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Cultural Repercussions: Extending Our Knowledge about How Values of Trust and Confidence Influence Tax Structures within Europe

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Within a unified Europe that is heading towards ever more harmonization, it is interesting to examine why there exists such diversity in tax regimes among its countries. Is it possible that some of the decisions pertaining to taxation are based on latent cultural aspects? This study, set in a purely European context, seeks to analyze tax variations within Europe through the lens of cultural variations. Specifically, how trust, confidence and equality matter with regard to tax revenues and tax progressivity. Within this regard, we achieved strong results linking trust and confidence to higher tax revenues and higher tax progressivity. That is, where trust among societal members is low and confidence in public institutions is low, regimes opt for low tax revenues and lenient tax rates. It is argued that where mistrust is high, the issue of income distribution between societal members is likely to stay within the private or individual sphere. Conversely, countries with high trust among societal members exhibit higher levels of income distribution by delegating more responsibility to public institutions, reflected in higher tax revenues and more progressive tax structures.

Keywords: trust, confidence, culture, tax, income distribution, knowledge, Europe

Introduction: Economic Cultures and Tax Regimes

In an increasingly intertwined Europe, actions of one country seldom go without repercussions on other countries. Economic interdependence is particularly strong in the European Union, where the members operate in a common market and some even share a single currency. Although some joint rules have been established in the field of taxes, we still observe remarkable differences among the tax regimes of European states. Some countries operate with high public revenue and progressive tax structures, while other countries generate comparatively little revenue and have fairly flat tax structures. For example in 2009, Denmark's tax revenues amounted to almost 50 percent of GDP whereas Ireland's only accounted for about 25 percent (OECD, 2010). This warrants a key question: why is there such diversity in tax regimes between EU countries?

A responsible answer to this question must address a multitude of aspects relating to the economic, historical and political makings of policy outcomes. However, one avenue that has been disregarded in this debate is the extent to which cultural bearings have an influence on tax regimes. One reason for the neglect is that culture is often considered an elusive term, which is difficult to be disentangled for empirical research (Guiso, Sapienza, & Zingales, 2006). This paper seeks to offset this deficit by exploring one avenue of cultural insight that helps explain why some countries opt for higher tax revenues and more progressive structures than others.

Specifically, it is the objective of this study to explore the role of the two cultural dimensions of social equality and trust for tax outcomes. We suggest that high trust and fairness norms lead to higher tax revenues and more progressive tax structures. While fairness considerations have received some attention as determinants of tax regimes (Plümper, Troeger, & Winner, 2009), aspects of trust and confidence remain comparatively unexplored. This surprises us as we consider the concept of trust pivotal for the functioning of a society. Many business and social activities are facilitated where trust is high as suspicion and time spent controlling them are lessened (Ariely, 2010, pp. 259). The willingness to contribute to common goals is likely to be undermined in societies with high mistrust: we suspect that people fear that others free-ride by avoiding taxes but nonetheless enjoy the public goods provided by the state. Moreover, if mistrust in political institutions such as the government or the parliament is high and they are regarded as opportunistic and budget maximizing bureaucrats, society is likely to be more reluctant to contribute to the functioning public institutions. Hence, in societies with constant suspicion, economic activity is likely to remain more in the individual and private sphere than being produced jointly through public institutions.

Linking this notion with tax regimes, our underlying premise is that higher levels of trust are correlated to higher levels of tax revenues. Societies that have faith that others contribute their fair share and that the tax contributions are being spent correctly are more willing to accept higher levels of public expenditure. Conversely, countries with low levels of trust and confidence among societal members will have less faith in the integrity of their societal counterparts and public institutions and are thus more reluctant to accept high tax margins.

If this holds true, cultural aspects have important ramifications for how governments should be addressing changes in their respective tax regimes. For instance, a proposed tax increase or the introduction of a more progressive structure in some countries may fail if not preceded by an attempt at ensuring trust and confidence among societal members first.

The empirical analysis has a European focus and is rooted in data from EU countries as well as Norway, Switzerland and Iceland. Data pertaining to cultural variation are taken from the European Values Study (2008) while the tax data stem from Eurostat (2011). Although the countries under investigation share historical roots, the variations are sufficiently large with regard to their cultural traits and their tax systems to conduct rank correlation tests.

Exploring the Theoretical Backdrop of Economic Culture and Taxes

The topic of economic culture is fairly new and yet highly arbitrary. Since Berger (1986) formally introduced the topic as an interdisciplinary phenomenon that addresses multiple social ideologies related to economics and business values within a national culture, several differing versions of economic culture have emerged. They all encompass the fundamental idea of economic culture, yet differ along concept, paradigm and operationalization of the phenomenon. As such, it must be noted that economic culture is as elusive a term as it is attractive. Yet, at an agreeable definition, and when used as an analytical tool, it serves as a powerful instrument to trace and understand the origins of many of our economic and institutional behaviours.

The cardinal benefit of utilizing economic culture as an analytical tool is to further the notion that economic behaviour has to be conceptualized in a cultural context (Gulev, 2006; Hofstede & Hofstede, 2005; Trompenaars & Hampden-Turner, 2004). Facts and output indicators reveal only little about economic behaviour; rather the economy is directed by interpretations and preferences that are determined by subtle meanings, personal justifications and the cognitive discourses that mould who we are and become (O'Donnell, 2000). A further benefit, which the current research relies on, is derived from country comparisons that economic cultural depictions yield. The determinants of the economy and their impact on taxation are not conducted through a uniform formula; economic manifestations are a product of a complex culture-specific formula particular to each country of analysis. Hence using economic culture as an analytical tool reminds us that each country has specific economic behaviours that can be traced back to cultural origins (Salacuse, 1999). Origins that, when understood, can help contextualize economic outcomes and allow for better utilization of societal efforts to work in accordance with desired competitiveness levels.

To work towards this goal we propose a singular classification of economic culture that depicts how our focus countries differ from each other along socio-economic tendencies. By no means is the following economic cultural country portrayal complete; it serves only to elucidate some specific economic cultural traits that are inherent to each of the countries and that may bear latent repercussions to taxation.

Trust, Confidence and Equality as Cultural Dimensions

Attempting to link cultural dimensions to variations in tax regimes requires digression away from mainstream cultural typologies. Accordingly, broad classifications of culture, e.g. individualism vs. collectivism, neutral vs. emotional, etc., (most notably those assembled by e.g. Hall, 1981; Hofstede, 2001, etc.) are, by their very nature of being broad, deemed inappropriate. Their generic construction, which made them hugely popular and utilized, lessens the validity with which they can be applied to specific analyses, such as those pertaining to taxation. Instead, we opt for cultural depictions that are exact and detailed towards unique expressions of behavioural differences. This means our economic cultural typologies are not primed for use in peripheral studies, but they serve to exactly examine the factors of analysis of the current study. This limited scope reduces the elusiveness of the cultural terms and increases the buoyancy of the emerging results (Gulev, 2009).

To gauge the extent to which our focus countries exhibit variations in behaviour relating to how tax policies should materialize, we utilize two sets of data from the European Values Study (EVS) (2008). The first set of EVS (2008) variables that tapped in to the core of the study, namely exploring levels of trust and confidence among societal members, consisted of the following indicators:

- The extent to which most people in society can be trusted vs. the feeling that you must be careful when dealing with people (v62). We theorize that high trust among societal members will permit and promote tax progressivity.
- The extent to which confidence is expressed in parliament (v211) and in the justice system (v218). For both these indicators, it is believed that confidence in the altruistic behaviour of national institutions will facilitate the willingness to support high tax structures and high tax progressivity.

The second set of EVS (2008) data dealt with peripheral cultural traits pertaining to equality that we suspected could also be linked to variations in taxation partiality:

- The extent to which equality with no underprivileged people and social class differences should be more important than personal freedom where the possibility to develop without hindrance is primarily encouraged (v192). Variations with regard to this response would help illuminate which cultures feel that equality is more important than individual freedom. We suspect this to be linked with taxation; those that voice high levels of equality should be more supportive of progressive tax structures.

- The extent to which people feel that individuals should take more responsibility for providing for themselves vs. the state taking more responsibility for ensuring that everyone is provided for (v194). We hypothesize that support for individual responsibility would be biased towards less progressive tax structures.
- The extent to which people feel that competition is good as it stimulates people to work hard and develop new ideas vs. the notion that competition is harmful and brings out the worst in people (v196). It is theorized that groups of people belonging to the thought-line that competition is good and promotes hard work in people will support more lenient tax structures.
- The extent to which incomes should be made more equal vs. greater incentive for individual effort (v198). We speculate that populaces with inclinations towards income equality, will voice greater support for high tax revenues and tax progressivity.

Determinant of Tax Outcomes

With the liberalisation of capital markets, scholars predicted a 'race-to-the-bottom' in taxes (Zodrow & Mieszkowski, 1986). The models on tax competition are based on the idea that two countries share the same international capital base and thus compete for attracting investments. As investments are cost-sensitive and capital can freely move across borders, governments engage in competitive tax cuts (for an overview see Wilson, 1999; Genschel & Schwarz, 2011). As the two states do not cooperate by, for example, setting a common minimum tax rate, the competition results in a race-to-the-bottom where each state attempts to undercut the other one's tax rate. In equilibrium, tax revenue and capital tax rates are lower than they would be without international competition. Scholars therefore initially predicted that tax policies would converge around one single tax model (Steinmo, 1994). Accordingly, high tax revenues and progressive tax systems, it was assumed, were not sustainable in the global economy (Rodrik, 1997).

In reality, tax convergence including the race-to-the-bottom is less evident. Certainly, the top personal and corporate income tax rates of many European countries have been on the decline since the mid-1980s. For example, in Germany and the United Kingdom the top rates on personal income dropped from 56 and 60 percent in 1981 to 45 and 35 percent in

2010, respectively (OECD, 2011). Yet, tax revenues have, if anything, risen since then. Moreover, European countries still have different tax regimes: while some such as Sweden and Denmark have relatively high tax revenues and progressive tax structures, others such as Latvia and Romania have less redistributive tax systems.

Scholars traditionally highlight the role of path dependence, domestic institutions and labour organisation to explain differences in tax outcome (Basinger & Hallerberg, 2004; Garrett and Mitchell, 2001; Lierse & Seelkopf, 2011). More recently, they have also referred to arguments of fairness and political cultures that affect the size and the structure of taxes (Koenig and Wegener, 2010; Lockhart, 2003; Nerré, 2008). For instance, Lockhart (2003) shows how societal characteristics shape tax revenues by focusing on the concept of political culture. The political cultures of the United States and Sweden differ sharply: the former is predominantly individualistic, while Sweden is more egalitarian and hierarchical, which is reflected in their tax regimes (Lockhart, 2003, p. 379):

> Societies' tax regimes offer clear indices of their predominant political orientations. A society that practices modest tax extraction will inevitably produce less active and extensive public institutions than a society with a higher level of extraction. Accordingly, the former will leave more responsibilities in private hands (those of individuals, families, charities, and businesses), whereas the latter will realize a broader range of social objectives through public programs.

Lockhart suggests that different cultural traits based on individualism versus collectivism determine the extent to which a society raises taxes and provides public goods. We argue that his focus on individualism neglects the important aspect of trust: the underlying logic of our argument is that voters generally prefer a low tax burden, but they also enjoy high levels of government spending. The trade-off between the two is influenced by the level of trust within a society. Trust and confidence contribute to the level of taxes in a twofold manner: first, trust within society as such means that people believe that everyone pays their taxes. If however, many people cheat on their taxes and nonetheless receive the benefits of publicly provided goods, then the social acceptance of paying the full amount is likely to decline leading to lower levels of tax revenue. Second, confidence in the political system is likely to positively contribute to the amount of tax revenue raised. If the public institutions and the politicians are regarded as opportunistic revenue-maximizers who do not act to the benefit of the public, then the probability is low that a party favouring a strong government based on high taxes will find high public support. Overall, societal trust is therefore expected to be positively correlated with the demand for public goods and tax revenue.

Some studies have also investigated the role of equity norms on the tax structure and the way in which the tax burden is distributed between different societal groups. For instance, Plümper et al. (2009) look at capital rates and investigate how fairness norms in terms of capital-labour equity, determine a country's response to international tax competition. Their main argument is that voters are concerned about a 'fair' distribution of tax burdens, and reduce government support when the difference between effective tax rates on labour and capital becomes too big. In their study they find the effect of fairness norms significant and positively related to capital taxes.

The main argument of the debate on fairness norms stems from the horizontal and vertical equity theorem of public finances (Musgrave, 1959). The former states that the same income, also if generated from different sources, should be taxed at a uniform rate. This means that, no matter whether I receive a certain income from capital returns or from a salary, it should be taxed at the same rate. In contrast, the vertical equity theorem postulates that people with a greater ability to pay taxes should pay more. If the wealthy do not only pay a higher proportion but an increasing proportion, then we refer to a progressive tax system, which is often associated with more egalitarian societies as it enhances the redistribution of income. Hence, we should expect that societies with more egalitarian values, tend to have more progressive tax systems.

While equity norms are not necessarily related to the amount of taxes raised, they are likely to affect the tax structure and the degree of progressivity and income distribution of a society. In sum, we expect different degrees of trust and equality norms to generate differences in the tax system as regards the overall level as well as the structure due to different preferences for public good provision and income distribution.

The data for exhibiting tax variations in Europe are gathered from the European Tax Statistics (European Commission, 2011) and the World Competitiveness Yearbook (2010). We chose major indices such as the tax revenue and public expenditure as a percent of GDP to evaluate the overall amount of public expenditure (see Table 2). With regard to the tax rates, we included measures of the top personal and corporate income tax rate, we opted for the top marginal rates as they better reflect the progressivity of a tax system. Moreover, we include a measure to distinguish between the effective tax rate on capital and labour to evaluate whether different equity norms correlate with how the tax burden is distributed. However, as top tax rates can be arbitrary measures for progressivity, we further selected three indicators to better account for actual income distribution within the European countries. The Gini coefficient measures the inequality of income distribution, where a value of 0 expresses total equality and a value of

100 maximal inequality. The final two indicators assess the percentage of household incomes that goes to the highest and lowest ten percent of households within a country. The more the highest and less the lowest ten percent have of the total income, the higher is the income inequality. In sum, these measures provide information on the extensiveness and the set-up of tax systems as well as the income distribution of a country. They therefore serve as representative indicators to capture and compare the level as well as the structure of taxes between countries, and can be linked to the cultural dimensions of trust and equity norms developed in the previous section.

Methodological Aspects of the Study

In the previous section, we outlined how culture is likely to affect tax outcomes in the European Union. We argued that the two cultural dimensions of trust and equality norms are likely to generate differences in the tax system as regards the overall revenue generated by taxes and the way the tax burden is distributed. In the following we briefly described the methodology which we adopted to derive a conclusion about our stated hypotheses about the relationship between culture and tax structures.

The data for economic culture and taxation structures are differentiated along an important dimension. While the scores for taxation differences are taken directly from European Tax Statistics (European Commission, 2011) and the World Competitiveness Yearbook (2010), the scores for economic culture are weighted results taken from multiple sources based on unprocessed EVS data. This occurs because the EVS does not provide ultimate scores, but leaves the data in its raw form. Accordingly, the data had to be transformed into useable scores that are compatible with the former two sets of data. For each EVS data set, this was accomplished by measuring the EVS ordinal datasets on weighted bipolar scales; the more one set of results gravitated towards one extreme, the less it could consequently gravitate towards the other. This method was kept uniform for all the EVS datasets and resulted in two indicators dealing specifically with trust and confidence, and four indicators dealing with tangential cultural traits suspected to influence tax structures.

The use of bipolar cultural descriptions is a controversial method of depicting cultural variances. On the one hand, its linearity nicely represents diversity in cultures and, by viewing contrasting characteristics, amplifies the significance and meaning of each culture. Yet, on the other hand, its typology constrains the outcomes to the scale's two-dimensional extremities and operates under the implied assumption that the more a culture is biased towards one extreme, the less it may gravitate towards the other (Trompenaars & Woolliams, 2003, p. 5). Although, the latter is true and its ramifications must be respected, the current research lends support to the methodology of bipolarizing cultures, as it allows for cultural discrepancies to emerge between countries in a panoramic and controllable manner, albeit noted, at the risk of encouraging potentially stereotypical generalizations. Furthermore, the seven economic culture indicators are innately contrasting. Therefore, a bipolar scale is a logical instrument to use, as an indication towards one extremity necessitates a departure from the other extremity.

To test the strength of the correlations between our cultural determinants and taxation structures, we conducted cross-lateral Spearman rank correlation tests fitted with confidence intervals for 28 data set samples to verify if significant correlations exist. This involved a large number of tests (altogether 166 separate correlation tests, of which 70 are included in this study) which were conducted through a statistical correlation machine that calculated the Spearman rank correlation coefficient (ρ) as:

$$\rho = \frac{\sum_{i=1}^{n} R(x_i)R(y_i) - n\left(\frac{n+1}{2}\right)^2}{\left(\sum_{i=1}^{n} R(x_i)^2 - n\left(\frac{n+1}{2}\right)^2\right)^{0.5}\left(\sum_{i=1}^{n} R(y_i)^2 - n\left(\frac{n+1}{2}\right)^2\right)^{0.5}}, \quad (1)$$

where $R(x)$ and $R(y)$ are the ranks of a pair of variables (x and y) each containing n (28) observations.

Results

Table 1 provides results pertaining to the rank order of each country in relation to each of the seven cultural dimensions tailor made for this study. As can be seen from the rank orders, for the four first cultural dimensions there is little geographical consistency; sometimes Nordic countries rank as most agreeing with the statements, sometimes Latin European or Central and Eastern European countries agree most with the statements. Further, countries that are often considered culturally similar (e.g. Spain and Portugal or Norway and Sweden) seem to be spread out dissimilarly over a large span. Such discrepancies are less apparent for the final three cultural dimensions that make up the core of this study. For trust and confidence in society and societal institutions, we notice a predilection of Nordic countries to be grouped together and agreeing most with the statements. Latin European and other continental countries score fairly neutrally, while Central and Eastern European countries typically tended to agree least with these statements.

Table 2 reveals the correlations that emerged between our cultural determinants and our tax and distribution variables. The results indicate a variety of meaningful correlations. Starting with culture's connection with tax rev-

Table 1 Cultural Manifestations of Our Focus Countries

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Countries that agree most with this statement						
SE	RO	FR	AT	DK	DK	DK
RO	UK	ES	SI	NO	LU	NO
DK	SW	BG	RO	SE	NO	FI
NL	SE	BE	DE	FI	SW	SW
FI	DE	NL	EL	NL	SE	LU
NO	IE	LU	FI	SW	SK	IC
SI	AT	FI	HU	IC	ES	SE
PL	PT	LT	SW	UK	NL	AT
UK	LU	EL	CZ	DE	IE	FR
EE	FI	PL	SE	IE	SI	EE
EL	FR	IT	PT	AT	FR	UK
ES	CZ	PT	ES	BE	FI	NL
LT	SK	HU	SK	BG	IC	DE
HU	DK	AT	FR	EE	BE	BE
SK	NL	DK	IE	ES	BG	BG
LV	LT	EE	PL	IT	PT	IE
IE	NO	IE	IC	CZ	DE	EL
LU	IC	CZ	UK	LT	IT	PT
IC	BE	SI	LT	LU	AT	SI
BE	BG	LV	BE	PL	EL	LV
BG	EE	SW	BG	FR	EE	ES
AT	PL	UK	NO	LV	UK	PL
FR	SI	SE	NL	SI	RO	RO
IT	HU	SK	EE	EL	LT	HU
DE	EL	DE	IT	HU	HU	IT
SW	LV	NO	LU	PT	PL	CZ
CZ	ES	IC	LV	RO	LV	SK
PT	IT	RO	DK	SK	CZ	LT
Countries that agree least with this statement						

Notes Column headings are as follows: (1) Equality is more important than freedom, (2) The individual should take more responsibility, (3) Competition is harmful, (4) Incomes should be made more equal, (5) Most people in society can be trusted, (6) Do you have confidence in Parliament? (7) Do you have confidence in the justice system? Abbreviations: AT – Austria, BE – Belgium, BG – Bulgaria, CZ – Czech Republic, DE – Germany, DK – Denmark, EE – Estonia, EL – Greece, ES – Spain, FI – Finland, FR – France, HU – Hungary, IC – Iceland, IE – Ireland, IT – Italy, LT – Lithuania, LU – Luxembourg, LV – Latvia, NL – Netherlands, NO – Norway, PL – Poland, PT – Portugal, RO – Romania, SE – Sweden, SI – Slovenia, SK – Slovakia, SW – Switzerland, UK – United Kingdom. Own creation based on EVS (2008) data.

enues as a percentage of GDP, we notice two highly significant correlations at the 99% confidence interval. The first relates to 'Trust in society' (0.481)

Table 2 Correlations between Cultural Determinants and Tax/Income Indicators

	As % of GDP		Tax Rates					Income Distribution		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Equality is more important than freedom (Q192)	–0.100	0.170	–0.142	0.071	–0.120	0.117	–0.064	0.227	0.030	0.188
The individual should take more responsibility (Q194)	–0.083	–0.021	–0.218	–0.074	–0.336*	–0.156	–0.208	0.182	–0.117	0.173
Competition is harmful (Q196)	0.148	–0.215	0.208	0.291	–0.154	0.195	0.049	0.279	0.010	0.248
Incomes should be made more equal (Q198)	–0.027	–0.056	0.120	–0.165	–0.261	–0.011	–0.031	–0.138	0.246	–0.173
Most people in society can be trusted (Q62)	0.481*	0.369*	0.676**	0.227	0.390*	0.338*	0.387*	–0.322	0.069	–0.286
Confidence in Parliament (Q211)	0.305	0.147	0.518**	0.342	0.290	0.034	0.398*	–0.364*	0.083	–0.396*
Confidence in justice system (Q218)	0.516**	0.374*	0.595**	0.357*	0.437*	0.221	0.491**	–0.313	0.186	–0.271

Notes Column headings are as follows: (1) tax revenue, (2) expenditure, (3) top personal income, (4) corporate income, (5) consumption, (6) labor, (7) capital, (8) Gini index, (9) income of lowest 10%, (10) Income of highest 10%. $N = 28$, * $p < 0.05$, ** $p < 0.01$. Own creation based on Spearman Rank Correlation tests.

and the second to ‘Confidence in justice systems’ (0.516). As the inclination for both trust and confidence increases, we notice an increase in the amount of tax revenue collected. At the 95% confidence interval, we notice the same trend with regard to public expenditure. As the inclination of people in a society is to have high levels of trust in each other, and confidence in the justice system, public expenditure levels increase (0.369 and 0.374, respectively).

Concerning ‘Personal top income tax rates,’ we achieve highly significant correlations with ‘Trust in society’ (0.676) and our two confidence parameters: ‘Confidence in parliament’ (0.518) and ‘Confidence in the justice system’ (0.595). Seen collectively, as these three cultural parameters increase, personal income tax rates become higher. Or seen reversely, as trust and confidence in national institutions diminishes, so do the top marginal levels of personal taxation rates.

Consumption tax rates achieve significant correlations with three cultural parameters: the feeling that the ‘State should take more responsibility’ (–0.336), ‘Trust in society’ (0.390) and ‘Confidence in justice systems’ (0.437). For the latter two, increases in trust and confidence again positively correlate to progressive tax rates. Labour and capital tax rates were theorized to exhibit strong positive correlations with culture. Along the cultural dimensions ‘Trust in society,’ such significant correlations were achieved (0.338 and 0.387, respectively). For capital tax rates, we also observed significant positive correlations for ‘Confidence in parliament’ (0.398) and a highly significant positive correlation for ‘Confidence in justice systems’ (0.491).

Finally, concerning income distribution, it is important to interpret the results carefully. The significant negative correlations achieved for the ‘Gini Index’ and ‘Confidence in Parliament’ (–0.364) and the negative correlation achieved for ‘Income of highest 10%’ and ‘Confidence in Parliament’ (–0.396) concur with the positive trends we have observed thus far for trust and confidence. A high Gini score, and a high ‘Income of highest 10%’ score, indicate inequality. Thus, where confidence and trust is high, we notice less inequality in income distribution.

Besides the correlations that achieved significance, several noteworthy results pertaining to failed or insignificant correlations emerged, that are equally noteworthy to highlight. Predominantly, the scores achieved along the cultural parameter ‘Incomes should be made more equal’ across all topics related to tax structures were insignificant. The reasons for the failure of this seemingly strong connection to tax are discussed later. Equally important to note from the table is the direction of the correlations under the three categories of ‘Income distribution.’ Albeit the majority of correlations being insignificant, it is difficult not to notice the overwhelming amount of negative correlations connected with the ‘Gini Index’ and ‘Income of the highest 10%’ and the positive correlations connected with ‘Income of the lowest 10%.’ For all three, these correlations indicate that where trust and confidence is voiced as important, income distribution reflects more equal allocations.

Discussion of the Results

The results of our empirical analysis reveal significant correlations between culture and income distribution. Surprisingly, the indicators for equity norms mostly rendered trivial results, whereas trust and confidence results produced very significant correlations for many areas of taxation. Trust is not only crucial for the level of tax revenue and expenditure levels but also for inequality and income distribution. In the following we discuss the linkage of the two categories of trust and equality with regard to variations in tax systems.

Pertaining to the former, we expected that societal trust would be positively correlated with tax revenue as societal acceptance of paying taxes and the confidence towards political institutions would increase. The hypothesis can be confirmed at a 0.01 level of significance for ‘Trust in society’ (0.481) and ‘Confidence in the Justice System’ (0.516). It shows that societies with high levels of trust such as the Nordic countries also tend to have high tax revenues. Certainly, we do not claim that trust directly causes high tax revenues but the evidence shows that there is a significant linkage between the two. Our theoretical argument elucidated the reasons for this: although people favour both low taxes and high government spending, the provision of common goods and institutions is facilitated by societal trust.

The results demonstrate that trust and confidence matter beyond what we had expected. High levels are not only related to more public revenue but also to higher tax rates in general. Although the correlations of our trust and confidence indicators are particularly strong with the top personal income and capital tax rate, its importance is not restricted to direct taxes. Also the consumption tax rate is positively correlated. The evidence suggests that trust is generally associated with higher tax rates, which is not surprising as trust is correlated with higher tax revenues: those states that have higher levels of tax revenue are also likely to have higher tax rates, as otherwise they would not be able to reach high levels of revenue.

While trust is overall related to higher tax rates, the results show particularly significant relationships with the top personal income tax rate and the capital tax rate. This suggests that trust and confidence do not only positively contribute to higher public revenues but also to more progressive tax systems. In other words, in such societies people do not only pay proportionally more taxes to the state, but people with high incomes also pay a greater proportion of their incomes than people with low incomes. Of our sample, Denmark has the highest top personal income tax rate of 59 percent whereas Romania only levies a rate of 16 percent in 2009. Moreover, the six countries (Baltic and Eastern European countries) with the lowest income tax rate are all based on flat tax systems, according to which people pay taxes of the same proportion of their income, while those with the highest rate (Nordic and Continental countries) are based on progressive systems, which facilitates income redistribution as they impose higher tax rates for upper incomes. This contributes to vertical equality (Musgrave, 1959, see also the second section).

The three measures on income distribution confirm this finding. While most of the results of the last three columns (Table 2) are statistically insignificant, they have the ‘right’ algebraic sign. The results for the Gini Index and the ‘Highest 10%’ have a negative sign whereas the ‘Lowest 10%’ has a positive sign. This means that mistrust is positively correlated with inequality, which reconfirms our hypothesis that trust positively contributes to more progressive tax systems.

While cultural values related to confidence generate important insights for understanding variations in European tax regimes, the indicators for equality do so less. Previous studies suggest that equity norms affect the tax structure and the way in which the tax burden is distributed between different societal groups (Plümper et al. 2009). Consequently, we suggested that societies with more egalitarian values are likely to have more progressive tax systems. Yet, the empirical results do not confirm our initial premise. The four selected questions from the EVS (2008), which account for different measures of equality (Q192–Q196), only render one significant correlation.

Why do we not find more significant correlations between tax structures and equity norms? Are perceptions about fairness not important? There are several reasons as to why the results are trivial. First, looking at Q198 in more detail, it becomes obvious that the answers to 'Should incomes be made more equal' are highly dependent on the status quo. Hence, the rankings are not only influenced by cultural differences but to a large extent by the actual level of inequality within a country. In societies where incomes are fairly equal, the answer is likely to be more negative although equity norms may be more pronounced. Second, with regard to Q192 'Equality is more important than freedom,' the descriptive statistics are crucial as the mean is 1.59, on a scale from one to ten, where one signifies 'personal freedom' and ten 'equality,' with a standard deviation of 0.09. In other words, the variation in cultural differences is so low among European countries that it is almost impossible to have significant rank correlation. Third, the insignificance of Q196 suggests that there is little public understanding of the linkage between taxes and competition. Most people are likely to associate competition with markets and companies rather than with taxes, which makes it an inappropriate indicator for this study. Hence, Q192, Q196 and Q198 are not optimal for measuring or comparing equity norms, although for different reasons.

Finally, for (Q194) we find that individual responsibility is positively correlated with consumption taxes. This finding indicates that the higher the consumption tax, such as the VAT and Excise taxes, the more likely we are to be in a society in which individuals should take more responsibility for themselves. The correlation is not surprising as consumption taxes are indirect taxes, which are charged irrespective of different levels of income. Hence, governments intervene (redistribute) less and the responsibility (risk) stays more within the individual. Yet, in the other areas of taxation, we do not reveal significant results. Interestingly, Southern and Eastern European societies often favour more equality than other European countries (Table 1). Although they have a high preference for redistribution and income equality, their levels of trust are comparatively low. Pitted against each other, it appears that the existence of societal trust acts as a larger precondition for governmental intervention and income redistribution than do stances on equality.

Summing up, the analysis shows that trust and confidence of people towards other members of their society is crucial for the provision of public goods and institutions. If mistrust is high, more responsibility is likely to stay within the private or individual sphere. Certainly, the results do not reveal a direct causal link between trust and taxes; yet, they suggest a causal link between mistrust and the size of the public sphere: issues of tax evasion and suspicion in opportunistic behaviour by public institutions undermine the willingness to contribute to common public goals. Hence, in societies with constant suspicion, economic activity is likely to remain more in the individual and private sphere than being produced jointly through public institutions.

Conclusion

This article has sought to address the issue of why diversity exists in tax regimes between European countries. There are multiple ways to address this question involving historical, institutional and economic aspects. For many researchers, it is felt that cultural aspects are so elusive that they do not serve for empirical research as it is difficult to measure culture scientifically, and hence cultural aspects are omitted from the discussion. We show in our study how culture can be operationalized to measure linkages between societal characteristics and income distribution. Based on data from the EVS (2008), we constructed seven indicators, which reflect the level of trust and of equity norms in European countries. With regard to the taxes regimes and income distribution we involved a variety of variables to account for the size of the public sector and the degree of income inequality within the countries under investigation.

The empirical analysis does not show that culture directly affects tax regimes and income distribution, but rather that a variety of significant correlations exist between trust and the size and structure of the public sector. Most notably, we notice a strong link between trust among societal members to be positively linked with higher tax revenues and more progressive tax structures. The correlations pertaining to confidence in institutions such as parliament and justice systems further underscore this tendency: where confidence is high, we notice tax structures of high progressivity. Put another way, where trust is low and confidence in public institutions is low, we observe lower tax revenues and a tendency towards flat systems for personal income taxes.

This has important repercussions on policy-making. Gauging the extent to which trust and confidence exists within a society may provide reliable predictions of how adjustments to tax rates will be received and reacted to by the public. Any increases in taxes, for instance, may be thwarted by a cultural reluctance based on mistrust to accept higher tax rates. For policy makers, it is important to understand the cultural undertones of what a society is prepared to accept and what it will reject, so that sound policies, including tax structures, can be made.

As with most cultural studies, the current paper suffers from some shortcomings inherent to the cultural debate. Taking national cultural portrayals as representative of all the people within a country is highly controversial; can we make fair representations of all the people of a country through country specific EVS data, or are sub-cultures and personal variances within countries such dominant influences that they cannot be discounted? Equally, controversial is the method of bipolarization of cultures; is it always true that the more one gravitates towards one extreme on a bipolar scale the less one can gravitate towards the other? Both of these typical shortcomings of cultural analyses are apparent in the current work, with the obvious consequence that the results must be interpreted leniently. However, when acknowledging the existence and ramifications of these shortcomings the results do provide value on a more holistic level: a level relevant and appropriate to have as an outset to allow for deeper continuations of cultural research. As such, the results of this study provide further nourishment for researchers and practitioners who subscribe to the notion that differing modes of operations stemming from cultural differences do persist in Europe (Klarsfeld & Mabey, 2004) and that these can be further understood and worked with.

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