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PREFACE

Why do people pay taxes? In most OECD countries the simple answer is probably that they are forced to comply with regulations. However, at a deeper level, taxation and fiscal policy are at the core of every society’s social contract. Citizens pay their taxes in exchange for public services and goods. At the same time, this exchange legitimates the political equilibrium and the state itself. However, in developing countries the link between the rights and obligations of different actors is often weak. The resulting equilibrium is frequently characterised by low levels of tax revenues and consequently insufficient public goods and services (in quantity and quality). In addition, tax evasion and elusion tend to be high – revealing the population’s low levels of tax morale – while at the same time the state makes little effort to enforce the tax code. All this creates a considerable barrier to development, as taxes are an important component of the domestic resource mobilisation efforts needed to facilitate and foster economic growth and development. Furthermore, reforms that do not take into account the political dimension and the link between taxation and expenditures often do not succeed.

The present paper by Christian Daude, Hamlet Gutiérrez and Ángel Melguizo contributes to a better understanding of the determinants of tax morale in developing countries. The paper provides an overview of the literature and a summary of the empirical evidence of the socio-economic and institutional drivers of tax morale, based on perception surveys such as the World Values Survey, as well as regional surveys like Afrobarometer, Asiabarometer and Latinobarometro. The paper shows that socio-economic factors such as age, gender and religious faith impact tax morale, as do the self-perceived financial situation, education and employment status of an individual. While the first two have a positive effect, in general the literature finds that the self-employed exhibit lower tax morale than employees. Trust in government, satisfaction with democracy and with public services are found to be of particular relevance. The results of this paper suggest several areas for further in-depth country analysis as well as areas where civil society, business organisations and the international development community could play a role in supporting the efforts of governments to improve tax morale and tax compliance.

This paper was produced as a contribution of the OECD Development Centre to the OECD’s Tax and Development Task Force. We hope it contributes to developing countries’ efforts to increase domestic resource mobilisation for development and reform their tax and expenditure policies to narrow the multiple development gaps that still remain.

Mario Pezzini
Director
OECD Development Centre
November 2012
RÉSUMÉ

Cet article propose une revue de la littérature existante et apporte de nouveaux éléments empiriques sur la base de données provenant de la World Values Survey, sur les déterminants de la morale fiscale dans le monde, et dans les pays en développement en particulier. Il montre que les facteurs socio-économiques tels que l’âge, la religion, le genre, la situation professionnelle et la réussite scolaire ont un effet significatif sur le degré de morale fiscale des individus. Concernant les déterminants institutionnels, l’article montre que le degré de morale fiscale des individus dépend également du niveau de satisfaction avec le système démocratique, de confiance dans le gouvernement et de satisfaction quant à la qualité des services publics. L’article conclut en proposant des pistes/orientations futures de recherche et des recommandations politiques dans ce domaine.

Classification JEL: E62, I38, P16.

Mots-clés: politique fiscale, morale fiscale, pays en développement.

ABSTRACT

This paper reviews the literature and contributes with some evidence based on the World Values Survey on the drivers of tax morale around the world, with an emphasis on developing countries. It shows that socio-economic factors such as age, religion, gender, employment status and educational attainment have a significant impact on people’s levels of tax morale. In terms of institutional determinants, it finds that the satisfaction with democracy, trust in government and the satisfaction with the quality of public services plays an important role in increasing tax morale. The paper also discusses future directions for research and policy action in this area.


Keywords: tax policy, tax morale, developing countries.
I. INTRODUCTION

Tax revenues as a share of GDP vary significantly across countries (Figure 1).¹ There are several economic reasons to expect a positive correlation between the level of economic development and tax revenues. Non-market home production and production for self-consumption is significantly higher in developing countries. Similarly, income levels around subsistence for a significant share of the population create narrow tax bases in developing countries. Developed economies also have significantly broader social safety nets and social transfers that are generally financed by higher social security contributions and taxes. To illustrate this point, if Ethiopia had the GDP per capita level of Norway, its tax revenue as share of GDP would be expected to be almost twice (from around 18% of GDP to around 35% of GDP, according to the regression line in Figure 1). However, despite the positive correlation between the level of development and tax revenues, there are significant differences across countries at similar stages of development. For example, while Jordan and Guatemala have very similar level of GDP per capita, tax revenues in Jordan are around 33% of GDP (more than 7 percentage points above the expected level), while in Guatemala revenues amount only to around 13% of GDP (almost half of the expected level given its GDP per capita). Among developed OECD countries there are also examples of differences across countries with similar levels of development. For example, while Sweden and Australia have very similar GDP per capita levels, Sweden imposes taxes almost 20 percentage points of GDP higher than Australia (48.9% versus 29.8%).

¹ For seminal references on taxation in developing countries and its challenges, see for instance the volume edited by Newey and Stern (1987), Tanzi (1992) and Bird et al. (2008), among others.
Some structural features of the economy are also important to understand the amount of revenues raised. The literature has pointed mainly towards the sectorial composition of output and trade openness as important drivers of differences in tax revenues across countries, in addition to GDP per capita. Thus, often used to compare tax policies in terms of the effort made to raise domestic revenues, tax to GDP ratios are corrected for these structural differences across countries. In particular, the empirical analysis compute tax effort indices as the ratio of the observed tax revenues (as share of GDP) with respect to the predicted tax revenues given the country’s structural characteristics. An index greater than unity represents a country with a tax effort above average and below one would mean that the country’s tax effort is below the expected level (taking into account its structural characteristics). Figure 2 presents such an indicator for 2008 for a large sample of developing and emerging economies. Interestingly, the index correlates negatively with GDP per capita, such that poorer countries seem to be making a bigger effort than the richer (middle-income) countries.

Domestic resource mobilisation is becoming a key aspect of development co-operation and assistance programs around the world (OECD, 2010a). This is due mainly to four interrelated issues. First, for most developing countries achieving development goals requires

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3 The simple correlation coefficient between the tax effort index and GDP per capita (in logs) is -0.39. While it is influenced in part by Ghana and Kuwait, the correlation is still negative (-0.26) if we do not consider these two countries.
financing investments and expenditures for which traditional development financial sources such official development assistance flows are not enough (Atisophon et al., 2011). Second, efforts to raise domestic tax revenues to finance economic and social development might increase the effectiveness of external funds, by fostering domestic capacities and building stronger institutions. Third, national development and state consolidation require domestic ownership of development priorities. Such ownership is strengthened when part of the financial efforts involved comes from the citizens. Finally, improvements in efficiency and effectiveness of public expenditures are more likely to occur if there exists a broad domestic constituency compared to a situation where governments are accountable for the way they spend resources mainly to external partners. Of course, there is no mechanical link between domestic resource mobilisation and greater expenditure effectiveness and transparency, but the historical evidence shows that demands from domestic taxpayers play an important role.4

Low capacity in the tax administration is often an issue pointed out as creating the opportunity for higher levels of tax evasion and elusion (see Mansfield, 1998). In particular, institutional aspects such as corruption, transparency and accountability of the public sector have also been found to have a significant impact on tax effort5 (see Bird et al., 2007; and references therein). Finally, natural resource rents can also reduce the incentives to levy taxes from other sources. The evidence shows that resource-rich countries and those that discover new reserves of oil, gas or minerals tend to substitute other sources of revenues (direct as well as indirect taxes).

The present paper contributes to this debate by exploring the literature and available data on tax morale – defined as the motivation of a country’s citizens to paying taxes, in addition to legal obligations – for a large sample of countries. There is a large empirical evidence of a significant correlation between tax morale and tax compliance in developing and developed countries. Furthermore, multivariate analyses show that tax morale is an important determinant of the ‘shadow economy’ and has therefore an impact on tax evasion (Torgler, 2011). Thus, understanding better what drives differences in tax morale across countries is a key element to understand differences in tax compliance. The aim of this paper is to review the literature and micro-survey evidence related to this issue, and to provide some fresh empirical analysis.

4 Several of these aspects have been recognized in the declaration of the fourth High Level Forum on Aid Effectiveness in Busan. See http://www.aideffectiveness.org/busanhlf4/images/stories/hlf4/OUTCOME_DOCUMENT_-_FINAL_EN.pdf.

5 We recognise revenue is also affected by the tax laws of the countries, and therefore different tax systems (that is, tax rates) will yield different levels of revenue. Moreover, tax systems and their outcome are also affected by the willingness of policymakers to legislate "good" tax systems. It is our view this result stems partly from institutional shortcomings, issues we particularly address in this paper.
Figure 2. Tax Effort Index in 2008

Source: OECD (2011) based on World Development Indicators.
The remainder of this paper is structured as follows. In the next section, we conduct a brief survey of the literature on tax morale in developing countries, identifying its main determinants. Then, we present the alternative databases used in this paper to assess tax morale across a large group of countries, as well as within regions. Subsequently, we present original micro-econometric evidence on the drivers of tax morale and discuss their relative importance. Finally, we conclude presenting some possibilities for extending the analysis across countries, as well as working more in-depth on country-level policy reforms.
II. A BRIEF OVERVIEW OF THE LITERATURE ON TAX MORALE

The empirical analysis of tax morale can be naturally related to the literature about the “median voter theorem” (Downs, 1957). In this framework, the level and progressivity of taxation and fiscal redistribution (i.e. the net effect of taxes and transfers) depend on whether the median voter benefits or not from these policies. In societies with more initial inequality of market income, the median voter would be more likely to vote for more redistribution. More broadly, this issue also linked to the literature that relates state capacity to development and taxation (see Besley and Persson; 2010 and 2011, as well as OECD, 2010b). Democratic transitions can be a necessary, but not sufficient condition for a strong and legitimate government based on high tax morale. Furthermore, individual features, such as mobility experiences and perceptions for the future, perceptions on the way the political system functions or on the link between taxes and public services delivery might matter, as well as nation- and region-wide cultural and social values (Alesina and Giuliano, 2009, Alt et al., 2010 and Robinson, 2010).

We gathered various papers that analyse empirically the determinants of tax morale using cross country samples for developing countries in Asia, Africa, Europe and Latin America and the Caribbean. These papers generally concentrate their analysis on the 1990s; although some of them go back to the early 1980s, and get to the late 2000s (see Table 1). An important caveat stems from the fact that the different studies measure tax morale in different ways. In particular, the *World Values Survey* and *Latinobarómetro* ask whether “cheating or evading taxes can be justified”, although the former adds “if you have the chance”. *Latinobarómetro* complements it with a question whether “good citizens should pay taxes”. By contrast, *Afrobarometer* focuses on enforcement, asking whether “the tax administration has always the right to make people pay taxes or not”. The latter approach could be affected by trust in the administration itself, blurring the relationship with public services in general. This hypothesis is supported by case studies where poor perceptions of the administration and oppressive enforcement of tax laws can generate a backlash and diminish tax morale. In these cases, the decline in tax morale is so large that it is not compensated by the fear of being caught or the quality of public services (Fjeldstad and Semboja 2001, Fjeldstad 2004). Even more, as stressed in Torgler (2004), the same tax morale questions may mean different things depending on the translation and the culture of the country.

The studies surveyed in general show that individual characteristics affect significantly the levels of tax morale in all regions. Those who claim a faith or religious identity are more

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6 Significance is generally evaluated in statistical terms in the literature. We discuss this point in more detail below.
strongly associated with positive attitudes towards paying taxes.7 Age also affects the results in Asia (Torgler, 2005), Eastern Europe (Hug and Sporri, 2011) and Latin America (Torgler, 2005; Gaviria, 2007 and Daude and Melguizo, 2010), with mid and old-age respondents justifying less tax evasion. By contrast, despite conventional wisdom on the higher tax morale of women, the literature is far from being unanimous on the effects of gender, with almost half of the papers finding a negative sign.8

The self-perceived economic situation and labour status also matter. Individuals who declare to be satisfied with their financial position and do not report having economic problems justify tax evasion less frequently.9 Additionally, educational attainment impacts positively tax morale indicators in practically all studies and regions. Finally, employment status is also relevant to explaining inter-personal differences in tax morale. Most studies show that self-employed exhibit lower tax morale than full-time workers, while retired declare a significantly higher one (Torgler, 2004 for Asia and Hug and Sporri, 2011 for Eastern Europe).

From a policy perspective, questions related to institutional aspects are probably the most relevant ones. Trust and satisfaction with democracy, with the government, and specifically with provided health and education services increase tax morale.10 Therefore, education may generate a double dividend, through intrinsic benefits as well as via the satisfaction with its provision. The enforcement of the tax code and overall trust in the legal system are also correlated with higher levels of tax morale (Levi and Sacks, 2009 for Africa), although some studies find that the fear of being caught is not significant (Torgler, 2005 for Latin America). By contrast, the perception of corruption exhibits no consistent results.

Overall, the literature confirms the relevance of moving away from mechanistic recommendations on tax administration, and producing fresh analysis on the relationship between tax morale, individual characteristics and satisfaction and trust in the government in developing countries.

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### Table 1. Tax morale studies in developing countries

<table>
<thead>
<tr>
<th>Reference</th>
<th>Tax morale definition</th>
<th>Individual</th>
<th>Main determinants</th>
<th>Policy-related</th>
</tr>
</thead>
<tbody>
<tr>
<td>D’Arcy (2011)</td>
<td>Tax department has always the right to make people pay taxes</td>
<td>Female (-), Illiterate (-), Primary education (+)</td>
<td>Handling and access to: health (+) and education (+)</td>
<td>Tax enforcement (+), Trust (+) and satisfaction (+) with democracy</td>
</tr>
<tr>
<td>Africa, 2005, Afrobarometer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daude and Melguizo (2010)</td>
<td>Good citizens should pay taxes</td>
<td>Age (+), Female (-), Ec. problems (-), Education (+), Religion (+)</td>
<td>Satisfaction with: democracy (+) and services (+), Corruption (-)</td>
<td>Satisfaction with democracy (-), Corruption (-)</td>
</tr>
<tr>
<td>Latin America, 2007 and 2008, LB</td>
<td>Tax evasion is not justified</td>
<td>Age (+), Female (-), Ec. problems (-), Education (+), Religion (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaviria (2007)</td>
<td>Preferences for redistribution</td>
<td>Age (+), Female (+), Savings (-), Income (-)</td>
<td>Past mobility (-), Future mobility (+), Perception in meritocracy (-)</td>
<td></td>
</tr>
<tr>
<td>Latin America, 1996 and 2000, LB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hug and Sporri (2011)</td>
<td>Cheating on taxes is not justified</td>
<td>Age (+), Female (+), Married (+), Self-employed (-), Retired (+)</td>
<td>Satisfaction with incumbent (+), Confidence in the legal system (+)</td>
<td></td>
</tr>
<tr>
<td>Eastern Europe, world, 1995-1997, WVS and EVS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levi and Sacks (2009)</td>
<td>Tax department has always the right to make people pay taxes</td>
<td>Female (-), Personal belongings, TV, car, radio (+)</td>
<td>Satisfaction with: local gov. (+), efforts to combat corruption (+), Enforcement of taxes (+), Fair treatment (+)</td>
<td>Trust in: government (+), in legal system (+), in democracy (+)</td>
</tr>
<tr>
<td>Africa, 2005, Afrobarometer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torgler (2003)</td>
<td>Cheating on taxes is not justified</td>
<td>Age (+), Female (+), Married (+), Self-employed (-), Retired (+)</td>
<td>Satisfaction with government (+)</td>
<td></td>
</tr>
<tr>
<td>Torgler (2004)</td>
<td>Cheating on taxes is not justified</td>
<td>Age (+), Self-employed (-), Unemployed (-), Upper class (-), Financial satisfaction (+)</td>
<td>Trust in: government (+), in legal system (+), in democracy (+)</td>
<td>Satisfaction with government (+)</td>
</tr>
<tr>
<td>Asia, 1995-1997, WVS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torgler (2005)</td>
<td>Cheating on taxes is not justified</td>
<td>Age (+), Female (-), Married (+), Self-employed (-), Retired (+)</td>
<td>Trust in: president (+), in democracy (+)</td>
<td>Satisfaction with national officers (+),</td>
</tr>
</tbody>
</table>

Notes: Only robust and significant results at the usual confidence levels are reported: WVS, *World Values Survey*; EVS, *European Value Survey*; LB, *Latinobarómetro*. 

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III. GLOBAL ANALYSIS

III.1. Perceptions: what do people think?

We then take a closer look at some basic statistics from opinion surveys of tax morale, using the latest round available of World Values Survey (WVS henceforth), corresponding to the 2005 wave and covering around 90 countries. In our case, tax morale is addressed by the question “do you justify cheating on taxes if you have the chance?” which restricts our sample to 55 countries: Andorra; Argentina; Australia; Brazil; Bulgaria; Burkina Faso; Canada; Chile; China; Colombia; Cyprus; Egypt; Ethiopia; Finland; France; Georgia; Germany; Ghana; Guatemala; Hong Kong, China; India; Indonesia; Iran; Italy; Japan; Jordan; Malaysia; Mali; Mexico; Moldova; Morocco; Netherlands; New Zealand; Norway; Poland; Romania; Russian Federation; Rwanda; Serbia; Slovenia; South Africa; South Korea; Spain; Sweden; Switzerland; Chinese Taipei; Thailand; Trinidad and Tobago; Turkey; Ukraine; United Kingdom; United States; Uruguay; Viet Nam and Zambia. For practical purposes, we group these countries under regional headings (see Table 2), which enables us to make comparison among regions regarding different attitudes towards taxation in different parts of the world.

Attitudes towards justification for evading taxes across regions show important differences, with Eastern Europe tend to exhibit lower tax morale than the rest (almost double the proportion of the next region). Figure 3 represents the results for those who never justify cheating on taxes across regions. We have inverted the scale, therefore a person scoring 10 never justifies cheating on taxes, thus having higher tax morale. For a range between 1 (never justifiable) and 10 (always justifiable), the sample average is 8.75 and 63% of all respondents in the sample saying they never justify cheating on taxes. For practical

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11 One possible source could be the Gallup surveys, which have greater country coverage and more uniform questionnaires, but they are also more costly. If one wants to advance in comparing many developing countries, it might at the time be the only option.

12 Unless otherwise stated, throughout the text we consider the lack of justification for cheating on taxes as a sign of tax morale. It is worthwhile to mention that using this question ignores the fact that cheating is a ‘no-option’, or at least much more limited in some developed countries, thanks to better enforcement mechanisms. Unfortunately, we are not aware about an adequate database to test for this potential bias. Simple correlations for Latin America between tax morale and tax administration indicators (budget and staff) do not show significant results, in line with the conclusions in Torgler (2005).

13 This grouping represents a slight modification of the United Nation’s regional classification (http://unstats.un.org/unsd/methods/m49/m49regin.htm). Due to the limited size of the sample, using more detailed sub-regions would rend the exercise of little comparative value.

14 In the survey, the original score ranges from 1: never justifiable to 10: always justifiable. We have inverted the scale, therefore a person scoring 10 never justifies cheating on taxes, thus having higher tax morale. For a range between 1 (never justifiable) and 10 (always justifiable), the sample average is 8.75 and 63% of all respondents in the sample saying they never justify cheating on taxes. For practical
cheating on taxes as a share of total respondents for all countries covered in the sample along regional lines, highlighting maximum and minimum for each defined region.\textsuperscript{15} Within the sample, two countries stand out in particular. Serbia is the country with the lowest tax morale, relatively far away from others, while Ghana exhibits “perfect” tax morale: none of the respondents justify cheating on taxes at all.

Table 2. Country groupings

<table>
<thead>
<tr>
<th>Western and Central Europe</th>
<th>Eastern Europe</th>
<th>Asia</th>
<th>Africa</th>
<th>North America and Oceania</th>
<th>Latin America and Caribbean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andorra</td>
<td>Bulgaria</td>
<td>China</td>
<td>Burkina Faso</td>
<td>Australia</td>
<td>Argentina</td>
</tr>
<tr>
<td>Cyprus</td>
<td>Moldova</td>
<td>Georgia</td>
<td>Egypt</td>
<td>Canada</td>
<td>Brazil</td>
</tr>
<tr>
<td>Finland</td>
<td>Poland</td>
<td>Hong Kong, China</td>
<td>Ethiopia</td>
<td>New Zealand</td>
<td>Chile</td>
</tr>
<tr>
<td>France</td>
<td>Romania</td>
<td>India</td>
<td>Ghana</td>
<td>United States</td>
<td>Colombia</td>
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<tr>
<td>Germany</td>
<td>Russia</td>
<td>Indonesia</td>
<td>Mali</td>
<td>Guatemala</td>
<td>Mexico</td>
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<tr>
<td>Italy</td>
<td>Serbia</td>
<td>Iran</td>
<td>Morocco</td>
<td>Trin. and Tobago</td>
<td>Uruguay</td>
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<tr>
<td>Netherlands</td>
<td>Slovenia</td>
<td>Japan</td>
<td>Rwanda</td>
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<td>Norway</td>
<td>Ukraine</td>
<td>Jordan</td>
<td>South Africa</td>
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<td>Spain</td>
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<td>South Korea</td>
<td>Zambia</td>
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<td>Sweden</td>
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<td>Malaysia</td>
<td>Chinese</td>
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<td>Switzerland</td>
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<td>Taiwan</td>
<td>Taipei</td>
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<tr>
<td>United Kingdom</td>
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<td>Thailand</td>
<td>Turkey</td>
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<td></td>
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<td>Viet Nam</td>
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</tr>
</tbody>
</table>

Source: Authors’ elaboration based on the World Values Survey database (2005).

\textsuperscript{15} For purposes we classify individual scores between 1 and 6 as having low tax morale, and those scoring 10 as having (high) tax morale.

An alternate classification, grouping countries by income level within each region, can be found in the Appendix.
Figure 3. Tax morale by regions

Source: Authors’ elaboration based on the World Values Survey database (2005).

Tax morale correlates positively with the opposition to “free riding”. Indeed, there is a strong relationship between individuals with high tax morale and those who frown upon claiming benefits they are not entitled to (Figure 4). This relationship underscores the close relationship between paying taxes, and the expectations people have regarding the eventual use of taxes. In this sense, feeling like a “valued customer”, who is getting a decent service in return of payment, could help explaining attitudes towards taxation.

Figure 4. Tax morale and free riding (average responses by country)

Source: Authors’ elaboration based on the World Values Survey database (2005).
Tax morale seems also to be positively related to the trust citizens have in their governments, though the relationship is somewhat weak (see Figure 5). Panel A shows the correlation between tax morale and the trust respondents say they have in their country’s government, while Panel B shows the correlation between the former and the support for democracy as a political system.\textsuperscript{16} In both cases, especially in the former, more trust in the government – making good use of revenues among other factors -- is associated with higher levels of tax morale. Higher support for having a democratic political system could be explained by the fact that people, on average, consent more with living under a democracy than the trust they have in governments, \textit{i.e.} the functioning of democracy.

The relationship between tax morale and perceptions regarding the quality of public services, particularly education, health and social protection are also of interest. Unfortunately, these issues are not specifically addressed in the WVS, and are easier to establish in some of the regional surveys. To explore this issue further, three regional surveys can be used: AsiaBarometer, Afrobarometer and Latinobarómetro. While the country coverage increases with each separate survey, there is still an important difference. The surveys are not directly comparable, and more importantly, neither AsiaBarometer nor Afrobarometer have appropriate tax morale questions. The former ties the willingness to pay taxes to increased provision of public goods and services, while the latter focuses on tax compliance and enforcement. In our view, only Latinobarómetro has questions that are framed in a useful way for those interested in questions of tax morale. However, the great utility of these surveys is that they are useful for addressing specific questions on the link between tax morale and satisfaction with public services. We discuss this issue in more detail below in the regional sections.

\textbf{Figure 5. Correlation between tax morale, trust in government and support for democracy}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{fig5.png}
\caption{Correlation between tax morale, trust in government and support for democracy}
\end{figure}

\textit{Source:} Authors’ elaboration based on the World Values Survey database (2005).

\textsuperscript{16} In the survey, respondents are asked to rate different political systems, considering which one would be the best or more desirable to rule their country.
III.2. Econometric analysis

In this section, we try to go beyond the simple bivariate correlation analysis of average values across countries, and consider a multivariate analysis using individual data from WVS. This procedure allows taking into account socioeconomic variables of the person and his or her life conditions that might affect tax morale as pointed out by the studies in the literature review. Furthermore, we also include perceptions of institutions and democracy.

III.2.1. Data and methodology

After an exhaustive revision of the database, the empirical analysis focuses on the impact of several variables in the justification of cheating on taxes, divided into two groups, socio-economic and institutions-related. Concerning the former, the analysis takes on board the following socio-economic characteristics of those surveyed:

- Marital status: married/living together; divorced/separated; widowed/single.
- Religion: a binary variable taking the value of 1 if respondent considers himself religious and zero otherwise.
- Gender: a binary variable taking the value 1 if the respondent is a female and zero otherwise.
- Educational attainment: from no formal education to university-level.
- Employment status: divided in eight binary variables covering part or full-time employment, self-employment, unemployment, students, housewives, retirees and other status.
- Economic status: self-reported (perceived) income quintile.
- Economic problems: a binary variable taking the value of 1 if the household can save and/or get by and zero if it needs to spend savings and/or borrow.

The second control group deals more directly with general aspects of government in general, which can explain how citizens perceive how taxes are being spent and thus affect their willingness to pay them. All these variables are constructed such that a larger number indicates a stronger preference (“more is better”):

- Support for democracy: how individuals value having a democratic political system. The answers range from 1 (very bad) to 4 (very good).
- Trust in government: the confidence of household in national government, ranging from 1 (none at all) to 4 (a great deal).
- Preferences for redistribution: whether taxing the rich and subsidising the poor are an essential characteristic of democracies. Answers range from 1 (not essential) to 10 (essential).

Some precautions are in order. First, as previously shown, country coverage is limited, restraining our ability to make strong arguments about particular regions. Second, causality is unclear in these terms, so we interpret our results then as correlations. Finally, in a first stage we focus rather on the signs and robustness of the variables than on the magnitude of the coefficients, given the different scales of the variables.
III.2.2. Econometric methodology

Using the WVS database, we perform a micro-econometric analysis for this sample of developed and developing economies of the relationship between citizens’ perceptions of justification for cheating on taxes, and several socio-economic and perceptions-related variables. In particular, we estimate a Probit model on an individual basis, including in a first stage only the socio-economic factors, and then including variables from our second control group. Our dependent variable, tax morale, is a dummy that equals unity if the person rates 10 on a scale from 1 (cheating on taxes is always justifiable) to 10 (cheating on taxes is never justifiable), and zero from answers raging between 1 and 6.\footnote{We define individuals with (high) tax morale as those who strictly do not justify cheating on taxes at all. Estimates performed with a tax morale definition which includes those whose answers range between 7 and 10 yields consistent results. Alternatively, an ordered Probit is estimated with the dependent variable ranging between 1 (cheating on taxes is always justifiable) to 10 (cheating on taxes is never justifiable). See the Appendix for the results.} All regressions include country dummies to capture potential differences in perceptions and average behaviour across countries.\footnote{Not all countries answered all questions, and thus are excluded when running the regressions. Specifically, for the following variables the countries in parenthesis are excluded: “employment status” (Jordan, New Zealand), “support for democracy” (Mexico, Rwanda), “trust in government” (Egypt, Rwanda), and “preferences for redistribution” (Colombia; Guatemala; Hong Kong, China; Italy; New Zealand). Other socio-economic variables that could explain attitudes towards taxation, such as “economic hardship” (France, Netherlands, New Zealand, Russia, United Kingdom), “city size” (China; Colombia; Hong Kong, China; South Korea; Switzerland; Turkey), or self-reported “quintiles” (Argentina, Jordan), are not included in the regressions. Regression results with these variables included can be found in the Appendix.}

III.2.3. Main results

Our estimations suggest that socioeconomic variables matter to understand differences in tax morale across individuals, as shown in Table 3. Those who claim a faith or religious identity have more positive attitudes towards paying taxes. Women also exhibit higher levels of tax morale, an outcome confirming the heterogeneity prevailing in the literature. Additionally, age also affects the results, with individuals justifying evading taxes less as they get older.

Both educational attainment and employment status affect tax morale positively. More educated individuals tend to justify less cheating on taxes, while the employment status and age of the person is also relevant to explaining inter-personal differences (columns 1-6). On the latter, the results suggest that part-timers and self-employed present lower tax morale when compared to full-time employees and older people tend to justify less cheating on taxes than younger ones. These results are perhaps expected, as people with greater education and formal employment are more likely to both have a deeper understanding of the tools of fiscal policy and themselves more likely to be actively financing public services through taxation, thus making them apathetic about cheating on taxes.

After controlling for socio-economic factors, institutions and transparency seem also to be playing a significant role. Those who perceive democracy to be the best system of government for their country think that cheating on taxes is unjustifiable, a result that is robust to different
model specifications (columns 3, 5 and 6). Similarly, those individuals who express trust in their national government display high tax morale (columns 2, 5 and 6). In the same vein, citizens who declare fiscal redistribution to be an essential characteristic of democracy, i.e. governments should tax the rich to subsidise the poor, also show high tax morale, though this result hinges upon model specification (columns 4 and 6). These results are in line with the argument that building fiscal legitimacy lies in the support of the public to the government and this in turn can help achieve greater results in terms of fiscal revenue more than compliance alone.

Out of the main determinants of tax morale, perception variables (support for democracy and trust in government) are within the variables with greater estimated impact. Our estimates enable us to analyse the marginal effect of each variable on the probability of reporting high tax morale. That is, we assess what is the effect of an additional unit - say, increased trust in government, being a year older or having an extra level of education (college degree vs. high school degree) - on tax morale. Figure 6 reports these results for some of the main determinants, comparing the effect of no support/trust versus high support/trust. Greater support for democracy carries the largest effect, with people agreeing with being governed under a democracy being about 12 percentage points more likely to never justify taxes than those who do not like at all democracy as system. Along those lines, older individuals (accounting for a 40 years difference), and people with greater trust in government also show a greater likelihood of not justifying tax evasion, of around 7.5 and 5.5 percentage points respectively. As seen from the figure, all variables show a positive marginal effect, though of different magnitudes. Interestingly, while education has a statistically significant effect, in terms of magnitude the effect per se seems to be rather small.

Figure 6. Marginal effects on probability of ‘Never justifying tax evasion’

Notes: Based on the regressions coefficients in Column 6 of Table 3. For Female and Religious it reflects the change in the dummy variable (being female or religious equals 1); for support for democracy and trust in government it reflects the difference between the maximum support and the minimum possible; age takes into account the difference between a 25-year-old and a 65-year-old person; educational attainment it accounts for the difference between completed tertiary education versus completed primary education.
Table 3. Probit regressions explaining tax morale

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Vis-à-vis Full-time employed:

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Notes: Marginal effects. Robust standard errors in parenthesis. ***,*** denote significance at 10%, 5% and 1% respectively. Regressions include country and marital status dummies not reported here. The dummy for full-time employment is omitted in the regressions.

Testing for some regional differences in the effects of perceptions, and bearing in mind all caveats, we find that after controlling for tax morale determinants persons with the same trust in government from Asia and Africa are significantly less likely to report high tax morale, compared to North-American and Oceania economies. In Figure 7, we report marginal

19 These effects compare maximum-to-minimum values. That is, it compares the effect on a person who has fully trust in his or her government vis-à-vis one who does not.
differences among regions, which is a helpful way of showing how additional change, say from fully trusting governments to not at all, affects the probability of reporting tax morale. Using developed North-American and Oceania as benchmark, we find a great heterogeneity from our perception variables, with support for democracy in Africa, and trust in government in Asia and Africa showing both the larger coefficients and stronger statistical significance, and to a lesser extent, trust in government and support for democracy in Eastern Europe. This highlights the importance of studying more in depth particular regional and country experiences.

Figure 7. Differences in marginal effects across regions (relative to North America and Oceania)

Notes: “Support for democracy” refers to individuals who think democracy is the best political system for their country. ‘Trust in Government’ asks individuals how much confidence they have in the government of their country’s capital.

III.3. Summary – Global analysis

Results so far point consistently towards the need to consider both socioeconomic factors and perceptions relative to institutional factors when assessing attitudes towards taxation and tax compliance, but more importantly the relationship between citizens and the state. Perception on the functioning of democracy, transparency and fairness are relevant to understand these attitudes, while socioeconomic issues (religiousness, gender, the age composition of the population) might relate to the stigma associated with evading taxes, in which a better understanding of these issues could inform taxpayer education efforts. At the same time, there might be some spillover effects from education to tax morale, as more education is associated with greater tax morale, helping to reinforce the argument about greater links between public service delivery and tax compliance. On a cautionary note, however, differences across countries
account for a significant fraction of the variation in tax morale in our sample. Therefore, a deeper understanding of regional and within-country factors that might affect tax morale is a needed complement to the cross-country analysis presented here.
IV. REGIONAL ANALYSIS

While the country coverage in the WVS is not large enough to perform detailed econometric analysis within regions, the data included in regional surveys enables us to make some comparisons among some determinants of tax morale with a greater coverage. The main drawback is that these surveys are not directly comparable between each other, and while there is considerable heterogeneity within each region (with the possible exception of Latin America and Caribbean), local questions can help identifying local customs and characteristics. Thus, as with the analysis performed with the WVS database, the goal of using regional surveys is to identify those aspects that can affect attitudes towards taxation the most. Specifically, we try to identify three areas across the databases: the relationship with public expenditure; the desire or demand for fiscal redistribution; and trust and satisfaction with government and the provision of public services.

We use the 2008, 2005-07 and 2010 rounds of Afrobarometer, AsiaBarometer and Latinobarómetro, respectively. As with the WVS database, some precautions are necessary. First, while there are a higher number of countries in the sample, there is still limited coverage for every region with the possible exception of Latin America. For example, in Africa the survey covers only 20 sub-Saharan countries. Similarly, there are considerable heterogeneities within regions, and therefore these results can be considered as trends rather than specific characteristics. However, as stressed throughout the report, the relationship between these variables, while cannot be established in a direct causality, can still prove useful for further areas of study.

IV.1. Africa

The Afrobarometer survey does not address tax morale directly. The only related question, extensively used in the previous literature, focuses instead on enforcement of obligations by tax officials. Figure 8 presents the results for answering the question “the tax department always has the right to make people pay taxes”, ranked from 1-5, with 5 representing strong agreement with the statement. The results are evidently influenced by how tax officials are perceived by citizens, but do not directly relate to the need of raising taxes, or the willingness of citizens to pay them.

Nonetheless, in Figure 8 below there is relatively high support for tax enforcement in Africa, with more than two thirds of respondents in the whole sample agreeing or strongly agreeing with this statement (Panel A). However, there are significant differences within the region. Ghana stands out as the country with higher tax morale, as defined here, which is

20 See the Appendix for a comparison among regional surveys between variables affecting tax morale.
consistent with the results from the WVS. Panel B relates tax morale with urbanisation of countries. Out of the three regions under study, Africa presents the lowest levels of urbanisation. Therefore, a valid question is how this relate to tax morale, as in sparsely populated areas there tends to be a less strict tax enforcement (Fjeldstad and Semboja, 2001). We find a positive correlation between urbanisation, such that individuals in countries with a higher share of urban population are on average more likely to accept tax enforcement on behalf of the tax department.

Figure 8. Average support for tax enforcement in African economies

Source: Authors’ elaboration based on the Afrobarometer database (2008).

A potentially key issue for accepting tax enforcement as legitimate is its relationship with the perception of corruption, and countries present higher levels of tax morale when corruption is (perceived to be) under control. The Afrobarometer survey includes several measures regarding the perception of corruption for different public authorities and officials. Panel A of Figure 9 shows the correlation between tax enforcement legitimacy and perception of corruption of government officials. Although the correlation is negative, it is not significant statistically at standard levels of confidence. For other authorities the relationship is also weak (e.g. president or members of parliament). In contrast, for tax officials clearly the perception of corruption matters (Panel B of Figure 9). This shows that the tax administration might be a key area to increase transparency and boost tax morale and compliance (OECD, 2011a).
There is a positive correlation between tax morale and satisfaction with health care in Africa. The Afrobarometer survey evaluates a wide array of public policies, which in effect serve as a thermometer of how governments do their job. While in all areas the relationship is positive, i.e. a better perception is associated with greater tax morale, the correlation with tax morale is particularly strong for the satisfaction with health care, as well as water and sanitation.

Finally, Figure 11 shows that tax morale is positively related to tax effort. Countries with higher disposition to agree with tax enforcement are also those with higher levels of revenues –
controlling for the level of development, trade openness and structure of the economy, including natural resources. To this end, while economic growth played an important role in increasing the tax base, more important were joint efforts to improve tax administration and increase transparency in government spending (OECD, 2011). In this regard, reforms on both ends of fiscal policy can reinforce citizens’ perceptions about government actions on their behalf.

Figure 11. Average tax enforcement support and tax effort in African economies

Source: Authors’ elaboration based on the Afrobarometer database (2008) and OECD (2010a).

IV.2. Asia

Similar to Afrobarometer, the AsiaBarometer survey does not address tax morality in the same precise way as the WVS. However, it presents an interesting alternative that explicitly links government spending to taxes. Survey participants are asked whether they “would like to see more or less government spending” while bearing in mind “that more spending may require a tax increase”. This inverted focus does not address the issue of paying taxes regardless of any spending associated to it. At the same time, people may want more services even if they (perhaps knowingly) will not bear the burden of financing this expenditure. Nevertheless, in general individuals across the board tend to support additional spending by the government, though the heterogeneity across countries on both ends of the distribution makes it difficult to establish a clear pattern for the entire region (Panel A of Figure 12).

There is a negative correlation between the level of development (measured by GDP per capita) and the demand for more expenditure (Panel B). In particular, demand for redistribution is significantly lower in South Korea; Singapore; Chinese Taipei; Hong Kong, China and Japan. It is interesting to point out that this result is not driven by a higher presence of the state in these economies. For example, tax to GDP is on average just one percentage point higher in these countries than the poorer countries in the region. The most likely explanation is that all five economies have experienced significantly strong economic growth over decades with an
important increase in living standards. Therefore, most people might be confident that their societies will continue experiencing increasing living standards, independently of social expenditure.

**Figure 12. Willingness to pay taxes to increase spending in Asian economies**

Panel A

Panel B

**Source:** Authors’ elaboration based on the AsiaBarometer database (2005-07) and World Development Indicators.

Interestingly, the public’s perception of how the government handles the quality of public services in general is not significantly correlated with the desire for more overall public spending. Figure 13 (Panel A) shows that there is no relationship between willingness for higher government spending on public services and the public’s perception of the quality of these services. However, when attention is narrowed to how individuals feel about those specific services that can have the most direct impact on their lives, such as health, education and the welfare system, “social services”, a slightly stronger correlation emerges (Panel B). The apparent discrepancy between the fact that the more satisfied people are with specific services like health and education, the more they seem to want more public spending; while at the same time there is no strong relationship between this desire for increased spending and the quality of such services can open up a space for effective government action that can reinforce tax morale in citizens. Again, quality in the provision of public services is key for achieving this.
Figure 13. Willingness to pay taxes to increase spending in Asian economies

Source: Authors’ elaboration based on the AsiaBarometer database (2005-07).

Greater trust in the government is highly associated with a demand for increased spending in Asia (Figure 14). This result underscores an interesting feature. While in general the public might want more public services provided by more government spending, there seems to be mixed feelings about the quality of this spending, and the standing of government in the eyes of individuals carries a greater weight. In this scenario, greater quality in the provision of public services would understandably help to strengthen tax morale. Evidently, the trust citizens have in their government is not forged by sound fiscal policy alone, but evidence suggests that the response of government to citizens’ demands (by means of taxes and expenditure) lies in the heart of the social contract between citizens and the state (see, for example, Torgler, 2004).

Figure 14. Willingness to pay taxes and trust in government across Asian economies

Source: Authors’ elaboration based on the AsiaBarometer database (2005-07).
IV.3. Latin America and Caribbean

The Latinobarómetro survey considers specifically the issue of tax morale in a similar way to the WVS. Using the same definition, justification of cheating on taxes as measure of tax morale, we find that across the region tax morale is generally high. General low levels of tax collection in the region compared to developed economies, reflects in countries with relatively high levels of collection (such as Costa Rica with around 20% of GDP) having lower tax morale than countries with relatively low levels of collection (e.g. Peru with around 14% of GDP).

Figure 15. Tax morale across Latin American economies

Source: Authors’ elaboration based on the Latinobarómetro database (2010).

Not only support for democracy as a system to organize societies and resolve conflicts, but also the way in which a democratic system can satisfy the demands and needs of citizens are important factors explaining high tax morale (Daude and Melguizo, 2010). In Latin America, there is a weak albeit positive correlation between satisfaction with democracy and tax morale, a sign perhaps of broken links between citizens and the state (Figure 16). The fact that, despite being unsatisfied with how the system is working, there are positive attitudes towards taxation, presents a suggestive argument in favour of focusing beyond tax compliance and administration as a mean of increasing tax revenues to focus on how the state delivers to its citizens.
Finally, as already shown for other regions, a greater perception of corruption is associated with increased justification for tax evasion in Latin America. The region follows the pattern exhibited elsewhere, somewhat weaker, with people having lower tax morale (that is, justifying cheating on taxes) the greater they perceive that there is corruption in public institutions. In turn, there is clearer evidence for the ‘dissatisfied customer relationship’. Greater dissatisfaction with public services (education in this case, but with similar results for health care) equally leading to lower tax morale (Figure 17).

Source: Authors’ elaboration based on the Latinobarímetro database (2010).
IV.4. Summary – Regional analysis

We feel that the use of regional surveys enables to increase the scope of countries analysed, while customised questions can cover more precisely local customs and traditions. With the usual caveat due to the methodological differences between surveys, some facts stand out across regions. A good perception of public officials, especially those directly handling tax issues is key to explain tax morale. The higher people perceive tax officials (or officials in general) to be corrupt, less likely they are to feel any obligation or desire to comply with taxes. Similarly, satisfaction with public service delivery is associated with higher tax morale. It is precisely here where the most effective action by the public sector can take place. This positive link notwithstanding, there seems to be at the same time poor judgment of the quality of public services. Improvements in this regard can go to great lengths in increasing tax morale, in addition to complimentary measures such as taxpayer education. Again, on a cautionary note, it is important to stress these results depend greatly on how tax morale is defined. In effect, how questions are posed to respondents and whether they truly understand what they are being asked will affect results. Also, the non-comparative nature of these surveys limits their descriptive utility even if they better capture local traditions.
V. CONCLUSIONS

This paper has surveyed the literature and provided new evidence on the determinants of tax morale across the world. Tax morale is found to influence behaviour and is significantly correlated with measures of tax effort across countries. The preliminary evidence presented in this paper suggests that beyond enforcement and the probability of being caught, people’s attitudes towards taxation are shaped by socioeconomic variables – such as gender, age, education, employment status and religious beliefs –, as well as perceptions regarding institutions, the use of tax revenues such as the quality of public services, and the strength of democracy. While the first group of variables are important to take into account when making comparisons across countries, the second group of variables should be considered as important areas of policy reform to raise tax morale, with education and its spillovers a powerful link between the two. This means that often, in addition to better enforcement, reforms that increase transparency and the efficiency of how revenues are used (to which the quality of public services is vital) might help to increase tax morale and therefore tax compliance. The evidence presented for Africa regarding the particular importance of corruption in the tax administration vis-à-vis general levels of corruption also point to making transparency a priority. However, the experience of several developing countries shows that if such reforms are not accompanied by an increase in transparency of expenditures their effects are often limited.

The paper also shows many limitations in terms of data coverage and availability. The World Values Survey database while offering the broadest coverage is quite limited for developing countries and the main regional surveys available (AsiaBarometer, Afrobarometer and Latinobarómetro) do not include the same questions regarding tax morale nor socioeconomic and institutional variables. Therefore, if one would like to have a more consistent analysis for a broad sample of countries, other sources, such as Gallup surveys, would have to be used as well. Furthermore, to monitor progress such surveys should be carried out regularly and maintain questions in the questionnaire that allow for a comparison over time. This is not currently the general case, e.g. for the regional surveys for Africa and Asia, that change many questions quite often. Finally, World Values Survey is silent on enforcement capabilities by the tax administration, and therefore some measures should be interpreted as a proxy both of tax morale and the possibility of evasion.

Finally, it is important to point out that these cross-country comparisons might be a useful tool for benchmarking and analysing broad trends, but for a better understanding of the issues to guide policy reform a more in-depth country analysis is needed. Country studies that allow establishing causality between public policy reforms and tax morale, as well as their effect on tax compliance and revenues would be a very important complement to these cross-country benchmarking exercises. Specifically, analysis of tax morale can inform the efforts of
governments, revenue authorities in particular, civil society and business to educate and engage taxpayers and potential taxpayers. Country studies could help the various stakeholders to examine how to target their outreach activities, think through what approaches would fit their local context, and evaluate the impact of their activities in terms of improved tax morale and compliance.
APPENDIX

Tax morale by region and income level

Source: Authors’ elaboration based on the World Values Survey database (2005) and income classification by the World Bank.
### Ordered Probit Estimation

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Notes: Marginal effects. Robust standard errors in parenthesis. ***, ** denote significance at 10%, 5% and 1% respectively. Regressions include country and marital status dummies not reported here. The dummy for full-time employment is omitted in the regressions. The dependent variable (cheating on taxes) ranges from always justified (1) to never justified (10).
Probit Estimation including ‘City Size’, ‘Economic Problems’ and ‘Quintiles’ as explanatory variables

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Notes: Marginal effects. Robust standard errors in parenthesis. ***,*** denote significance at 10%, 5% and 1% respectively. Regressions include country, employment status and marital status dummies not reported here due to space limitations. The dummy for full-time employment is omitted in the regressions. The dependent variable (cheating on taxes) ranges from always justified (1) to always justified (10).
### Tax morale among regional surveys

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| **Tax Morale**        | ‘The tax department always has the right to make people pay taxes’ | ‘Would you like to see more or less government spending in each area (for several areas of government spending)? Please bear in mind that more spending may require a tax increase’ | - Tax evasion is never justified 
- Do you think good citizens should pay taxes? | - Do you justify cheating on taxes if you have a chance? 
- Do you justify claiming benefits you’re not entitled to? |
| **Satisfaction with public services** | ‘How would you say the government is handling: improving healthcare (among different aspects of government action, each asked separately)’ | - ‘How well you think your country’s government is dealing with the following issues?’ 
- ‘How satisfied are you with these aspects in your life?’ 
health/education/social welfare system/security (for several areas, each asked separately). | 'Are you satisfied in the way (public education, public healthcare, among others) works?' | N/A |
| **Tax accountability** | ‘Parliament should ensure that the President explains to it on a regular basis how his government spends the taxpayers’ money’ | N/A | N/A | N/A |
| **Perception of Corruption** | ‘How many people do you think are involved in corruption’ (for different authorities, each asked separately) | ‘How much you agree with the statement “there is widespread corruption among those who govern the country”?’ | 'Which do you consider is the main problem in your country?' 
Out of several possibilities, ‘corruption’ is an answer. | N/A |
| **Support for/satisfaction with democracy*** | - With which statement do you agree: democracy is preferable to any other kind of government (other answers possible) 
- How satisfied are you with the way democracy works in your country? | ‘How satisfied are you with these aspects in your life?’ The democratic system (for several areas, each asked separately). | - With which statement do you agree: democracy is preferable to any other form of government (other answers possible) 
- How satisfied are you with the way democracy works in your country? | ‘How good would you say is having a democratic political system for governing your country?’ |
| **Trust in government** | ‘How much do you trust each of the following: President/ National Assembly?’ (for different authorities, each asked separately) | ‘To what extent do you trust the <Central Government> to operate in the best interests of society?’ (for different institutions, each asked separately) | ‘How much trust do you have in the following institutions?’ (for different institutions, each asked separately) | ‘How much confidence do you have in the government (in your nation’s capital)?’ |

*Latinobarómetro has by far the most extensive coverage of democracy, with seven questions addressing this topic.*
REFERENCES


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