin{gathered} 3.23 \\ (0.10) \end{gathered}$ | $\begin{gathered} 3.63 \\ (0.10) \end{gathered}$ | *** |  |  |  | $\begin{gathered} 3.79 \\ (0.12) \end{gathered}$ | $\begin{gathered} 3.90 \\ (0.10) \end{gathered}$ |  | $\begin{gathered} 4.13 \\ (0.12) \end{gathered}$ | $\begin{gathered} 4.23 \\ (0.12) \end{gathered}$ |  | 2.40 | 0.28 |
| United Kingdom | $\begin{array}{r} 4.00 \\ (0.16) \\ \hline \end{array}$ | $\begin{array}{r} 4.46 \\ (0.14) \\ \hline \end{array}$ | *** | $\begin{array}{r} 4.94 \\ (0.16) \\ \hline \end{array}$ | $\begin{array}{r} 5.17 \\ (0.14) \\ \hline \end{array}$ |  | $\begin{array}{r} 4.70 \\ (0.16) \\ \hline \end{array}$ | $\begin{array}{r} 4.98 \\ (0.14) \\ \hline \end{array}$ | * | $\begin{array}{r} 4.49 \\ (0.17) \\ \hline \end{array}$ | $\begin{array}{r} 4.84 \\ (0.15) \\ \hline \end{array}$ | * | 0.90 | 0.16 |

[^12]OECD data (average of the two versions for 2003). The higher the figure the more protected is the the employment. The theoretical range of the indicator is $0-4$.
${ }^{2}$ This figure is from 2007.
${ }^{3}$ Calculations on data from "Doing Business in 2004"

|  | Whole sample | Men | Women |
| :---: | :---: | :---: | :---: |
| Percentage of female interviwees | 54.43 |  |  |
| Age | 45.75 | 44.64 | 46.47 |
| Income | 5.03 | 5.24 | 4.88 |
| Education (\% values) |  |  |  |
| Secondary preparatory | 24.87 | 24.04 | 25.58 |
| Secondary vocational | 21.37 | 22.83 | 20.16 |
| University degree or more | 20.46 | 21.67 | 19.47 |
| Employment status (\% values) |  |  |  |
| Self-employed | 6.46 | 9.35 | 4.04 |
| Full-time worker | 38.40 | 50.77 | 20.04 |
| Part-time worker | 8.71 | 3.41 | 13.14 |
| Unemployed | 4.59 | 4.95 | 4.29 |
| Marital status (\% values) |  |  |  |
| Married / living with partner | 61.04 | 64.57 | 58.08 |
| Widow | 8.47 | 3.64 | 12.51 |
| Divorced | 5.60 | 4.26 | 6.73 |
| Number of children | 1.83 | 1.73 | 1.90 |
| Reliigious orientation (\% values) |  |  |  |
| Religious | 75.57 | 69.98 | 80.26 |
| Atheist | 1.53 | 2.14 | 1.01 |
| Catholic | 57.51 | 56.79 | 58.11 |
| Protestant | 29.36 | 30.39 | 28.49 |
| Jewish | 0.23 | 0.40 | 0.09 |
| Muslim | 0.67 | 0.77 | 0.59 |

Table IV. Opinion of competition (OLS estimates, standard errors in brackets)

|  | Austria | Belgium | Finland | France | Germany | Greece | Ireland | Italy | Netherlands | Spain | Sweden | U.K. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male (model 1) | -0.371 | -0.402 | -0.298 | 0.200 | -0.608 | -0.056 | -0.084 | -0.761 | -0.397 | -0.354 | -0.406 | -0.491 |
| Standard error | $(0.127){ }^{* *}$ | $(0.179) * *$ | (0.169)* | (0.209) | $(0.144)^{* * *}$ | (0.180) | (0.170) | $(0.149)^{* *}$ | $(0.198){ }^{\text {** }}$ | $(0.129) * * *$ | $(0.144){ }^{* * *}$ | $(0.214)^{* *}$ |
| R-squared | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| Male (model 2) | -0.322 | -0.287 | -0.288 | 0.378 | -0.549 | -0.051 | 0.089 | -0.694 | -0.353 | -0.273 | -0.393 | -0.411 |
| Standard error | $(0.133){ }^{* *}$ | (0.187) | (0.175)* | (0.215)* | (0.158)*** | (0.187) | (0.189) | $(0.154){ }^{* * *}$ | (0.214)* | (0.132)** | (0.151)*** | (0.244)* |
| R-squared | 0.02 | 0.05 | 0.06 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.08 | 0.03 | 0.04 | 0.04 |
| Male (model 3) | -0.316 | -0.255 | -0.298 | 0.303 | -0.620 | -0.066 | 0.135 | -0.694 | -0.366 | -0.281 | -0.355 | -0.450 |
| Standard error | (0.132) | (0.188) | (0.179)* | (0.219) | (0.157)*** | (0.187) | 0.191 | $(0.155)^{* * *}$ | (0.214)* | $(0.134)^{* * *}$ | $(0.155) * *$ | (0.251)* |
| R-squared | 0.03 | 0.05 | 0.07 | 0.06 | 0.08 | 0.06 | 0.005 | 0.04 | 0.09 | 0.03 | 0.06 | 0.05 |
| Observations | 956 | 866 | 657 | 681 | 835 | 828 | 722 | 1076 | 397 | 1261 | 686 | 475 |
| Table V. Preferences for increasing the government ownership of firms (OLS estimates - standard errors in brackets). |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Austria | Belgium | Finland | France | Germany | Greece | Ireland | Italy | Netherlands | Spain | Sweden | U.K. |
| Male (model 1) | -0.305 |  | -0.455 | -0.099 | -0.454 |  | -0.246 | -0.719 | -0.515 | -0.045 |  | -0.234 |
| Standard error | $(0.138){ }^{* *}$ |  | $(0.158) * * *$ | (0.176) | (0.153)*** |  | (0.174) | $(0.137)^{* * *}$ | $(0.183) * * *$ | (0.199) |  | (0.214) |
| R -squared | 0.01 |  | 0.01 | 0.01 | 0.01 |  | 0.01 | 0.03 | 0.02 | 0.01 |  | 0.01 |
| Male (model 2) | -0.252 |  | -0.443 | -0.029 | -0.338 |  | -0.190 | -0.634 | -0.311 | -0.026 |  | -0.389 |
| Standard error | (0.146)* |  | (0.160)*** | (0.185) | (0.162)** |  | (0.187) | $(0.141)^{* * *}$ | (0.199)* | (0.208) |  | (0.239)* |
| R-squared | 0.02 |  | 0.06 | 0.06 | 0.05 |  | 0.06 | 0.07 | 0.10 | 0.04 |  | 0.08 |
| Male (model 3) | -0.263 |  | -0.408 | -0.071 | -0.331 |  | -0.251 | -0.635 | -0.309 | -0.087 |  | -0.395 |
| Standard error | (0.147)* |  | $(0.163) * *$ | (0.188) | (0.163)** |  | (0.190) | $(0.141)^{* * *}$ | (0.200)* | (0.210) |  | (0.246)* |
| R-squared | 0.02 |  | 0.08 | 0.07 | 0.07 |  | 0.07 | 0.07 | 0.11 | 0.05 |  | 0.09 |
| Observations | 921 |  | 626 | 650 | 775 |  | 696 | 1022 | 393 | 598 |  | 443 |


|  | Austria | Belgium | Finland | France | Germany | Greece | Ireland | Italy | Netherlands | Spain | Sweden | U.K. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male (model 1) | -0.680 | -0.327 | -0.349 | -0.318 | -0.501 | -0.246 | 0.183 | -0.461 | -0.630 | -0.301 | -0.155 | -0.276 |
| Standard error | $(0.166)^{* * *}$ | (0.195)* | (0.181)** | (0.226) | $(0.184){ }^{* * *}$ | (0.189) | (0.190) | (0.170)*** | $(0.206)^{* * *}$ | (0.204) | (0.155) | (0.213) |
| R-squared | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 |
| Male (model 2) | -0.655 | -0.272 | -0.300 | -0.076 | -0.446 | -0.169 | 0.191 | -0.346 | -0.558 | -0.146 | -0.048 | -0.298 |
| Standard error | $(0.173)^{* * *}$ | (0.206) | (0.186)* | (0.235) | (0.197)** | (0.195) | (0.207) | (0.175)** | $(0.223) * *$ | (0.211) | (0.158) | (0.241) |
| R-squared | 0.06 | 0.07 | 0.04 | 0.08 | 0.04 | 0.04 | 0.03 | 0.05 | 0.11 | 0.04 | 0.07 | 0.04 |
| Male (model 3) | -0.661 | -0.235 | -0.331 | -0.084 | -0.402 | -0.150 | 0.184 | -0.337 | -0.546 | -0.123 | -0.060 | -0.373 |
| Standard error | $(0.171)^{* * *}$ | (0.207) | (0.191)* | (0.238) | (0.198)** | (0.195) | (0.211) | (0.177)** | (0.226)** | (0.217) | (0.162) | (0.247) |
| R-squared | 0.08 | 0.08 | 0.04 | 0.09 | 0.05 | 0.05 | 0.04 | 0.05 | 0.12 | 0.04 | 0.08 | 0.06 |
| Observations | 955 | 867 | 634 | 674 | 827 | 813 | 692 | 1060 | 394 | 568 | 675 | 457 |


|  | Austria | Belgium | Finland | France | Germany | Greece | Ireland | Italy | Netherlands | Spain | Sweden | U.K. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male (model 1) | -0.443 | -0.108 | -0.457 | -0.309 | -0.434 | -0.024 | -0.407 | -0.653 | -0.235 | -0.252 | -0.102 | -0.352 |
| Standard error | $(0.166)^{* * *}$ | (0.185) | $(0.188) * * *$ | (0.194) | $(0.175)^{* * *}$ | (0.179) | (0.191)** | $(0.163) * *$ | (0.214) | (0.140)* | (0.166) | (0.226) |
| R -squared | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 |
| Male (model 2) | -0.496 | -0.026 | -0.364 | -0.134 | -0.376 | 0.003 | -0.273 | -0.515 | -0.292 | -0.260 | -0.012 | -0.738 |
| Standard error | $(0.178)^{* * *}$ | (0.195) | (0.191)** | (0.204) | $(0.184) * *$ | (0.183) | (0.042)*** | (0.170)*** | (0.228) | (0.143)* | (0.172) | $(0.245)^{* * *}$ |
| R-squared | 0.02 | 0.05 | 0.09 | 0.06 | 0.07 | 0.05 | 0.11 | 0.05 | 0.06 | 0.03 | 0.04 | 0.12 |
| Male (model 3) | -0.514 | 0.015 | -0.320 | -0.108 | -0.397 | -0.014 | -0.304 | -0.514 | -0.311 | -0.203 | -0.042 | -0.745 |
| Standard error | $(0.178){ }^{* * *}$ | (0.195) | (0.196)* | (0.206) | $(0.185)^{* *}$ | (0.185) | (0.207)* | (0.170)*** | (0.232) | (0.145)* | (0.176) | $(0.247){ }^{* * *}$ |
| R-squared | 0.03 | 0.06 | 0.09 | 0.07 | 0.07 | 0.06 | 0.04 | 0.05 | 0.08 | 0.03 | 0.05 | 0.13 |
| Observations | 971 | 875 | 658 | 680 | 857 | 831 | 724 | 1098 | 401 | 1283 | 686 | 477 |

Table VIII. Country socio-economic characteristics, gender and support to a competitive market (OLS estimates - standard errors in brackets)

|  | Competition harmful | State ounership of firms | Requlation of firms | Government intervention |
| :---: | :---: | :---: | :---: | :---: |
| Male | -126.977 | -125.841 | -183.531 | 43.302 |
|  | (62.295)* | $(48.068) * *$ | (22.379)*** | (53.946) |
| GDP | ${ }^{-7} 10^{-4}$ | $-2^{*} 10^{-4}$ | $-3^{*} 10^{-4}$ | $-2^{*} 10^{-4}$ |
|  | $\left(2^{\star 1} 10^{-5}\right)^{* * *}$ | $\left(5^{*} 10^{-5}\right)^{* * *}$ | $\left(9^{*} 10^{-6}\right)^{* * *}$ | $\left(8^{* 1} 10^{-5}\right)^{* * *}$ |
| GDP per capita (log) | -. 009 | 8.010 | 9.786 | 10.312 |
|  | (2.305) | (2.395)*** | (1.661)*** | (3.791)** |
| Male x GDP per capita (log) | 12.517 | 12.195 | 18.144 | -4.243 |
|  | (6.115)* | $(4.712)^{* *}$ | (2.113)*** | (5.211) |
| Social benefits (\% of GDP) | 0.009 | -0.010 | -0.104 | -0.110 |
|  | (0.014) | (0.026) | $(0.023)^{* * *}$ | $(0.031)^{* * *}$ |
| Male x social benefits (\% of GDP) | 0.032 | 0.042 | 0.153 | 0.017 |
|  | (0.018)* | $(0.013)^{* * *}$ | (0.028)*** | (0.014) |
| Gini index | 4.639 | 7.354 | 12.953 | 13.042 |
|  | (3.766) | (4.104)* | (2.310)*** | (4.966)** |
| Male x Gini index | -14.574 | -8.191 | -27.289 | 0.621 |
|  | (6.110)** | $(4.553)^{*}$ | (2.562)*** | (3.275) |
| Rate of men's unemployment | -0.005 | 0.115 | 0.324 | 0.351 |
|  | (0.123) | (0.114) | $(0.068)^{* * *}$ | (0.099)*** |
| Male x rate of men's unemployment | 0.195 | 0.210 | 0.130 | -0.136 |
|  | $(0.104)^{*}$ | (0.087)** | $(0.070)^{*}$ | (0.121) |
| Ratio between men's and women's unemployment rates | -0.649 | 0.183 | -0.761 | -0.129 |
|  | (0.4807) | (0.478) | (0.634) | (0.600) |
| Male x ratio between men's and women's unemployment rates | 2.292 | 2.215 | 5.748 | -0.324 |
|  | $(1.115)^{*}$ | (0.919)** | $(0.860)^{* * *}$ | (1.023) |
| German legal origin | 0.065 | 0.077 | 0.557 | 0.254 |
|  | (0.506) | (0.491) | (0.221)** | (0.546) |
| Male $\times$ German legal origin | -2.579 | -2.766 | -6.607 | 0.470 |
|  | (1.265)* | (0.991)** | $(0.555)^{* * *}$ | (1.064) |
| Roman legal origin | 0.194 | -0.367 | -0.396 | 1.048 |
|  | (0.289) | (0.540) | (0.423) | (0.654) |
| Male $\times$ Roman legal origin | -0.654 | -1.284 | -4.166 | -0.006 |
|  | $(0.354)^{*}$ | (0.602)** | (0.584)*** | (0.579) |
| Constant | 4.178 | -75.970 | -90.831 | -97.022 |
|  | (25.315) | $(24.657)^{* * *}$ | (17.789)*** | $(37.465)^{* *}$ |
| Oservations | 9573 | 6918 | 8748 | 9674 |
| R-squared | 0.04 | 0.08 | 0.07 | 0.09 |


[^0]:    ${ }^{1}$ Eckel and Grossman (1996), p. 143.

[^1]:    ${ }^{2}$ See also Songer and Haire (1992).
    ${ }^{3}$ The survey of literature presented in this section does not aim at being complete, but rather it provides an overview of the most significant contributions.
    ${ }^{4}$ See also Eckel and Grossman (2008).
    ${ }^{5}$ See also Niederle and Vesterlund (2007).

[^2]:    ${ }^{6}$ On the relevance of stereotypes see also Fryer and Levitt (2010) and Niederle and Vesterlund (2010).

[^3]:    ${ }^{7}$ See also Migheli (2012), which compares preferences for competition and market economy in Western and Eastern German Länder and incidentally finds some gender effect.
    ${ }^{8}$ Assuming that the mentioned differences between men and women hold.

[^4]:    ${ }^{9}$ So, for example, the class $2,250-2,500$ euro per month is the fifth in Germany, the sixth in Italy, and the eighth in Spain.

[^5]:    ${ }^{10}$ This means that the proportions of the valid cases by control are statistically not different from the sample used in a set of regressions (where "set" refers to a given dependent variable) to another.

[^6]:    ${ }^{11}$ It can also be noticed that all these differences are statistically significant.

[^7]:    ${ }^{12}$ These figures are consistent with other works that used other indicators (see for example Smarzynska Javorcik and Spatareanu, 2005).
    ${ }^{13}$ The data for these two variables are from the OECD statistical database (year 2003) for the level of employment protection and from the World Bank's Doing Business 2004 report.

[^8]:    ${ }^{14}$ Here it is worthy to recall that these are calculated on 12 (as many as the countries considered in the paper) observations. Hence, a high statistical significance can not be due to the width of the sample (on this see for instance Miller and van der Meulen Rodgers, 2008).
    ${ }^{15}$ Indeed should all the full regressions be displayed for all the countries and the variables considered, twelve table each with nine columns - would have been necessary.
    ${ }^{16}$ This is in order to run and present robustness checks.

[^9]:    ${ }^{17}$ For a classification of the legal origins of a country see Djankov et al. (2007).

[^10]:    ${ }^{18}$ Since in this regression all the countries are pooled together, the standard errors are clustered at country level.
    ${ }^{19}$ As inequality increases, the population could ask for smoothing it through redistribution.
    ${ }^{20}$ Typically the measures against unemployment are public, and therefore when the unemployment increases, the population tends to demand more public intervention in the economy.
    ${ }^{21}$ This is a measure of the actual weight of the public hand in the economy.
    ${ }^{22}$ This is defined as the sum of people who immigrate in country X minus the number of people who emigrate from country X over 1,000 inhabitants in a given year. This can be considered as an indicator of the general dynamicity of an economy: it is likely that growing economies with dynamic labour markets attract more immigrants than economies with poor or stagnant growth and with sticky labour markets.
    ${ }^{23}$ This allows to (grossly) control for different existing levels of regulation, public intervention in the economy, etc.
    ${ }^{24}$ On different gender-specific perceptions of social and economic phenomena, see Davis and Greenstein (2009).

[^11]:    ${ }^{25}$ There could be several explanations for this finding, from the role that women have in nature (i.e. procreation and protection of the children), to the long history of discrimination against women (that could have induced them to consider success a matter of luck rather than of effort). However a discussion of this point would go too far from the focus of the paper.
    ${ }^{26}$ This is, of course, a simplification of the reality, but not a distortion of it. Examples of this are the pension systems, the unemployment subsidies, the general mechanism of fiscal redistribution, the public health programmes, etc.

[^12]:    Significance: *** 99\%; ** 95\%; * 90\%.

