

**POLITICS AND TAX MORALE. THE ROLE OF TRUST, VALUES,  
AND BELIEFS, IN SHAPING INDIVIDUAL ATTITUDES  
TOWARDS TAX COMPLIANCE**

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**POLITICS AND TAX MORALE. THE ROLE OF TRUST, VALUES,  
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Dedicated to my son, Christian Leonardo

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## SUMMARY

Traditional models of tax evasion cannot explain why most people comply with their taxes. It has been proposed that taxpayers may have an intrinsic motivation (or willingness) to comply with taxes – Tax Morale. Empirical studies found that trusting government, upholding religious beliefs, and supporting democratic regimes, increase individual Tax Morale. Based on those results and drawing from related literature in Political Science, this study tests the role of trusting government institutions delivering public goods to taxpayers, ideological beliefs, individual support for political regimes, and upholding post-materialist values, on Tax Morale. Results for individuals living in democratic countries show a positive relationship between trust in government institutions and upholding democratic values on Tax Morale; a negative relationship between upholding ideological (conservative) beliefs and Tax Morale, and no relationship between upholding post-materialist values and Tax Morale. Results for individuals living under non-democratic regimes differ in some respects; whereas support for democracy is related with higher Tax Morale, other results – trust in government and ideological beliefs – differ from theoretical expectations. Overall, higher trust in government increases willingness to comply with taxes, and support for democracy elicits higher Tax Morale.

# 1. Introduction

The question of why people pay taxes has been asked since taxes were first levied; however, the answers have changed over time. Economists use the model developed by Allingham and Sandmo (1972) based on the economics of crime approach (Becker, 1968, 1974). In a nutshell, the model posits that individuals would evade taxes as long as the payoff from tax evasion outweighs the costs of being caught evading. Therefore, increasing the costs of tax cheating – increased audits and stiffer penalties for non-compliance – would reduce tax evasion.

Despite its simplicity and clear-cut policy predictions, the model has fallen short of explaining why observed levels of tax compliance (in experiments and empirical studies) are higher than theoretical predictions. That has prompted the search for alternative models that may better capture the complexity of tax compliant behavior (Alm, 1999).

One aspect ignored by the neoclassical model of tax evasion (as it is sometimes called) is the role of individual attitudes towards compliance with taxes. Theoretical models have been developed that explicitly include individual attitudes (e.g. Schnellenbach, 2006) or social conventions and norms (Cullings and Lewis, 1997) to explain individual tax compliance decisions. The existence of a willingness to comply with taxes - Tax Morale – has been proposed to explain individual attitudes towards tax

compliance; it has been defined as the intrinsic motivation to comply with taxes (Torgler 2003a, b)

Empirical research on the factors affecting Tax Morale has produced some consistent results,

1. Individuals who trust government are more likely to report higher Tax Morale than those who do not trust it,
2. Individuals upholding religious values are more likely to exhibit higher motivation to comply with taxes,
3. Individuals who support democracy are more likely to show willingness to comply with their taxes,
4. Older individuals are more likely to have higher Tax Morale than younger ones.

Before proceeding further, I should point out that a limitation of those results is that research linking Tax Morale and tax compliance behavior has lagged behind (Halla, 2010 ), and that the work I plan to carry out is not addressing this issue. One possible reason for that deficiency is data availability. Because of the illegal nature of tax evasion, data on individual tax evasion is difficult to obtain - even when considering the data needs of the neoclassical model. Therefore, getting data that also includes individual attitudes towards tax compliance may be even more difficult. A handful of studies that have used survey data (Wenzel 2005, Braithwaite, Reinhart and Smar, 2010) and behavioral experiments (Bosco & Mittone, 1997) have produced insights suggesting the existence of a link between tax compliance attitudes and tax compliance behavior.

Using those findings as a starting point, I seek to deepen the understanding of the factors that shapes individual willingness to comply with taxes. For instance, we know that trusting governments affects Tax Morale but we do not know with detail what government does that affects individual trust. Similarly, the role of religious beliefs on Tax Morale has been recognized in the literature, but other beliefs that may be as important ideology has not received the same attention. Moreover, there are some reservations regarding the measures used to gauge certain concepts such as individual support for democracy (Inglehart, 2003). In addressing those concerns, it will be helpful to broaden the theoretical foundations by borrowing from work done in other social sciences on related topics, e.g. trust in political institutions, justice and fairness, and trust and cooperation among individuals. Therefore, using findings 1 through 4 as a starting point, four revised hypotheses will be developed and tested,

1. Trust in Government and Tax Morale. I propose that governments increase individual Tax Morale when government organizations that interact directly with citizens in the delivery of public goods and services treat individuals with fairness and impartiality.
2. Individual beliefs. In addition to religious beliefs, I hypothesize that an individual's ideological positions would affect his/her Tax Morale.
3. Support for Democracy and Tax Morale. Based on the finding that individuals who support democracy are more likely to report Tax Morale, I will propose the hypothesis that when the political regime in place matches individual preferences, individuals who uphold those preferences are more likely to report Tax Morale.

4. I will propose that lower Tax Morale of some individuals may be part of a process of societal value. Specifically, I will use the post-materialist value change hypothesis developed by Ronald Inglehart (Inglehart, 1971, Inglehart and Abramson, 1999) that posits that individual values are shaped by the environment experienced during their formative years.

Table 1.1 below summarizes the findings in the literature on Tax Morale and the proposed hypotheses that will be developed in the coming chapters.

<b>Table 1.1 Tax Morale Findings and Proposed Hypotheses</b>	
<b>Findings</b>	<b>Proposed Hypotheses</b>
Trust in Government increases Tax Morale	Tax Morale is affected by government action when delivering public goods and services to individuals (output side of government)
Upholding religious beliefs increases Tax Morale	Ideological beliefs affect tax Morale
Individual support for Democracy increases Tax Morale	Individuals whose individual regime preferences are reflected in the current regime are more likely to report Tax Morale.
Older individuals exhibit higher Tax Morale	Older individuals may uphold different values compared to those of younger cohorts

The plan for the upcoming chapters is the following,

Chapter 2 discusses the limitations of the Neoclassical Model of Tax Evasion

Chapter 3 introduces some of the alternative models of tax compliance, reviews Tax Morale in detail, and lays out the basic themes to be developed into hypotheses in chapter 4

Chapter 4 develops the four proposed hypotheses

Chapter 5 presents the empirical model –data and methods, variables and expectations about results.

Chapter 6 presents the results of testing the empirical model introduced in chapter 5

Chapter 7 discusses the results of the previous chapter, their policy implications, and points out some areas of future interest

## 2. Neoclassical Model of Tax Evasion

### 2.1. Overview

The question of why people pay taxes has been asked from the beginnings of taxation although explanations amenable to empirical testing had to wait much longer. The conventional starting point for the literature on tax evasion comes from the model developed by Allingham and Sandmo (1972) (henceforth named neoclassical model of tax evasion), which extended the economics of crime framework developed by Becker (1968, 1974) to the field of taxation. Taxpayers comply with taxes based on a cost-benefit calculation weighing the benefits derived from evading taxes v. the costs of being caught cheating. The model's policy predictions are straightforward; increased control (taxpayers' audits) and higher penalties for tax cheating would lower tax evasion.

The neoclassical model of tax evasion is an appealing theoretical proposition because of its simplicity and straightforward policy prescriptions. However, that simplicity has come with the price of undermining its ability to explain observed tax compliant behavior. More specifically, I will highlight five issues that limit the model's empirical appeal,

1. Observed levels of tax compliance exceed those predicted by the neoclassical model; given the levels of audits and fines in practice
2. Exclusive reliance on incentives - command and control strategies - may crowd out individual motivation to comply voluntarily with taxes



3. The behavioral assumptions of the neoclassical model of tax evasion conflicts with the conception of individuals upheld by democracy
4. The neoclassical model assumes that exists a clear and objective demarcation between compliant and non-compliant behavior, which may not be the case in practice
5. The neoclassical model assumes tax officials behave in ways that contradict the economic principle of self-interest

The first two issues have been thoroughly discussed in the Tax Compliance literature. The third issue addresses the topic of voluntary tax compliance but from a political environment perspective. The fourth one uses the well-known phenomenon of Creative Tax Compliance in a novel way<sup>1</sup> to illustrate that a clear separation between legal and illegal behavior – unlike theoretical expectations - may be unclear even for tax enforcement. The last observation highlights the unexplained contradiction in the neoclassical model between constructing taxpayers according to the assumptions of Economics and at the same time denying those principles in its characterization of tax officials.

## **2.2 Predicted versus Observed Tax Compliance**

Empirical studies testing the impact of audits and penalties on tax evasion have been extensively conducted. The overall conclusion is that observed levels of tax

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<sup>1</sup> To the best of my knowledge, I have not found references in the Tax Compliance literature that used Creative Tax Compliance to provide evidence that contradicts the basic tenets of the neoclassical model of tax evasion.

compliance are much higher than theoretical predictions derived from audit and fine rates alone (Alm, 1999, Alm, McClelland, and Schulze, 1992, Frey, 2003).

Different reasons have been offered to explain that finding but subsequent work has undermined its relevance. For instance, one reason offered was that high risk aversion was raising compliance beyond the model's predictions – individuals considered sanctions more likely than they really were. However, later studies revealed that for that explanation to be true the estimated coefficients for risk aversion had to be set up to unrealistic levels given the available evidence (Schnellenbach, 2006).

Another argument proposed to explain the observed levels of tax compliance was that the real extent of tax evasion is not fully captured by the data. With tax evasion being an illegal activity, tax evaders have every incentive to hide it. However, evidence produced by experimental studies has confirmed that tax compliance is higher than predicted by deterrence and punishment alone. Experiments allow for a tighter control of the factors that affect tax evasion decisions– such as audit and penalty rates. Two experimental results are quite remarkable; first, some tax compliance is observed even when the probability of detecting those evading taxes is zero. Second, some tax evasion is observed even when compliance with taxes can be fully enforced (Alm, McClelland, and Schulze, 1992).

What empirical and experimental results show is that taxpayer behavior may not fit well within the boundaries of the neoclassical model of tax evasion and its underlying economics of crime approach. Some individuals always cheat regardless of sanctions and some always comply (Bird, 2004); some others comply with taxes behaving as if they over-weigh low probabilities of detection while others appear to be risk-seeking. Some

individuals sometimes behave cooperatively while at times acting as free-riders; some individuals seem to be guided by social norms and notions of equity (Alm, McClelland, and Schulze, 1992, Alm, 1999). Given the multiplicity of observed behaviors and the difficulties in effectively monitoring tax compliance it may not be surprising that some call tax compliance “quasi voluntary” (Levi, 1998) Indeed, the new approach to increase voluntary tax compliance makes a central postulate to encourage taxpayers to voluntarily comply with their taxes (Braithwaite, 2003a, Alm and Martinez-Vazquez, 2007).

To summarize, the neoclassical model of tax evasion has fallen short of explaining observed levels of tax compliance by predicting higher tax evasion than empirical and experimental studies have revealed. Moreover, the variety of behaviors exhibited by individuals regarding their compliance with taxes suggests that the neoclassical model of tax evasion may be too narrowly defined to capture such diversity.

### **2.3 Behavioral Assumptions and Voluntary Tax Compliance**

A second criticism of the neoclassical model of tax evasion is its sole reliance on threats and coercion to induce tax compliance. There are two different aspects to that critique. First, it takes considerable resources to monitor taxpayer compliance, especially when there is no third-party information to check the accuracy of taxpayers’ tax filings (e.g. income of self-employed individuals). Scarcity of material and human resources is more acute in developing and transitional countries where at the same time there are more needs for government revenue to alleviate extreme poverty and inequalities; in those cases, it would be more cost-effective to deploy those scarce resources where the largest yields - recovered revenues or potential for tax evasion - may be realized and develop

other strategies to improve tax compliance for the rest of the taxpayer population, e.g. voluntary tax compliance (Alm and Martinez-Vazquez, 2007).

Second, exclusive reliance in deterrence and punishment to increase tax compliance risks undermining taxpayers' own motivation to comply with taxes (Frey, 2003),

“...*trust breeds trust...*” (Feld and Frey, 2007).

Evidence from social Psychology and behavioral Economics shows that control and mistrust undermines compliance and cooperation among those being controlled and mistrusted. For instance, experimental evidence shows that exclusive reliance on sanctions and norms to create and sustain cooperation crowds out cooperation learning (Ostrom, 2000b). Moreover, a consistent predictor of a person's willingness to cooperate with others is being a recipient of another person's trust (Zak, Kurzban, and Matzner, 2005), whereas individuals who experience betrayal of their trust expectations end up withholding cooperation (Baumgartner et al, 2008). Those results are consistent with the finding that fairness and cooperation among individuals – besides material outcomes – are rewarding (Tabibnia and Lieberman, 2007)

An insidious shortcoming of using incentives to induce individual tax compliance is that authorities' choice of incentives gives taxpayers a good representation about how authorities see them. Bowles (2008) reviewed several experiments dealing with the role of incentives on individual performance, finding that the use of incentives undermined performance. Those findings were observed even when the incentives were chosen to maximize individual payoffs; individuals adjusted their behavior to punish the principal's lack of trust in the agents - even at a cost for them. He concluded that material interest

and moral sentiments may not be separable as economists have customarily assumed. Therefore, if tax authorities treat taxpayers according to the recommendations of the neoclassical model of tax evasion and control their compliance via incentives, individuals will read the authorities' lack of trust in them and undermine taxpayers' own willingness to comply. A downward spiral of lower tax compliance and increasing control to sustain tax compliance is the most likely outcome.

Perhaps the best summary for the role of incentives on shaping individual behavior was provided by Tyler (2006),

*"...people are not influenced simply by the possession and use of power. Those authorities who seek to lead groups through incentives and/or coercion find it difficult to shape behavior effectively through these mechanisms, and they have difficulty creating and maintaining their influence over others..." (p. 393)*

To summarize, there is substantial evidence that exclusive use of incentives to reduce tax evasion may lead to lower tax compliance because of crowding out taxpayers' own willingness to comply with taxes. In turn, reduced tax compliance would force government to exercise even more control to keep revenues from falling, which will lead to additional declines in individual voluntary compliance, and so on.

## **2.4 Behavioral Assumptions and Democracy**

The neoclassical model of tax evasion assumes individuals as willing to engage in illegal behavior if the expected payoff of doing it exceeds the payoff provided by other alternative activities (Becker 1974, p. 9). In principle, there would be no problem with this conceptualization of individuals as long as it is empirically verifiable; however, that

the available evidence suggests there is a distance between theoretical predictions and observed behaviors.

There is another aspect in which those behavioral assumptions are problematic and that happens when those assumptions conflict with the behavioral assumptions sustaining democratic regimes. Under democracy, individuals enjoy a wide array of freedoms and rights that are upheld by governments. Some of those fundamental rights are the right to elect those who would rule and becoming aspirants running for public office. Those rights are the result of assuming individuals as mature and responsible, and capable of keeping up to their promises and commitments. If individuals are just prospective norm breakers - as the neoclassical model of tax evasion posits - they would likewise decide to run for office and benefit from what it has to offer in terms of private rewards. Alternatively, they would vote for those who would let them to transgress as many norms without punishment as possible. Democracy in that case should be an impossible utopia. Because advanced democracies have avoided such a fate, what needs to be explained is not why there are criminals, but instead why so many individuals observe the norms (Frey, 1997).

A more concrete illustration of the clash of conceptions involves considering what happens when individuals meet tax authorities. Treating taxpayers as suspicious cheaters – as hypothesized by the neoclassical model - undermines their status as citizens of democratic state because, among those rights that individuals enjoy is the presumption of being not guilty until proven otherwise (Freedom House, 2011). In turn, that clash would impact how individuals would react towards the state; tax compliance would fall because individuals comply with their taxes responding to how authorities treat them (Feld and

Frey, 2002, 2007). If taxpayers are treated in ways that undermine achieving a high level of consensus about government actions, taxpayers would respond by using whatever means available to evade taxes (Frey, 2003).

The effects of treating individuals as prospective criminals undermine governments' legitimacy and individual willingness to collaborate with them. Bureaucrats who regard individuals as suspicious of cheating on norms would make them more resistant of authorities such as law enforcement (Sunshine and Tyler 2003) and less likely to cooperate with authorities in general (De Cremer and Tyler 2007). They contended that unfair treatment received from government officials undermine individual identification with governmental and societal norms; the treatment received from government bureaucrats tells individuals they do not belong to the same group than those officials (De Cremer, Tyler, and der Ouden, 2005). Unfair treatment at the hands of government officials – by taking place where individual well-being is at stake (Rohrschneider, 2005) will lower individuals' willingness to comply with norms in general). What seems to be missing is a behavioral concept of individual as a social being that is born in a social environment that it is not only not imposed upon the individual, but also necessary in their successful development (Simon, 1991)

To summarize, conflicting conceptions of the individual between those of democracy and the classical model of tax evasion may affect not only tax compliance but compliance with norms in general. Individuals living in well-established democracies that are treated by tax authorities in ways consistent with the economics-of-crime approach are expected to show a declined willingness to comply with their taxes. Taxpayers would read from the treatment received from tax officials that they are seen as untrustworthy

(Bowles, 2008) and would adjust their behavior accordingly, increasing resistance to cooperate and submit to authorities' decisions – among them, to comply with their taxes.

## **2.5 Legal versus Illegal Behavior. Creative Tax Compliance**

The neoclassical model of tax evasion assumes that tax evasion is the result of individual calculation between benefits of tax evasion v. costs of being caught cheating on one's taxes. This assertion rests on two implicit assumptions; first, that tax norms establish a clear and explicit boundary between tax-compliant and non-compliant behavior. Second, that everybody bound to comply with tax norms see them in exactly the same way. If both assumptions are met, tax non-compliance is the result of individual willingness to violate those norms. Unfortunately, that cannot be assumed to be the general case.

First, human rationality is not omniscient but limited. There is a difference between the real world and the subjective representation of it inside individuals' minds (Simon, 1978; 1986). As a result, norm compliance errors may not be ruled out as a possible cause for tax non-compliant behavior; tax laws are complex and require a minimum level of personal qualification that several individuals do not meet (Hofmann, Hoelzl, and Kirchler, 2008). Similarly, eventual breaks in individual will to comply with taxes may occur even when individuals are convinced about the fairness of the tax code; individual action is not driven exclusively by thought but also by emotion and habit (Braithwaite 2003c). Punishing all compliance errors as if they were tax cheating would make individuals resentful of authorities and negatively affect their willingness to comply with taxes.



In the same way that tax norms are interpreted and may lead to unintentional tax non-compliance, tax norm interpretation may be a legitimate way to reduce one's tax liability. However, tax norm interpretation may also be done with the purpose of exploiting norm uncertainty, complying with the letter of tax norms but undermining their intentions (Barker, 2009). That phenomenon is identified in the Tax Compliance literature as Creative Tax Compliance,

*“...the essence of creative compliance is that it escapes the intended impact of law...finding ways to accomplish compliance with the letter of the law while totally undermining the policy behind the words...when compliance takes the form of creative compliance...it becomes, for those vested with the task of enforcing policy, a problem not a solution...creative compliance will be found in any area of law in which those subject to it have the motivation and the resources (in terms of money and/or know-how) to resist legal control legally...” (McBarnet 2003, p. 230)*

Creative Tax Compliance makes the distinction between compliant and cheating tax behavior imprecise and equivocal. A practical illustration of the difficulties of separating legal from illegal tax behavior comes from a case that took place in Australia during the late 1990s and early 2000s that has been documented with detail (Murphy, 2004, Braithwaite, Murphy, and Reinhart, 2007). Briefly stated, a group of Australian taxpayers invested in so-called tax effective schemes that provided taxpayers with sizable tax deductions. The attitude of the Australian Tax Office (ATO) shows that uncertainty about tax norms and taxpayer behavior intentions also reaches those in charge of enforcing the tax code. They initially processed the tax returns and granted those tax deductions. However, by mid-1998 the ATO made a 180 degree turn; they disallowed all the previously accepted tax returns and instead went after those taxpayers that had received tax breaks (about 42,000) to collect not only past due taxes but also interests and

penalties. The ATO justified its change in attitude contending that the investment schemes' only purpose was of obtaining tax deductions, distorting the tax code's original intention of promoting investment. Affected taxpayers actively resisted the authorities' decisions claiming that those schemes had been sold to them by professionals to legally minimize tax liability. They lodged complaints before the Ombudsman and started organizing to litigate against the tax administration while refusing to pay the disputed taxes and penalties<sup>2</sup>. The controversy escalated – despite the relatively minor number of taxpayers involved – receiving broad attention in the press going all the way up to the national parliament. By 2002 the tax authorities backtracked several of their claims offering instead settlements with taxpayers where a grace period to pay past due taxes was offered and dropping tax penalties and interests; interestingly, those settlements were not offered to the financial advisors who sold those tax investment schemes to investors thus implicitly acknowledging that taxpayers might have been duped by unscrupulous advisors (Braithwaite, Murphy, and Reinhart 2007, 143).

The illustration provides a practical lesson on how difficult may be to draw an objective, clear-cut separation between compliant and non-compliant behavior. Instead, differences or deficiencies about how tax norms are interpreted may be at the root of some observed non-compliance situations. Whether those non-compliant situations are the result of taxpayers' ability (or capacity) to understand the tax norms, a legitimate attempt at reducing one's tax liability, or the result of skillful twisting of the tax code undermining the legislators' intentions when drafting the code, may be difficult to

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<sup>2</sup> More than 50% of those taxpayers had rejected settling their tax cases with the tax administration as late as 2002.

determine. In fact, it is not unusual that what the Tax Codes establish as permissible or forbidden has to be decided before the Courts by judges that seek to untangle the legislators' *intentions* when writing the statute. Therefore, the assumption that an objective separation between tax compliance and tax evasion always exist – as implicitly assumed in the neoclassical model – does not necessarily hold in practice.

## **2.6. Behavioral Assumptions of Tax Officials**

One of the most problematic features of the neoclassical model of tax evasion is the way that taxpayers and tax authorities are portrayed. Whereas taxpayers are assumed as self-interested, evading on their taxes as long as the payoff is beneficial to them, tax officials – instead of their own self-interest – are assumed to pursue government's interests (or the common good) by searching for and sanctioning tax cheaters.

Unfortunately, there is no explanation about why tax officials are assumed to be different from taxpayers. Thus, it would be interesting to may speculate on what would happen if both taxpayers and tax officials are only driven by their own self-interest - as Economics customarily assumes for economic agents.

When catching a taxpayer in a tax cheating situation, a tax official is faced with a choice; report the violation and the penalties for non-compliance go to the government coffers, or manage to extract some side payment from the taxpayer in exchange for leaving the situation unreported. In doing so, the tax official weighs the costs of reporting (not getting extra income) versus the costs of extracting side payments and not reporting tax cheaters (being caught himself and in turn being either penalized or bribed in exchange for being left off the hook).

Lifting the assumption that tax authorities are incorruptible pursuers of the common good has changed the tax evasion game from a risky gambling to an uncertain one. The decision of whether to cheat or comply with taxes no longer depends on deterrence and punishment but also on what taxpayers expect about others' actions regarding tax evasion. If the taxpayer believes most individuals would cheat on their taxes and be able to get away with it by paying bribes, then he may decide to cheat too taxes. On the contrary, if he believes others mostly comply with their legal obligations to pay taxes and enforce tax laws, he may decide it is better to pay our taxes.

One logical counter-argument is that by applying harsher penalties and heavier oversight of both taxpayers and those monitoring their compliance may reduce those incentives to cheat. However, the issue is who will apply those penalties since he has nothing to gain from it. In general, when non-compliance is the expected behavior harsher penalties and heavier oversight will be mostly ineffective because there would be no one willing to enforce them (Persson, Rothstein, and Teorell 2010). Moreover, enacting harsher penalties for non-compliance and failing to enforce them would reinforce individual perceptions that non-compliance with norms cannot be eradicated or reduced thus further undermining compliance among those who still comply (Ostrom, 1998); nobody wants to be a "sucker" that plays by the rules when nobody plays by them (Levi, 1998, Rothstein, 2005)

To conclude, the neoclassical model shows the problematic feature that, in order for it to work it has to assume behavior from tax officials that contradicts the basic tenets of *homo economicus*. When the assumption is lifted, the role of expectations about what

others do regarding compliance with tax norms become a part of the decision to cheat or to comply with taxes

## **2.7. Conclusions**

The neoclassical model of tax evasion is a simple and elegant way of thinking about tax compliance. However, the model falls short in several respects and some of its features are problematic. First, it predicts higher tax evasion than observed. Second, its conception of individual behavior is not suitable with that of modern democracies; where both collide it would make individuals less compliant with their taxes, government norms and authority. Third, its reliance on sanctions and controls to reduce tax evasion crowds out autonomous tax compliance behavior making individuals less (and not more) compliant with taxes and formal rules. Finally, the tax code does not always provide an objective separation between legal and illegal behavior; in addition to individuals making mistakes in interpreting tax norms, the phenomenon of *creative compliance* challenges the very nature of what tax norms define as admissible behaviors -taxpayers may seek to comply with the letter of the law but undermining their intentions.

The table below summarizes the main points made about the Neoclassical Model of Tax Compliance and the issues just discussed.

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**Table 2.1. Neoclassical Model of Tax Evasion**

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<b>Advantages</b>	<b>Limitations</b>
Simple Clear and testable predictions	Observed levels of tax compliance are far higher than theoretical “Model of man” contradicts conception of man under democracy <ul style="list-style-type: none"><li>• Undermines individual compliance with government norms</li></ul> “Punishment and Control” approach crowds out voluntary tax compliance Objective demarcation between legal and illegal behavior is not possible because norms interpretation is subjective <ul style="list-style-type: none"><li>• Involuntary compliance errors</li><li>• Creative tax compliance</li></ul> Discrepancy between characterization of taxpayers and tax enforcement officials <ul style="list-style-type: none"><li>• Taxpayers are self-interested, but tax agents are not</li></ul>

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The assessment of the neoclassical model would not be complete without mention to the policy implications. One important lesson is that that suggesting “one-size-fits-all” taxation policies to elicit individual compliance – e.g. sole reliance on deterrence and punishment – may seem at times problematic and even counterproductive.

Recent efforts in tax administration reform in developed and developing countries have followed on a broader strategy of making tax administration and tax enforcement consistent with democratic principles,

*“...in return for taxes, taxpayers should not only receive goods and services, but also sound governance that is respectful and protective of democratic principles and processes...” (Braithwaite, 2003b)*

Consistent with that overall objective, tax reform has focused on eliciting voluntary tax compliance by building a relationship between taxpayers and tax authorities

based on respect and trust (Alm and Martinez-Vazquez, 2007). In order to do that, tax reforms have sought to endow tax administrations with means to help taxpayers to fulfill better and more easily their tax duties, developing codes of conduct for taxpayers and tax officials, applying transparent procedures on taxpayers consistently, and giving taxpayers the opportunity to appeal tax administration decisions before independent bodies. Those elements of tax reform have been present in cases as disparate as Australia (Braithwaite, 2003a), Bulgaria (World Bank, 2003) and Kazhakstan (World Bank, 2008).

The next chapter will introduce some alternative models of tax compliance, presents Tax Morale, and review its findings, and the issues that will lead to the formulation of the hypotheses to be developed and tested in the coming chapters.

### **3. Alternative Models of Tax Compliance and Tax Morale**

The chapter will review a few models of tax compliance that diverge in substantial ways from the neoclassical model of tax evasion, and then introduce and discuss Tax Morale and its findings.

#### **3.1. Alternative Models: the Role of Norms**

One feature shared by those alternative models is that researchers' interest shifted away from explaining tax evasion, instead seeking to understand what influences people to comply with taxes. Another shared feature is abandoning the assumption that tax compliance is based on individual decision-making towards analyzing, formalizing, and testing the role that social and individual norms play on tax compliance. In fact, those features developed contemporary to the neoclassical model of tax evasion developed by Allingham and Sandmo (1972); interest in norms and individual morality as influencing tax compliance started at least in the 1970s or earlier (Torgler, 2003b). I will now provide a brief account of work done regarding the role of individual and social norms in tax compliance, and then move to consider in detail what affects individual attitudes towards compliance with taxes –Tax Morale.

The first model to introduce is the “heuristic” approach to tax compliance (Scholz and Pinney 1995, Scholz and Lubell, 1998a, b) which hypothesizes two different heuristic mechanisms affecting individual tax compliance. One is the “duty” heuristic;



individuals over-estimate the likelihood of getting caught because cheating violates their sense of duty; as a result, taxpayer estimations of the probability of being caught cheating are biased upwards. Scholz and Pinney (1995) tested it empirically and found that the probability of being caught was influenced more by duty factors than by objective deterrence factors. The other mechanism is the “trust” heuristic (Scholz and Lubell 1998a) and contends that individuals would be willing to pay their taxes when they trust government and trust other citizens to pay their fair share of taxes. Empirical results revealed that higher levels of trust lowered the likelihood of individual non-compliance even after controlling for deterrence factors. No further work along those lines has been identified, possibly because of data issues preventing additional work along those lines.

Alternative models introducing the role of individual and social norms also introduced taxpayer typologies instead of a single-type of taxpayer. Cullis and Lewis (1997) proposed a model of tax compliance where individuals derived satisfaction (utility) not only from consumption but also from compliance with social norms, and from others’ observance of tax norms. They considered taxpayers as multifaceted identifying three main taxpayer types. “Compliers” pay taxes because it is required and fear punishment if taxes are not paid; “identifiers” pay taxes because of social norms, beliefs, and behaviors of those surrounding them. “Internalizers” consistently articulate their beliefs (including moral beliefs) with their actions regarding tax compliance.

Another approach to how norms influence tax compliance can be found in Schnellenbach (2006), where tax compliance is driven by considerations of legitimacy and fairness. Individuals are assumed to be guided by an intrinsic motivation to fulfill their obligations fed by,

*“...participation rights in collective decision making or of a fair treatment of taxpayers by the authorities...” (p.118)*

In this model, individual beliefs (normative or positive) on taxation and the workings of government are what drive individual tax compliance. Only individual norms count; individual considerations of government legitimacy (justified levels of taxes and a working government administration) compel individuals to comply. Not complying with taxes when the government is considered legitimate violates personal beliefs leading to psychological costs - named dissonance costs.

In contrast with Schnellenbach, Bosco and Mittoni (1997) have used social and individual norms at explaining tax compliance. They tested the model experimentally using both types of norms plus traditional deterrence and punishment factors. In their experiment they found that moral (individual) constraints significantly alter compliant behavior whereas social constraints were not significant influences in the decision to comply with taxes.

With a basic background on the role of individual and social norms on individual tax compliance, I now turn to introduce Tax Morale.

### **3.2. Tax Morale**

Tax Morale has been defined as the intrinsic motivation to pay taxes (Torgler, 2003b, 2006). Although Tax Morale seeks to explore how individual attitudes towards tax compliance affect compliant behavior, it has focused so far on what affects individual attitudes towards compliance with taxes.

Tax Morale – like the models introduced in earlier sections - assigns an important role to norms that regulate individuals' lives in how they shape individual compliance. Norms include not only individual but also institutional norms (Torgler, 2003b). Norms - formal and informal - are important because they act as guides for individual behavior reducing uncertainty in social exchanges (North, 1994).

In another departure from the neoclassical model, Tax Morale constructs individuals' rationality as limited; norms fill in the gaps (e.g. whether others pay their fair share of taxes) as guidance in their own tax compliance decisions (Torgler, 2003b). Formal norms matter to Tax Morale; for instance, a complex tax code may seek to improve the system's fairness by taxing more precisely those that should be taxed. However, to the extent that increased code complexity may impose unfair burdens on individuals' capabilities, it may affect taxpayers' perception of the equity of the tax system, and lower their willingness to comply (Torgler, 2003b).

Individuals may be affected differently by different types of norms. Some may be affected by what others around them think (or do) about complying with taxes, whereas others may be impervious to what happens around them. Based on norm sensitivity, four types of taxpayers were proposed by Torgler (2003b) that are summarized in Table 3.1 below,

<b>Taxpayer Type</b>	<b>Attributes</b>	<b>“Collective action” equivalent type</b>
Social Taxpayer	Influenced by social norms Sensitive to others’ beliefs and actions (especially those close to them) “Comply if others comply”	Conditional Cooperators (cooperate if others do their part)
Intrinsic Taxpayer	Sense of Duty/obligation towards tax compliance Sensitive to the ways government treats individuals “Comply if authorities treat them fairly”	Conditional Cooperators (if authorities do not enforce rules, they may withdraw cooperation)
Honest Taxpayer	Insensitive to norms “always comply”	Altruistic
Tax Evader	Cost-benefit calculators of risks v. benefits of tax evasion “comply only if forced to”	Rational egoists

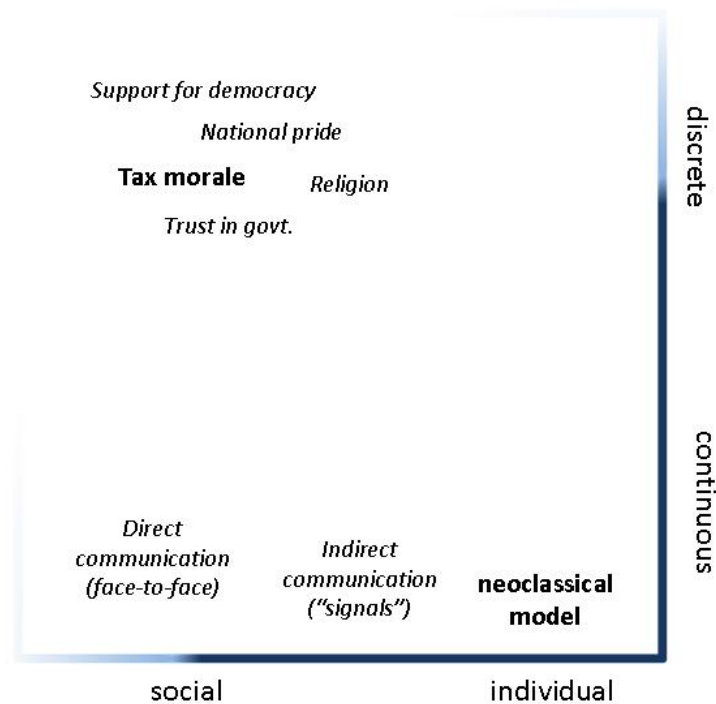
Tax Morale provides a broader conception of individual behavior than the neoclassical model. Tax Evaders match the model of behavior in the neoclassical model; their compliance attitude is shaped by a benefit-cost calculation and they are unconcerned about the social environment. In addition to tax evaders, three additional types are proposed. So-called Social Taxpayers are influenced in their attitudes towards taxes on what others do regarding their own taxes. Unlike the previous group, Intrinsic Taxpayers attitudes towards tax compliance are affected by the way authorities treat them. Finally, Altruistic Taxpayers’ compliance attitudes are that of “always comply” regardless of social or individual attitudes.

The most interesting aspect of the taxpayer typologies is how they parallel similar developments in the social sciences, notably those in the literature on collective action.

Ostrom (2000a) developed a typology regarding individual attitudes towards cooperation, which is included in the last column of Table 3.1 to illustrate how both overlap. Conditional cooperators overlaps both the social and intrinsic taxpayers, whereas “altruists” mirrors the “honest taxpayers” and “rational egoists” corresponds squarely with the “tax evader” both mirroring the model of behavior of the economics of crime approach. The importance of those parallels is that they may offer new insights in what shapes individual behavior.

Parallelisms between collective action and Tax Morale extend to the role of norms in shaping individual behavior. Collective action posits that individuals know that they would be better off by cooperating, but if many others withhold their cooperation then the best strategy would be not to cooperate. For instance, taxpayers may understand the long-run consequences of tax evasion (lower provision of public goods and services and lower social well-being) but short-term considerations (e.g. perceived tax evasion on others, or mistreatment at the hands of government officials) may push them into non-compliance. “Fixing” the incentives structure (raising audit rates and/or penalties) would not solve the problem because of the reasons argued in chapter 2 – crowding out voluntary tax compliance.

Tax Morale –like some of the models reviewed earlier - shifted the theoretical emphasis from predicting non-compliant behavior (the neoclassical model of tax evasion) to predicting what may affect individual attitudes towards tax compliance as represented in Figure 3.1



**Figure 3.1. Tax Compliance and Tax Morale**

The chart seeks to illustrate the differences of focus between the neoclassical model which attempts to predict tax evasion behavior (placed close to the origin in the chart) in an individual (no other factors matter) and continuous basis (adjusting compliance/evasion at the margin). By contrast, Tax Morale –although it seeks to explain individual tax compliance from individual attitudes- has yet to provide a more thorough path from attitudes to behavior. Because such work is not complete (Halla, 2010) Tax Morale is placed farther away from the origin (to the left and up) Because individual compliance is shaped by their observance of norms, taxpayer behavior no longer follows

a strict cost-benefit calculation but is embedded within a social context that shapes it, represented by its position to the left along the social-individual dimension. The move represents the results from tax compliance experiments where subjects were exposed to different types of communication among them (indirect communication “signals”, direct communication “face-to-face”) and how they affected tax compliance (Alm, McClelland, and Schulze, 1992, 1999).

Likewise, Tax Morale is placed high along the vertical axis to represent that the factors that were posited to affect tax compliance under the neoclassical model have been found not to affect individual attitudes towards tax compliance (Torgler, 2003a); instead, other factors affect individual willingness to comply with taxes, such as trust in government (Martinez-Vazquez and Torgler, 2009, Torgler, 2003a, b, Cummings et al., 2004), pride in one’s nationality (Martinez-Vazquez and Torgler, 2009), and religious beliefs (Torgler, 2005b, 2006).

### 3.2.1. Tax Morale Limitations

Like any hypothesis, Tax Morale is a representation of reality and as such is not free of shortcomings or limitations. Posner (2000) made a more extreme case arguing that the disparate compliance rates among different taxes suggest that Tax Morale may not exist. That would be a possibility if there were just one type of individual; however, there are diverse types of taxpayers, and each in turn may form specific evaluations about specific taxes in the same way that norms affect their behavior differently. Hammar, Jagers and Nordblom (2009) studied taxpayer perceptions of tax evasion for specific taxes in Sweden and found large variations in perceptions of tax evasion across different

taxes; taxes perceived as more evaded would be evaded the most to avoid being labeled a “sucker”. That interpretation is supported by the fact that trust in their fellow citizens doing their part regarding taxes was a main factor explaining those differences in perceptions of tax evasion.

Perceptions of government legitimacy may also affect compliance with taxes. If the government collecting taxes is perceived as illegitimate (e.g. usurped access to power or treats individuals despotically), individuals have the right to resist it and withholding resources – not paying taxes - is one way to do it (Torgler, 2002). Therefore, Tax Morale may exist independently of divergent rates of compliance across taxes, or even in the presence of substantial evasion.

Halla (2010) concerned with the scarce evidence linking Tax Morale with tax compliant behavior provided different suggestions for testing the relationship between Tax Morale and taxpayer behavior including,

1. Linking randomized in-depth audits and panel survey data
2. Using laboratory experiments augmented with surveys

Regarding the first suggestion, getting data not only on compliant behavior but also on individual attitudes may be as difficult as getting data on tax evasion alone. Regardless of data limitations, some empirical work has been done and its findings support a relationship between Tax Morale and tax compliance. For instance, Murphy (2004) used data from a survey conducted among taxpayers already accused of tax evasion in Australia reporting that their trust in tax authorities was much lower than among the general population. She also found that their resistance to tax authorities could be predicted by their level of trust in authorities. One obvious limitation of the data is that



surveyed taxpayers were already accused of tax evasion so we do not know whether their lower confidence in authorities stemmed from a perception that the accusation was unfair or it was always low to the extent of engaging in questionable tax behavior. Wenzel (2005) used data from another survey and reported evidence of a complex web of relationships between tax ethics (Tax Morale) and tax compliance, between perceived social norms and individual tax ethics, and perception of social norms and tax compliance. Although his results also provided support for an ex-post rationalization of tax evasion - consistent with the neoclassical model of tax evasion –his findings are also consistent with the existence of different types of taxpayers driven by different norms and motives (not only self-interest).

Because data issues may slow developments in connecting individual attitudes to individual behavior regarding taxes, experimental methods may offer the best compromise to test how individual attitudes influence individual behavior. In particular, inter-disciplinary collaboration adding to behavioral economics the most recent advances from neuroscience using brain imaging techniques and checking brain chemistry may reveal what goes on in individuals' minds when deciding on paying their taxes. For instance, recent research has revealed that there are unique differences in brain activity of experimental subjects when engaged in a cooperation task versus pursuing one's own self-interest and defect (Sanfrey, 2007). Further, experiments have revealed that individuals' brains automatically offloads information that gets subconsciously processed via intuition and pattern recognition that in turn influences individual decision making (Camerer, 2007); that may explain the role of norms in tax compliance – a mechanism to simplify decision-making reducing cognitive demands.

To summarize, Tax Morale is defined as the intrinsic motivation to pay taxes. Norms shape individual behavior because they are used by bounded-rational individuals as aids on what to do regarding compliance with taxes. Because taxpayers respond differently to different types of norms, different types of taxpayers may be identified based on their relative sensitivity to norms. Finally, government norms may affect Tax Morale according to the fairness of tax norms and procedures, and how they treat individuals. The role of norms in shaping individual attitudes mirrors developments in other social sciences, more notably in the literature of collective action thus opening the possibility of using its theoretical and empirical insights in the field of tax compliance. Tax Morale's main limitation comes from the still under-developed relationship between individual attitudes and individual behavior; despite of data limitation problems, some empirical work has been done showing results consistent with the proposition that individual attitudes towards tax compliance affect individual behavior.

The next section introduces the review of the literature regarding the factors affect individual Tax Morale.

### **3.3. Trust in Government and Tax Morale**

Starting with a revision of the most recent literature, Torgler (2003a) studied individual Tax Morale among individuals from European democracies and reported that individuals having a higher degree of confidence in the Legal System have higher Tax Morale. Trusting the legal system may lead to accepting government's decisions and provide an incentive to obey its rules; trusting government officials also affected Tax Morale (Torgler 2003a, 137).

Similarly, Torgler's (2003b) study of Tax Morale in Switzerland found that individuals trusting the government and the legal system also had higher levels of Tax Morale. Moreover, the more extensive the forms of direct democracy participation available the higher the individual's motivation towards complying with his/her taxes, which may be interpreted as it is fair for governments to let individuals decide directly what they want the government to do. On the other hand, if a government is perceived as corrupt, taxpayers will not trust it become more inclined towards evading their taxes (Cummings et al., 2004). Using survey data from the U.S., Botswana, and South Africa, the authors found that individuals trusting the legal system, the government, and national officers were more likely to have higher Tax Morale. The dependent variable -Tax Morale- was constructed using a question from the Afrobarometer that asked individuals whether they had engaged in not paying income taxes (an approach followed in virtually all the studies considered).

Martinez-Vazquez and Torgler (2005, 2009) studied the evolution of Tax Morale in Spain in the period 1975-2000; in this case, the study covered the period from the end of Franco's dictatorship to the consolidation of democracy. They found that Tax Morale increased in Spain over time. In addition, individuals who trust the Parliament also had higher Tax Morale, and those who had a high sense of pride in their nationality were also found to be more likely to have higher Tax Morale,

*"...if the Parliament is seen to be acting in a trustworthy way, taxpayers' trust in the state increases and so would their willingness to comply with their tax obligations..." (p. 16)*

Torgler (2005) analyzed Tax Morale in developing countries of Latin America using survey data from two different sources (Latinobarometro, and World Values

Survey) and reported that individuals that trusted government (trust in the president in one dataset, and satisfaction with national officers in the other) were most likely to report Tax Morale.

Alm and Torgler (2006) compared Tax Morale between the U.S. and several European countries using WVS data. In particular, they tested for differences in Tax Morale between Spain and the U.S. and found out that trust in government has a positive impact on Tax Morale,

*“...focusing on how the relationship between the state and its citizens is established; they also allow us to analyze trust more closely at the current politico-economic level...” (p. 236).*

Again, trust in Parliament and the Legal system affect Tax Morale among those that trust those organizations,

*”...if the state acts in a trustworthy way, then taxpayers might be more willing to comply with the taxes...treatment seen by individuals as unfair may lead to resentment...” (p. 236)*

Torgler and Schneider (2007) discussed factors shaping Tax Morale in multi-cultural European countries -Belgium, Spain and Switzerland- using WVS data. They reported that -those who trust government were more likely to report higher Tax Morale;

With those results showing a consistent relationship between trust in government and Tax Morale, let us turn to examine in more detail the rationale offered for the relationship between trust in government and Tax Morale.

### 3.3.1. Discussion

The results in the previous section clearly indicate that trusting government is associated with higher Tax Morale. However, it is not clear what governments do to elicit individual trust in them. Two possible explanations on how governments may affect individual tax moral can be cited. On the one hand, it has been suggested that governments that act trustworthily or are perceived as being fair may elicit individual trust. On the other hand, perhaps reflecting economists' focus on individual choices, it has been theorized that governments may elicit trust when deliver what individuals demand; widespread support for the programs provided by government legitimates government actions and imposes a social norm towards paying taxes (Alm and Martinez-Vazquez, 2007),

*“...survey evidence suggests that some people will not pay their taxes if they dislike the way their taxes are spent, if they feel they have no say in the decision process, if they feel that government is unresponsive to their wishes, or if they feel they are treated unfairly by government...” (p. 49).*

The two broad explanations offered to explain how governments affect individual Tax Morale cited in the quote may be summarized as follows

1. Individuals will not pay unless government spends their taxes in ways they favor
2. Individuals have a say on how government spends taxpayers' (that is, voters' money) or the government treats them fairly

With regards to the first point, it seems questionable that tax compliance decisions are driven primarily by the results in the ballot box, or by what the political institutions decide. In advanced democracies a sizable part of the population chooses not to vote in general elections, thus questioning the basic insight that governments elicit compliance

by spending consistent with voters' preferences. If individuals do not bother with expressing their policy preferences via voting, how would governments know what they want?

There is another problem with this argument; it falls short in explaining why those whose preferences were not selected – either their preferred candidate or preferred policy alternative did not get selected - would still be willing to comply with their taxes. If taxpayers were to comply with their taxes according to the match of government actions with their preferences, given that a sizable proportion either does not vote or selects the losing alternatives, we should expect widespread tax noncompliance. Hetherington (2004) pointedly observed that trust in government is necessary only when individuals pay the cost of policies and do not receive the benefits. Why should those whose preferences have not been favored by government pay taxes?

With regards to the second argument provides a comprehensive explanation. Experimental evidence suggests that individuals are more compliant when they have a voice on how their taxes are spent (Alm, Jackson, and McKee 1993) and when they can vote on how tax enforcement should be done (Alm McClelland and Schulze, 1999). Those findings suggest when individuals are given an outlet to express their opinion about what policies should be adopted that positively affects tax compliance and that is regardless of the policy actually selected. That may be so because individuals may value the way that governments give them the same way they may value a certain policy outcome; if individuals interpret being asked about their preferences as a signal that government considers them as mature and responsible partners in governance, individuals would in turn reciprocate that treatment and comply voluntarily with their tax obligations

without further coercion. Survey evidence from Switzerland confirms that individuals actually derive satisfaction being allowed to decide on policy matters directly – direct democracy (Frey and Stutzer, 2005).

With the insight that taxpayers value being given a voice on government decisions that affect their well-being, the question is whether sporadic incursions to the ballot box is the only mechanism to elicit and keep Tax Morale high enough and for and long enough to induce individuals to voluntarily comply with their taxes. Based on insights from recent findings in the literature on institutional trust and other sources, I will hypothesize that governments interact with taxpayers in several ways and that those interactions have an even more pronounced impact on individual Tax Morale. Two questions would help in unveiling the mechanism linking government actions with Tax Morale,

1. What actions do government institutions undertake that may be conducive to create, improve, or undermine citizens' trust in government?
2. What government institutions are the most likely to produce actions affecting citizens' trust?

To summarize, the empirical literature has found a consistent relationship between individual trust in government and Tax Morale. Higher willingness to comply is associated with higher trust in government. The proposed mechanisms leave some unanswered questions and therefore a more comprehensive mechanism on how governments affect individual trust - which in turn would affect Tax Morale – should be developed incorporating the more recent insights from the literature on political trust

because that literature has dealt itself with how political institutions affect individual trust (Levi and Stoker, 2000).

### **3.4. Religious Beliefs and Tax Morale**

Another factor influencing individual Tax Morale is religious beliefs. Religion is a system of beliefs that limit individual discretion away from acts that may be seen as morally unacceptable; it operates as a heuristic to reduce uncertainty by way of providing rules of behavior, or as a device to reduce “transaction costs”. Religion may be seen as a moral force that motivates individuals to act in determinate ways in the same way that religious organizations may provide a society’ moral constitution (Torgler, 2006) Interestingly, he briefly introduced ideology when borrowing from Douglass North’s definition of ideology as a system of constraints on individual behavior. Two implications are that ideology and religion may be seen as playing a similar role of constraining and guiding individual behavior, and that both ideology and religion can be considered as individual beliefs, a point that would be explored when elaborating a hypothesis about individual beliefs and Tax Morale.

The impact of religious beliefs on individual Tax Morale was evaluated in detail in Torgler (2006). Using World Values Survey (WVS) data from several countries, the influence of religiosity on Tax Morale was gauged in different ways. For instance, active involvement with religious organizations appeared correlated with individual Tax Morale. Other measures of individual involvement with religion - attending services and belonging actively to a religious group - raises the Tax Morale for individuals engaging in those activities when they belonging to certain religions -Catholic, Protestant,



Orthodox. Those results provide support for the assertion that religion provides some behavioral standards that motivate individuals not to break norms (and among those that of paying their taxes). Interestingly, the study offered a counter-check of religion's influence on Tax Morale by analyzing whether individuals engage in certain rule-breaking behaviors such as claiming government benefits to which they were not entitled or knowingly buying stolen goods (Torgler identified it as trustworthiness). Higher trustworthiness was found to be positively related with one's Tax Morale both on its own right and with regards to religion.

In a different study, Torgler (2003a) studied Tax Morale determinants in Switzerland and reported that religiosity -measured as church attendance- had a positive influence on an individual's Tax Morale. Similar findings were reported by Alm and Torgler (2006) that compared Tax Morale between European countries and the U.S., and that reported that church attendance as a measure of an individual's religious beliefs was positively correlated with one's Tax Morale. Torgler and Schneider (2007) made a similar case in the comparison between three European countries -Spain, Belgium, and Switzerland- and found out that church attendance was positively correlated with individual Tax Morale.

Martinez-Vazquez and Torgler (2005, 2009) reported in their study of the evolution of Tax Morale in Spain since the democratic restoration that religiosity - measured as a self-assessment of a person being religious or not- also affects Tax Morale; it is hypothesized that religiosity and churches may induce individuals to restrain themselves from engaging in unethical behavior (such as cheating on taxes).

Overall, the empirical evidence provides support for religious beliefs playing a role in shaping individual Tax Morale; individuals' religious beliefs have been measured in different ways but the results have been similar, namely the higher the level of religiosity the higher the Tax Morale. The next subsection would comment on those results.

#### 3.4.1. Discussion

The evidence for the influence of religious beliefs on Tax Morale does not prevent from making some observations regarding the policy implications of those findings. First, religiosity may operate as a parameter for tax policy instead of a variable to be controlled or manipulated. It seems difficult (if not impossible) for governments to manipulate individuals' religiosity to increase their willingness to comply with their taxes. Even if religious beliefs run high among the population, attempts at manipulating the religious element to increase individual Tax Morale may risk a backlash as such moves may be resented and bring a decrease in Tax Morale.

A second aspect that seems to limit the importance of religious beliefs in shaping Tax Morale deals with the increasing secularization of modern societies. Dalton (1996) observed that religion has been losing its importance as a provider of guidance for voting behavior in modern industrial democracies. It is not difficult to see that there are less and less citizens for which religion plays a role in guiding their lives. Consequently, secularization has increased the number of nonreligious citizens for which religious norms of behavior – or the constraints against engaging in certain kinds of behavior –

may not apply. In other words, the importance of religiosity in shaping Tax Morale may be so for a decreasing portion of the citizenry.

Another issue concerns not the relevance of religious beliefs by themselves but instead that other individual beliefs have not been considered. Ideology is a clear candidate to be tested as to whether it affects individual Tax Morale. Because ideology – as well as religious beliefs – constraints individual behavior, it is somewhat surprising that the potential impact of the former has not been considered or tested.

Denzau and North (1994) discussed in more detail how ideology shapes human action through its positive and normative implications. Ideology fills the knowledge gaps individuals have about the environment by providing a representation of what the world is about and how it should look like. In other words, ideologies offer a “guide” on what to expect from the environment and how to interact with it,

*“...ideologies are the shared frameworks of mental models that groups of individuals possess that provide both an interpretation of the environment and a prescription as to how that environment should be structured...”*  
(Denzau and North 1994, p. 3)

By providing a normative prescription on how to structure the environment, ideology provides a critical component in the creation and crafting of the tools – institutions - that individuals use to transform the environment,

*“...the mental models that the mind creates and the institutions that individuals create are both essential to the way human beings structure their environment in their interactions with it...”* (Denzau and North 1994, 4)

Therefore, ideology provides a blueprint of the environment and a normative prescription on how it should look like, and institutions are shaped by those ideological

beliefs to operate on the environment to conform it to the normative prescriptions of ideology.

Our particular interest rests on how ideological beliefs may shape individuals' understanding of society and the state, and how those representations may translate into attitudes towards tax compliance – Tax Morale; that would be further developed in the next chapter.

### **3.5. Support for Democracy and Tax Morale**

In comparison with the previous factors, the influence of individual support for democracy in Tax Morale has received somewhat less attention. The main finding is that individuals who supported democracy as form of government were more likely to exhibit Tax Morale than those who did not (e.g. Torgler 2005b, Torgler and Schneider, 2007). In addition, certain democratic practices –direct democracy- affect Tax Morale. Torgler (2003a) studied Swiss cantons and reported that direct democracy institutions (referenda) have a positive impact on Tax Morale; the higher the degree of citizens' direct participation in government decision-making the higher the Tax Morale. Those findings mirror those from Feld and Frey (2002a) that reported higher Tax Morale in those Swiss cantons where participation rights were more extended.

In another study, Torgler and Schneider (2007) study of Tax Morale in three multi-cultural European countries – Switzerland, Spain, and Belgium - found that support for democracy -measured as the extent to which individuals evaluated democracy as a good system to govern one's country- affected individual Tax Morale, higher levels of

support for democracy were associated with higher Tax Morale for the two countries in which it was measured -Belgium and Spain.

What those findings suggest is that individual support for democracy drives Tax Morale up. Similarly, support for institutions that grant individuals more participation in policymaking - like referenda - also increase individual willingness to comply with taxes and lower tax evasion (Feld and Frey, 2002b). Two broad issues - how to measure individual support for democracy, and whether other types of political regimes may also elicit Tax Morale as long as individuals prefer them – will be discussed.

### 3.5.1. Discussion

The findings in the empirical literature suggest a link between individual support for democracy and individual willingness to comply with taxes. It is a plausible result; if they live under a democratic regime, those who favor democracy are more likely to be willing to contribute to sustain the political regime they prefer. Two issues deserve further attention. The first one concerns with how to measure individual support for democracy. The second issue is whether individual preferences for other types of political regimes may also affect Tax Morale.

With regards to the first issue, Inglehart (2003) has questioned the extent to which measures of overt support for democracy really measures individual commitment with democratic values and democracy as a desired system of government (those have been the measures used in the reviewed studies on Tax Morale). To illustrate his claim, he tabulated the World Values Survey's response to the questions used to gauge individual support for different political regimes. Support for democracy seems virtually universal

even where their political systems are clearly away from democracy (as understood in the Western World), such as China. However, individual support for other types of regimes (military rule, or ruled by leaders not hindered by elections or parliaments) show a pattern that betrays measures of overt support for democracy. Individual support for democracy is very high among individuals from advanced democracies; support for non-democratic government types is quite low. The further away the move from those democracies, the higher the support for non-democratic forms of government. Therefore, assessment of whether individual support for democracy affects Tax Morale should take into account issues of how to better measure that support.

The second issue is a generalization of the finding that support for democracy increases Tax Morale. The specific question to elucidate concerns whether individuals are more willing to comply with their taxes when those resources support a political system that they prefer - regardless of it being a democracy or not.

### **3.6. Demographics and Tax Morale**

Analysis of socio-demographic factors and their impact on Tax Morale has been subordinate to establishing the primary importance of other factors, e.g. trust in government, religiosity, or support for democracy. In particular, I would like to pay some attention to the circumstance that older individuals have been found to exhibit higher Tax Morale than younger ones. A brief review of the literature on political trust shows a potentially interesting pattern; younger individuals are consistently less trusting of government and political institutions than their elder peers. Because younger individuals

share both lower Tax Morale and lower trust in political institutions it may be of interest to explore whether there is some common factor that may explain both findings.

Torgler (2003a) use data from Switzerland and reported that individual's age was related with Tax Morale; individuals fifty to sixty-four years old had higher Tax Morale than those who were below fifty years old. Torgler (2003b) used survey data from Europe and the U.S. finding that age increases individual Tax Morale in both cases (EU and U.S.). Cummings et al (2004) reported similar findings in their comparison of Tax Morale between South Africa and the U.S. Older individuals again are more likely to have higher Tax Morale than younger ones; with women and married individuals having higher Tax Morale than men and singles respectively.

Martinez-Vazquez and Torgler (2005, 2009) studied the evolution of Tax Morale in Spain since democratic restoration and reported that the older the individual the higher his Tax Morale was although the marginal effects were small. Unlike other studies, this one used data from the first four the World Values Survey thus providing a view of evolution of Tax Morale over time. Torgler (2005) in his study on Latin American countries reported that older individuals tend to have higher Tax Morale than younger ones; other socio-demographic variables showing varied results. In his study of religiosity and Tax Morale, Torgler (2006) reported that age being positively related with Tax Morale –the older the individual the higher the Tax Morale, women having higher Tax Morale than men. Alm and Torgler (2006) studied Tax Morale in the U.S. and Western Europe and reported age being positively related to Tax Morale – older individuals showing higher Tax Morale than younger ones. In addition, females showed higher Tax Morale than men. The same result – higher Tax Morale among older individuals and

women – was reported by Frey and Torgler (2006) in an empirical study of thirty European countries (western and post-communist countries). Torgler and Schneider (2007) studied three multi-cultural European countries (Spain, Belgium, and Switzerland) and found –again- that older individuals (50-64 year olds) have higher Tax Morale than those 30 and younger (baseline group). Finally, Feld and Torgler (2007) studied Tax Morale in Germany after reunification and the results regarding individuals’ age and Tax Morale have been in line with those already reported, that is younger individuals showing consistently lower Tax Morale than older ones.

Overall, the finding that older individuals have a higher willingness to comply with taxes has been consistently reported in the reviewed articles. In turn, those results have been explained as result of older individuals being more deeply “invested” on societal expectations thus increasing the cost for those so invested of behaving dishonestly (Torgler, 2003b). Although a plausible explanation, there may be alternative ways to interpret them; in particular, similar patterns have been observed regarding trust in political institutions invites further investigation.

### 3.6.1. Discussion

Dalton (2005) used U.S. data to test changes over time in patterns of trust in political institutions. Interestingly, patterns of political trust are quite similar with those observed in empirical studies of Tax Morale; younger individuals show less trust in political institutions and –as we have seen- have lower Tax Morale. Dalton’s findings have been replicated virtually all advanced democracies of North America, Western Europe, and Japan (Norris 1999, Dalton 1999, Pharr, Putnam and Dalton, 2000); because



Tax Morale studies have covered those regions as well makes the possibility of a common explanation to those patterns.

The post-materialist value change hypothesis (Inglehart, 1971, Inglehart and Flanagan, 1987) has been offered to explain changes in trust in political institutions, and it may be suitable to explain individual Tax Morale of young v. old individuals as well. He contended that individuals' values are acquired until early adulthood and then remain constant for the rest of their lives, and that those values were influenced by the social and economic environment during the value-formation phase. Therefore, to the extent that different cohorts face different socioeconomic conditions their values would diverge. If that is the case, it may be that differences in Tax Morale among young and older individuals would not be the result of age but instead the consequence of upholding different values. The coming chapters will elaborate with more detail what those post-materialist values are about and how they may affect Tax Morale.

### **3.7. Conclusions**

Alternative models of tax compliance and Tax Morale share some similarities. They all share a common interest for understanding the role of individual norms, social norms, and institutions, in explaining tax compliance. That separates them from the neoclassical model of tax evasion which, in its basic form assumes that control and punishment drives tax compliant behavior.

Tax Morale is the intrinsic motivation to pay taxes. That willingness to comply with taxes is influenced by moral norms, social norms, and institutional arrangements.

Tax Morale acknowledges that individuals differ in their sensitivity to different types of norms which allows identifying broad typologies of taxpayers – instead of the single typology assumed in the neoclassical model. Interestingly, those taxpayer typologies may be readily comparable with similar typologies of individual behavior regarding individual attitudes towards cooperation.

Because Tax Morale focuses on what drives individual attitudes towards tax compliance, it may require additional work to develop how tax compliance attitudes translate into tax compliance behavior. Data availability may be a problem as the amounts of information (and its feasibility) are more demanding than with the traditional model; despite of this, some experimental work done in other social and natural sciences suggest that there is a line connecting individual attitudes with behavior.

The table below summarizes the empirical findings in the Tax Morale literature and presents the issues that will allow development of the hypotheses to be proposed in the next chapter.

**Table 3.2. Tax Morale. Summary of Findings and Issues**

Findings	Issues
<p><b>Trust in Government</b></p> <p>Individuals who trust government =&gt; higher Tax Morale</p> <ul style="list-style-type: none"> <li>• Govt. address individual preferences about spending</li> <li>• giving voice to individuals</li> <li>• treating individuals fairly</li> </ul>	<ul style="list-style-type: none"> <li>• What do governments do to elicit/undermine individual trust?</li> <li>• What government organizations are more likely to do those actions?</li> </ul>
<p><b>Religious beliefs</b></p> <p>Individuals who uphold religious beliefs =&gt; higher Tax Morale</p> <ul style="list-style-type: none"> <li>• religious norms limit individual discretion</li> <li>• reduce uncertainty on what to do</li> <li>• provide social “morals” or “perennial police”</li> </ul>	<p>Ideology guides behavior</p> <ul style="list-style-type: none"> <li>• How the world works + how it should be organized</li> <li>• Affect institutions’ design (e.g. government)</li> </ul>
<p><b>Support for Democracy</b></p> <p>Support for democratic system raises Tax Morale</p> <ul style="list-style-type: none"> <li>• Individuals would support a system they favor/ resist a system they dislike</li> </ul>	<p>How do we measure “support for democracy”?</p> <ul style="list-style-type: none"> <li>• Some measures contradict with others gauging support for alternative other political systems (e.g. military rule)</li> </ul>
<p><b>Individual Values</b></p> <p>Older individuals have higher Tax Morale than younger ones</p> <ul style="list-style-type: none"> <li>• Older individuals are more “invested” in society; more “costly” to evade taxes and get caught</li> </ul>	<p>Post-materialist value change hypothesis: why individual values change over time</p> <ul style="list-style-type: none"> <li>• Younger individuals less trustful of political institutions</li> <li>• Younger more rebellious against authority</li> <li>• Value change process started in the 1960s/1970s</li> </ul>

## 4. Theoretical Framework. Hypotheses

### 4.1. Trust in Government and Tax Morale

A consistent finding in the literature is how trust in government positively influences individual Tax Morale. Although the results are reasonable it is unclear what governments do to elicit individual trust. We are doubtful about the assertion that individuals trust government when it spends taxes according to individuals' preferences, or whether governments elicit individual trust when they treat individuals with fairness. Therefore, in order to determine how individual trust in government happens, we need to address two issues,

1. What actions do governments take that may affect individual trust?
2. What are the government organizations most likely to produce those actions?

In order to answer those questions we introduce a distinction among government organizations that has been borrowed from Rothstein (2005). The **Input** side of government converts individual preferences into policies that will produce the goods and services that individuals want government to provide. The **Output** side of government, by contrast, actually delivers those goods and services to individuals. The proposed hypothesis rests on the fact individuals' interactions with the output side of government affect their well-being immediately. Therefore, what happens at the point of public good

delivery is what makes taxpayers to trust or distrust government and therefore affect their Tax Morale.

#### 4.1.1. Input Side, Trust, and Tax Morale

The modern state is not organized as a monolithic structure. Instead, government is a conglomerate of specific organizations that fulfill specific roles and responsibilities. Modern democracies use a well-known structure of three branches of government – executive, legislative, judiciary. The input side is constituted – among democratic regimes – by Parliaments (the legislative branch) and the Executive branch (e.g. Prime Minister, President) because they introduce taxpayers’ preferences for public goods and services into government. Representative democracy does that through elections that send elected members to populate those organizations to advance the policies favored by a plurality of the electorate. Because those members represent the part of the electorate that supported them, both the Executive and the Legislative branch of government are partisan. They are controlled by the political fraction or fractions that gathered the broadest support among voters. By extension, the actions that those organizations take – the policies they advance - are also partisan,

*“...the main idea of the representative aspect of democracy is partisanship...to ensure the implementation of the political majority’s programs...there is nothing to stop the political majority from choosing to favor certain groups...” (Rothstein 2005, p. 109)*

Although it may be counter-argued that those bodies’ actions aim to serve the “common good”, such assertions miss the point; what in fact is being served is the version of common good that has been favored in the last election. Consequently, the

actions taken by those branches of government are unlikely to elicit trust in government and affect Tax Morale for all taxpayers. To be sure, those who support those actions may trust government but it does not explain why those others whose preferences would be favored would be willing to comply with their taxes<sup>3</sup>. Hetherington (2004) pointedly commented that people need to trust government when they pay its costs but they do not receive benefits.

An alternative view of the problem using different conceptions of justice yields a similar result, namely that the input side may not affect individual trust and Tax Morale. Wenzel (2003) introduced a discussion about the three different types of justice that government seeks to address – distributive, retributive, and procedural, justice. Issues of distributive justice - who is best entitled to receive a resource allocation, or bear a cost – are decided by input government organizations. Issues of retributive justice– what sanctions are fair for norm violations – are also decided on the input side of government. Because there are different conceptions of both distributive and retributive justice those issues are decided in the input side of government. For instance, whether unemployed people deserve receiving help in their predicament versus giving money to business as tax cuts to reduce unemployment, or whether capital punishment is the appropriate penalty for certain offenses are decided by the legislative with the executive making its contribution to the issue .Decisions in the input side organizations are made via vote –the alternative with the largest support is enacted. Consequently, not everybody will be

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<sup>3</sup> If that were indeed the case, then we are back to the neoclassical model of tax evasion; individuals receive what they prefer from government and therefore have no incentive to cheat whereas they would cheat when they do not receive what they want.

satisfied with the allocations made by, say parliaments; we got partisanship again but without naming it. I will introduce procedural justice in the next point, but suffice for now to say that it helps bridging conflicting views regarding distributive and retributive justice ensuring that like individuals receive like treatment from authorities.

The problem with the assertion that input institutions drive trust in government and Tax Morale is focused squarely on the most visible element of democracy – voting - but voting may be problematic. Concerns about the potential dangers of voting may be traced back to the U.S. revolution; Madison (1788) observed that individual freedoms are threatened not only by government actions but also by majorities’ decisions threatening the freedoms of minorities. Levi (1998) made a case similar to that of Madison but went further contending that the introduction of safeguards to provide special protections for minorities may reduce the danger of a “dictatorship of the majority” at the expense of creating a new problem, namely majorities’ resentment towards minorities because of the latter’s obstruction of the will of the former. She illustrated the point with French Speakers in Canada that fear being swamped by English-speakers that are the majority of the population in issues running along the language divide line.

To conclude, government organizations in the input side may not seem likely to elicit individual trust because their actions are partisan therefore favoring certain groups of individuals over others. Because of this characteristic, it is unlikely that actions undertaken by the political organizations of government would make taxpayers that do not like those decisions to be willing to comply with taxes - except for a return to the neoclassical model of tax compliance. The problem rests with voting mechanisms that – if left unrestricted - may allow majorities to undermine the rights of minorities, or impose

undue burdens on them. Thus, with political organizations of government in question as drivers of individual Tax Morale, the focus in the next section is with the side of government that delivers policy to citizens – the output side - to evaluate whether their actions may affect Tax Morale.

#### 4.1.2. Output Side, Trust, and Tax Morale

The previous section has shown that trust in government organizations in the input side may fall short of explaining why individuals trust government and exhibit Tax Morale -the decisions they take will leave some citizens dissatisfied – and thus unable to explain why those whose preferences have not being met are not more likely to cheat on their taxes. Lower voter turnout also conspires against that explanation because many taxpayers do not even bother with voicing their policy preferences – they do not vote. Therefore, I will turn to analyze what happens in the output side of government and whether its actions may affect Tax Morale.

Procedural Justice (or procedural fairness as it is also called) is an important component of government actions in the output side. In his study of justice types, Wenzel (2003) contended that this aspect of justice has to do with the fairness of procedures used to reach a decision. Tyler’s (1988) empirical research made a critical connection showing how procedural justice explains why individuals submit to decisions made by authorities even when those decisions impose costs upon them. The basic insight from Tyler’s work is that individuals are interested not only on what they get from authorities – the realm of Distributive and Retributive Justice – but also on how they get it – Procedural Justice. In many instances, the complexity of the issues affecting individuals may exceed their



ability to understand them (Tyler, 1988, Ayers, 1992). In those cases, instead of evaluating authorities' decisions based on what they get (or are asked to contribute) individuals instead focus on how authorities have treated them during the process leading to the decision. When individuals feel they have been treated fairly, they are more willing to accept those decisions.

An important consequence of procedural justice is that when individuals perceive they have been treated fairly by the government they may reciprocate in kind by becoming more willing to comply with government's norms and decisions, including willingness to comply with their taxes. A broad and expanding consensus exists on how issues of fairness and legitimacy affect trust in authorities in a variety of arenas, impacting voluntary compliance with their norms and requests (Levi, 1998, Levi and Stoker, 2000, Rothstein, 2005, 2009, Rothstein and Teorell, 2008), tax compliance (Feld and Frey, 2002, 2007, Murphy, 2004), law enforcement (Sunshine and Tyler, 2003) and how it may affect individuals' cooperation with authorities (De Cremer and Tyler, 2007). Procedural Justice explains why individuals accept outcomes even when they are not favorable. Because of its concern with the fairness of procedures leading to an adjudication decision, procedural justice helps in arbitrating conflicts among different conceptions of distributive and retributive justice (Wenzel, 2003). Perhaps as important, Procedural Justice is not limited to the relationship between individuals and the government but encompasses other areas of human activity as well. For instance, individuals in the marketplace often care about how they are treated (Lane, 1988).

An interesting and recent development regarding fairness concerns the finding that individuals actually obtain satisfaction from receiving fair treatment, in the same way

they get satisfaction when they get the goods and services they prefer. Economists have started exploring whether procedural justice is a source of satisfaction (utility) for individuals. Benz, Frey, and Stutzer (2002) hypothesized that individuals derive satisfaction (utility) not only from outcomes (consumption of goods and services) but also from the process leading to those outcomes calling the satisfaction derived from processes *procedural utility*. Frey and Stutzer (2005) used survey data from Swiss cantons to test empirically the proposition that fairness of the political process might influence individual well-being. Individuals in Swiss cantons with more developed direct democracy procedures (e.g. referenda) were more satisfied than those living in less politically developed cantons, independent of those rights being exercised (effectively voting) or not.

The finding that individuals obtain satisfaction from the way they are treated gives another reason to the experimental finding that direct participation in policy decisions increases tax compliance and reduces tax evasion (Alm, Jackson, and McKee, 1993, 1999, Feld and Tyran, 2002). In light of the finding that individuals value receiving fair treatment, what individuals most likely value regarding voting mechanisms is having the **right** to express their views regardless of the final result; they most likely know that their individual influence on the final outcome of the election is minuscule. Political participation rights, however, are just one instance of how governments may elicit individual trust, and the discussion is about how Procedural Justice works in the output side of government, and a good starting point is examining the treatment received by taxpayers under democracy.

Democracy posits that individuals are equally endowed with freedoms and rights. The most visible are the right of voting for candidates to public office and competing for it. Although they are important, there are other aspects of equality that would have an immediate impact on individual well-being. In addition to the already mentioned rights, individuals are equally entitled to receive their share of public good and services, and here is where procedural justice comes into play. Political organizations in the input side decide on what the bundle of goods and services should be, but they do not deliver it. Instead, government organizations in the output side do; when they deliver those public goods and services they should treat individuals without any reservation or restraint that is not in the norms regulating the provision of those goods and services; in other words, they should treat everyone without any preconceived ideas and biases, that is individuals should be treated with impartiality (Rothstein and Teorell, 2008). In other words, output organizations are impartial when the processes and procedures used to provide (or deny) goods and services to individuals should be transparent, explicit, and consistently applied to all<sup>4</sup>. It is impartial treatment of individuals what legitimates government actions in the output side in the same way that fair and free elections legitimate access to the occupants of public office. When government treats individuals in a fair way, it becomes legitimate by the way it exercises its powers over the citizenry.

The importance of fair and impartial treatment highlighted by Rothstein and Teorell (2008) has been recognized in the tax compliance literature as promoting

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<sup>4</sup> Lane (1988) highlighted an important aspect of procedural fairness when positing that procedures and norms that are too complex for the average individual to understand are unfair even if applied consistently to all individuals; he contended that it is unfair to push individuals to understand norms and procedures beyond the reach of their abilities.

voluntary tax compliance. Using clear and transparent procedures with taxpayers, listening to their concerns, helping them to meet their tax obligations, are all part of the new paradigm of tax compliance that seeks to build a relationship of trust and respect between taxpayers and authorities (Alm and Martinez-Vazquez, 2007, Braithwaite 2003a) taxpayers respond to the treatment received from authorities when deciding whether to comply with their taxes (Feld and Frey, 2007); they are more likely to comply when they perceive they have been treated fairly even if compliance means accepting a sanction for non-compliance. Overall, fair treatment of those who deal with the output side of government – procedural justice - is a key element in eliciting cooperation and trust from individuals (De Cremer and Tyler, 2007).

The importance of fair and impartial treatment to legitimate the exercise of authority in the output side becomes clear when deviations from it such as corruption are considered. By making access to public goods and services contingent to engaging in private transactions with government officials exchanging them for bribes or other favors, corruption effectively undermines procedural justice because public goods are only available those who bribe their access to them; democratic ethics being damaged in the process as well as individual trust (Warren, 2004). Unlike corruption in the input side of government, corruption in the output side has an immediate impact on individual well-being; getting unemployment or retirement benefits, getting protection of one's property and physical safety, or getting healthcare and education, are some of the circumstances where individual well-being is at stake and where corruption or other forms of discrimination breaks down the basic democratic principle of equality among individuals. In turn, individuals may use what they have learned about government through those

interactions with government officials and make inferences about the extent to which government as a whole represents their interests (Rohrschneider, 2005).

Individual exposure to corruption does not only affect its immediate well-being but also further undermines the legitimacy of the political system and interpersonal trust. Seligson (2002) found that to be the case when studying corruption in Latin American countries. It would be very difficult for a government to claim that it treats all individuals equally when its citizens are victims of corruption or discrimination at the hands of street-level bureaucrats or the police. Therefore, individual trust is elicited or undermined according to the way individuals are treated by the output side of government. Consequently, we will test the following proposition,

**Individuals that trust the output organizations of government - courts, government bureaucracies, or law enforcement - would be more likely to exhibit Tax Morale than those who do not trust them.**

The policy implications are straightforward. If the hypothesis is empirically supported, it would suggest that government attempts to elicit Tax Morale should start where government officials meet individuals face-to-face (output side) because trust in government is mostly built, maintained, or destroyed, there. The relevance of direct, face-to-face interactions in building relationships of trust and cooperation between taxpayers and tax authorities is supported by findings that suggest direct contacts between individuals provide superior clues about the trustworthiness of one another (Ostrom 1998, 2000a), which in this case would translate as taxpayers getting clues about government's attitudes towards its citizens through the treatment received from its officials.

Second, the importance of the output side of government in building individual trust – a condition for increasing Tax Morale – suggests that tax administration reform is one part of a broader reform of public bureaucracies dealing with the public. What the tax compliance literature has proposed as paradigm for tax authorities to improve voluntary tax compliance – fostering trust between tax authorities and taxpayers by treating the latter with respect, apply transparent procedures to them, help out taxpayers to fulfill their tax duties, among others – are not different from what political scientists have been proposing for the output side of government if individual compliance wants to be elicited –treat individuals with fairness and impartiality, apply procedures individuals can understand, provide voice to individuals in their dealings with authorities.

A third implication is that reforms in the organizations of the output side of government are necessary for democracies to consolidate as viable regimes and building trust among individuals. A political system's legitimacy before its inhabitants stems not only from how it has accessed power but also by the ways it exercises power over its citizens. Legitimacy for democratic regimes require not only vertical accountability, that is government officials held accountable to citizens by way of free and fair elections, but also horizontal accountability where state institutions control one another and citizens may be sure that their rights and freedoms will be upheld and respected (O'Donnell, 2004). Because exposing individuals to government corruption undermines legitimacy of the political system as well as interpersonal trust (Seligson, 2002), building a professional and impartial bureaucracy under the same mold proposed for tax administrations may be a good step in re-building both trust in government and in their fellow citizens (Rothstein 2000, Rothstein and Stolle, 2002)

## 4.2 Ideology and Tax Morale

Studying ideologies' potential influence on Tax Morale is particularly interesting of the way ideologies shape individuals, society and its institutions. However, regardless of its salience and its presence on political and policy debates we are unaware whether ideology and its potential impact on Tax Morale have been addressed. Denzau and North (1994) discussed how ideologies shape economic change, asserting that dogmas, myths, and incomplete theories play an important role in explaining what individuals do and why they do it -because of its positive prescriptions on how the environment works and how it should be structured.

Ideologies are necessary because of individuals' inability to fully grasp the world around them and how to interact with it. Because of those limitations, individuals cannot form an objective model of the environment necessary to successfully operate on it. Ideologies play the crucial role of filling in knowledge gaps providing a representation of what the world is about and how it should look like; it is in this way that ideologies shape individual behavior. When studying the influence of religious beliefs on Tax Morale Torgler (2006) borrowed a definition from Douglass North similar to the role of religious beliefs. Ideology and religion share the feature that both constrain individual behavior by promoting certain actions and discouraging others.

Ideologies have a crucial influence in the creation and crafting of the tools used to transform the environment – institutions. Because ideology supplies the “evidence” that is not otherwise available (ideology's statements do not need to be factually accurate because if those facts would exist then ideology would not be necessary), it ends up

influencing institutional design since that design will be based both on facts (available) and beliefs (used in the absence of factual evidence). However, those institutions would most likely reflect the prevailing ideology of those with the power to devise or influence institutional creation or change<sup>5</sup>. Ideologies are the mental models representing the environment while institutions materialize those mental maps in rules and norms that allow individuals to operate in that environment.

One interesting aspect of ideology is that different – and contradictory - ideologies may coexist. O’Donnell (1998) provides an illustration on how alternate and contradictory ideologies are at the foundation of democratic institutions. He contended that three different traditions –democracy, republicanism, and liberalism – contribute a fundamental pillar of modern democracy but also contradict the other two, as each have a different view on the role of individuals, private and public spheres, and government. The democratic tradition contributes the notion that individuals are equally qualified to decide on government matters and occupy public office; republicanism provides the idea that public officials are subject to the limits imposed by laws and to the purse of the public interest (as opposed to personal interests). Finally, the liberal tradition supplies the idea that there are certain individual rights that no power should violate (not even the state). However, each tradition (ideology) taken separately and to its extreme denies the basic tenets of the other two. Taken each of those ideologies alone, each denies the constitutive

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<sup>5</sup> An illustration with a contemporaneous issue may be done by considering the opposition of certain groups to same-sex marriage. Their opposition is based on the grounds that their beliefs say that marriage is meant to be between a man and a woman, to which they add some ‘scientific’ evidence that it is indeed questionable. But the point to be made is that religion plays the same role as ideology. With no ultimate evidence on the merits or demerits of same-sex marriage, those groups instead rely on views that tell individuals what the world is about and how the institutions dealing with it should be structured.



“facts” of the other two. Thus, the democratic component alone leads to a dictatorship of majorities; no individual right – the cornerstone of liberalism – should stand in the way of that majority. By its part, liberalism alone ignoring democracy and republicanism degenerates into plutocracy; no notion of common good would be supported that may encroach individual rights and freedoms (e.g. property rights). Finally, prevalence of republicanism without democracy and liberalism degenerates into dictatorship by self-righteous elite –only the common good matters and individual rights and majorities’ opinions are secondary. Emphasizing how ideologies coexist even if they contradict one another would be useful in the coming section when developing the argument on how different ideological positions regarding government policy in general and taxation in particular may have an impact on Tax Morale.

To summarize, ideologies give individuals a blueprint of the environment and a normative prescription on how it should be manipulated. They are useful in helping individuals to shape their mental maps of reality and by extension they shape societal that operate on the environment in order to achieve the normative prescriptions of ideology. However, ideologies are not objective knowledge but a combination of some factual information with beliefs, ideas, prejudices, and half-baked theories to enable individual and collective action.

With those basic insights about ideology we can now turn towards more specific positions regarding the state and its actions particularly regarding taxation.

#### 4.2.1. Ideology, the State, and Public Policy

We have seen how ideology shapes individual understanding of the environment and the societal institutions that direct modern societies including modern democracies. We have explored briefly how ideologies have shaped different aspects of modern democracies but we need to go further and explore how ideologies shape individual attitudes towards the state and especially towards tax policy because taxation is unique to government.

Governments –like individuals - face uncertainties about how the environment works and the potential impacts of policies. The actions that governments propose to undertake, those that are undertaken, and those they refrain from doing are influenced – among other considerations - by ideology. Ideology in policy debates arise from two broad positions that seek to provide a “model” about the interaction between individuals, society, and the state. One position posits that state intervention in individual (private) matters is always negative; it is proposed that state interventions in society should be limited exclusively to protect individual freedoms and private property. With those “facts” settled, the normative prescription recommends that the smaller and the least active the State the better because state size and activity represents a real threat to individual freedom (Rudolph and Evans, 2005).

The other position starts from the premise that unchecked economic inequality among individuals is a threat to individual freedom because extreme inequality would empower the most affluent individuals to rule in their favor undermining the freedoms and justice of all. Therefore, the normative action for the state is taking a stance and act reducing economic inequality among individuals.

A quick glance of both ideological positions reveals their gap-filling nature since they are more about values and beliefs than about facts. For instance, the factual claims made by each are unproven. It is unproven that all government intervention in society is negative in the same way that it is not clear that solving economic inequality should be only concern of the state. It may happen that differences in material means translate into differences in individual standing when claiming protection for one's rights, which in turn undermines equality of individuals that democracy posits as a foundational concept; however, eliminating economic inequality may carry the risk of destroying other individual rights in the process as it has been the case with communism<sup>6</sup>. The "death of ideologies" predicted after the fall of communism has not happened; economic recessions, persisting poverty, and increased crime are issues to be dealt with (Dalton 1996, p. 330). In turn, uncertainty about the causes of those issues and the effectiveness or undesirable effects of policies opens the door to solutions prescribed by competing ideologies. Once again, ideologies compete and conflict in the policy arena the same way they conflict and compete at the institutional level.

Reviewing the empirical evidence linking ideology with policy attitudes reveals how ideologies provide guidance and support for a broad range of political attitudes. For instance, ideology provides individuals with stable guidance on issue attitudes (Schneider and Jacoby, 2005). More specifically, differences in ideology explain individual differences on framing policy issues with conservatives presenting government spending

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<sup>6</sup> Another illustration comes from health policy – mandatory vaccination. It may curtail individual rights to refuse treatment but the benefits to accrue to society may only be reached when everybody is mandated to comply -vaccination of all that may be vaccinated may protect those who cannot receive the vaccine by limiting the possibility of contagion.

differently from the way liberals see it. Whereas the former emphasizes over-the-board reductions in spending – consistent with their view that government action is always negative - the latter emphasizes keeping aid to disadvantaged groups in society untouched – consistent with their standing towards reducing economic inequality (Jacoby 2000, p. 3). Specifically, Schneider and Jacoby (2005) found that ideological positioning (liberal-conservative) were significant predictors for individual attitudes towards welfare spending in the U.S.; the most conservative the individual the most opposed to welfare expenditure. Rudolph and Evans (2005) reported similar results not only for welfare spending but for other expenditure areas as well. Earlier studies found that ideological beliefs affect individual position on government issues more generally (Jacoby, 1990, 1991).

With empirical evidence supporting the role of ideologies in shaping individual attitudes on policy issues, the question becomes how ideology may influence Tax Morale. As with other issues, taxation and tax compliance shows divisions along ideological lines. Specifically, conservatives make a case for a limited government because they fear increased state power would threaten individual freedom (Rudolph and Evans, 2005); liberals on the other hand are less concerned with taxes and instead more focused on what is done with the resources extracted through taxation and how they may benefit disadvantaged groups (Jacoby, 2000). Through their “positive” and “normative” dimensions ideologies shape individual attitudes towards taxes as a correlate of shaping individual positions regarding government policy more generally. Wahlund (1992) studied factors that affected individual tax compliance and found that – among others -

Swedish taxpayers who supported conservative parties were to evade more taxes than those not supporting them.

Thus, we may enunciate the following hypothesis,

**Individuals upholding views a limited role for government – congruent with conservative or right-wing ideological position - would have lower Tax Morale than those whose support a more active of government –consistent with liberal or left-wing ideological beliefs.**

Policy implications if the hypothesis is empirically supported are straightforward. Governments should be aware that attempts to change individual attitudes towards taxes (or towards government more generally) may be mediated by the prevailing ideology among the citizenry. For instance, an electorate that holds a favorable view of government activities may help governments in implementing reforms (in taxation and in other fields), whereas individuals that uphold a negative view about government activities beyond protecting private property and individual rights would most likely resist any reform that is interpreted as increasing government intervention in society. Tax administration reforms in Spain during the 1980s provide an illustration of policy changes accomplished partially as result of positive view of individuals about those actions. On the one hand, the tax administration saw a doubling of its personnel (Onrubia 2007)<sup>7</sup>, and the strong increase of Spain's tax effort (tax intake almost doubled from the 1970s to the early 1990s up to 40 percent of GDP) (Martinez-Vazquez, 2007) plus the

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<sup>7</sup> Onrubia, J. (2007). The Reform of the Tax Administration in Spain. Fiscal reform in Spain: accomplishments and challenges. J. Martinez-Vazquez and J. F. Sanz-Sanz. Cheltenham, UK;Northampton, MA, Edward Elgar: pp. 484-531.

introduction of new taxes such as the VAT. On the other hand, Spaniards' ideological attitudes towards government were at the very least not opposed to those reforms; in fact, government activity was seen in a positive light regardless of individuals' political and ideological loyalties (McDonough, Barnes, and Lopez Pina, 1998, pp. 63-64). Over time, however, those perceptions changed and by the 1990s public enthusiasm for government activism had disappeared. The importance of ideology on tax compliance is highlighted by Wahlund findings that provided a link between individual ideological preferences and tax evasion.

### **4.3. Support for Political Regimes and Tax Morale**

The literature reviewed in the previous chapter reported that higher individual support for democracy is associated with higher Tax Morale (Torgler 2003, Torgler and Schneider, 2007). Those results are interesting not only because of the findings in themselves but also that they may be part of a more general pattern, namely that individuals would exhibit higher Tax Morale when the political regime in place matches their regime preferences. For instance, an individual supportive of democratic regimes would have higher Tax Morale – as it was reported – when the regime under which s/he lives is democratic than if living under an authoritarian one. Conversely, individuals that support non-democratic regimes might exhibit higher Tax Morale when the regime in place is non-democratic. That possibility will be explored in the coming paragraphs.

#### **4.3.1. Measuring Individual Support for Political Regimes**

In order to make a general case about alignment of individual regime preferences with the current regime in power as influencing Tax Morale, it is necessary to further elaborate on how to measure individual support for political regimes. Inglehart (2003) observed that measures of overt support for democracy included in well-known surveys like the World Values Survey show an almost unanimous support for democratic governments worldwide. However, when checking individual preference for competing political regimes, there is also a substantial level of support for non-democratic forms of government, which is even more notorious among those living in new democracies, hybrid regimes, or authoritarian ones.

In his article, Inglehart illustrated his points using the proportion of respondents that reported support for different political systems in the 1999-2000 wave of the World Values Survey. The questions asked individual support for a democratic system<sup>8</sup>, a system ruled by strong leaders that do not have to put up with parliaments and elections and the last alternative is leave the military to rule<sup>9</sup>. Table 4.1 presents information similar to the one used by Inglehart's article but from the most recent wave (2005-2008) of the World Values Survey. Survey respondents have been grouped by the three main categories of countries computed by the Freedom in the World Survey –Free countries, Partial Free, and Not Free countries; in addition, the best-scoring democracies have been placed in the first column.

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<sup>8</sup> That particular item has been used in the Tax Morale literature to measure individual support for democracy.

<sup>9</sup> The survey also includes a category of regimes where technocrats, not politicians, make the government decisions. In keeping with Inglehart's decision I have not included it in the tables where I presented his findings using the last wave of the World Values Survey.

<b>Table 4.1. Support for Different Political Systems (in %)</b>				
	<b>Liberal</b>			
	<b>Democracies</b>		<b>Partial Free</b>	<b>Not Free</b>
<b>Freedom House Scores</b>	<b>1</b>	<b>1 to 2.5</b>	<b>3 to 5.5</b>	<b>6 to 7</b>
<b>Having a Democratic Political System</b>				
Very Good / Fairly Good	93	91	95	93
Fairly Bad / Very Bad	7	9	5	7
<b>Having a strong leader that does not bother with Parliaments / Elections</b>				
Very Good / Fairly Good	27	38	43	22
Fairly Bad / Very Bad	73	62	57	78
<b>Having the Army Rule</b>				
Very Good / Fairly Good	9	20	37	35
Fairly Bad / Very Bad	91	80	63	65

Source: 2005-2008 World Values Survey

The figures displayed confirm Inglehart’s insights. For instance, the top third of table 4.1 shows an universal endorsement of democracy even among those living in countries that fall short of being democratic themselves (Partial Free and Not Free). The lower panels also show that support for competing political regimes questions individual commitment with democracy and with it the validity of the findings about the relationship between individual support for democracy and Tax Morale. To illustrate, a sizable proportion of individuals in liberal democracies (second column, 38 percent) that offered support for democracy north of 90 percent also consider very good or fairly good to have strong leaders that are not bothered with elections and parliaments, thus, plainly contradicting their support for democracy. Even among those living in the highest-scoring democracies ranking the highest scores in the Freedom in the World Survey more



than a quarter supports non-democratic leaders that leave parliaments and elections aside. Moving down the scale of political and individual rights (Partial Free countries column) shows a larger proportion of individuals - 43 percent - supports rulers that are not subject to parliamentary or electoral accountability which makes look the 95 percent of support for democracy for the same individuals in those countries a very suspicious figure. What the figures reveal is that measuring support for democracy by using measures of overt support provides problematic results.

Instead of discussing how to better measure individual support for democracy – a discussion that Inglehart offered in his article, I would instead pose a broader question, namely whether individual support for the political regime in place in a given country may affect Tax Morale. The earlier insight that individuals who supported democracy exhibited higher Tax Morale leaves outside several of the countries in the WVS that fall short of what a democratic regime is about – according to the Freedom in the World Survey. The crucial point is that for those individuals whose regime preferences favor the regime actually in office, it seems reasonable they would be more willing to comply with their taxes. To illustrate, individual support for democracy would only be relevant for individual Tax Morale when the regime under which the individual lives is democratic, and conversely individual support for democracy would lower Tax Morale if the political system is not democratic. The results linking support for democracy and Tax Morale follow that logic –the hypothesis has been tested with individuals coming from democratic countries – although in light of the problems with the measurement of support for democracy it may be necessary to re-evaluate.

Consequently, we may test the following proposition,

**Individuals who support a certain political regime are more likely to exhibit Tax Morale if their preferences are represented by the regime that actually rules in their countries.**

The implications of this hypothesis are straightforward. If individual beliefs support democracy and the prevailing governance system is itself democratic we would expect Tax Morale to be higher among those supporting that particular form of government. On the other hand, if individual beliefs do not correspond to those of the political system under which s/he lives, e.g. supporting democracy under an authoritarian system then we would expect Tax Morale to be low. It seems reasonable that individuals who support democracy and are forced to live under an authoritarian government to resist such situation by (among other things) cheating on their taxes (Torgler, 2003)

Conversely, one way in which individuals would exhibit support for political system is by willingly paying their taxes. The case of large shifts in political regimes - such as transition from authoritarianism to democracy – seems more complex to elucidate. On the one hand, individuals that were supportive of the old system would be reluctant to lend their support to the new one and therefore less willing to voluntarily comply with their taxes. On the other hand, support for democracy may be arguably smaller – given the evidence we just reviewed – than for those living in consolidated democracies, but they may nonetheless be willing to support democracy with their taxes. Over time, support for the new regime may improve (if it is successful) by either changing the minds of those who supported the previous regime, or by making new generation - raised under the new

system - develop loyalty to it without being influenced by the experiences of the old system.

#### **4.4. Post-Materialism and Tax Morale**

In the previous chapter we reviewed the finding that higher Tax Morale of older individuals has been explained as the result of them being more deeply “invested” on societal expectations, which increases the cost of dishonesty (Torgler, 2003b). By its part, lower Tax Morale among the best educated may be consequence of education giving them differential knowledge about ways to circumvent their tax responsibilities, or become more critical on how governments use tax revenues (Torgler, 2003b, p. 12).

I would like to explore alternative explanations for some of those findings using developments in the literature on political support, especially Ronald Inglehart’s hypothesis on individual value change – post-materialism. The main point of post-materialism is its assertion that changes in individual attitudes towards political institutions are consequence of changes in the underlying values upheld by individuals, which in turn are the result of the environment experimented by individuals during their formative years (adolescence and early adulthood). I will borrow those insights to hypothesize that the same process that leads to lower trust in political institutions for new cohorts of individuals may also explain the differences on Tax Morale between young and old individuals. In order to build how post-materialism would affect individual Tax Morale we need first to introduce how it affected individual attitudes towards institutions of representative democracy –the subject of next section- and it would influence Tax Morale.

#### 4.4.1. Patterns of Trust in Political Institutions

The issue of declining support for institutions of representative democracy has occupied a prominent place in the literature since the 1970s (Dalton 1996, 1999, Norris 1999) which gave rise to talks of a new era in politics - the “new politics” (Wenzel and Inglehart 2005, Dalton, Scarrow, and Cain 2004). Public confidence in institutions of representative democracy in advanced democracies – Europe, North America, and Japan –declined since the late 1960s in a well-documented phenomenon (Pharr, Putnam, and Dalton, 2000). However, the interpretations of the phenomenon changed over time. Initially, it was interpreted as one worrisome indication that support for democracy was at risk but later and better measures revealed that democracy as the ideal form of government has received overwhelming support (Norris, 1999, Dalton, 2005). In fact, a wave of democratization during the twentieth century expanded democracy as a form of government from a privilege enjoyed by a minority of the population to a mass phenomenon that empowered ordinary individuals with civil and political rights (Welzel and Inglehart, 2005). Moreover, no alternative to democracy is in the horizon,

*“...in sharp contrast to the period after World War I, no serious intellectual or ideological challenge to democracy has emerged. Whether tracked over the more than five decades since the end of World War II or...since the fall of the Berlin Wall, opponents of democracy have lost support...” (Pharr, Putnam, and Dalton 2000, 9)*

Decline in confidence on institutions of representative democracy coexists with an increase in political participation. Confidence on pivotal institutions of representative democracy such as politicians, political parties, and parliaments has sharply declined

(Pharr, Putnam and Dalton, 2000). However, the growing disinterest and distrust in the representative side of politics (e.g. decreased voter turnout) is mirrored by an increase in using non-traditional channels for political participation. Individuals sign petitions, join special interest groups, engage in unconventional forms of political action (e.g. boycotts, protests), and favor expanded avenues for inputting their preferences into decision-making (Dalton, Scarrow, and Cain, 2004).

To summarize, confidence in institutions of representative democracy has decreased steadily during the past few decades although it has not meant the rejection of democratic ideals or democracy as being the best form of government. Instead, there is disenchantment with some aspects of representative democracy that coexists with new forms of participation in the political process. What remains to be explored is what has driven those changes among the public and whether they may also affect Tax Morale.

#### 4.4.2 Post-Materialist Value Change Hypothesis

The process of declining confidence in institutions of representative democracy has been attributed to a shift in values upheld by individuals. Here, the hypothesis of post-materialist value change (Inglehart 1971, Inglehart and Flanagan 1987) provides a widely-used and debated hypothesis to explain individual value change in advanced democracies (Dalton, 1996). It has been used to explain a broad set of phenomena taking place in advanced democracies such as the rise of environmentalism, support for new social movements (women, minorities), and the ways individuals interact with the political system (Dalton, 1996). However, to the best of my knowledge, the only application of the post-materialist hypothesis to economic matters was done by Uhlaner

and Thurik (2006). They studied the relationship between entrepreneurship and post-materialist values and found that upholding post-materialist values negatively impacted entrepreneurial activity and business formation rates.

The model of value formation it provides is based on two premises (Dalton, 1996, Marks, 1997),

1. Value preferences reflect the environmental conditions the individual has experienced during his/her formative years
2. Individual value change occurs because individuals value those things that are in short supply

The set of values that individuals uphold develops in response to the environment –social, economic, and cultural- they experience during their youth/young adulthood years; once those values solidify they will remain relatively unchanged for the rest of their lives.

To illustrate how individuals may change their values according to the circumstances of their upbringing, those who experienced the political turmoil of the 1920s and 1930s, the Great Depression, and WWII, during their formative years would emphasize and uphold “material” values such as economic well-being. They would also appreciate a predictable authority - rule of law, and basic political and civil rights because those were in short supply even where democratic regimes were established<sup>10</sup>. To the extent that their material expectations were fulfilled, they would be willing to submit to those authorities; the higher willingness to comply with taxes –Tax Morale – among the

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<sup>10</sup> The case of the blacks in the U.S. is a direct illustration that even basic individual rights can be violated in an otherwise democratic political system.

oldest individuals may be one aspect of deference to authorities - a retribution for what governments delivered to them.

The “baby boomer” generation offers an interesting contrast in terms of differences in values compared with the previous group. Growing up in the affluent and stable period after WWII meant that material needs were no longer pressing. Moreover, with basic civil and political rights ensured in most of Western Europe and North America, they were free to pursue new issues. Using the earlier generations’ achievements as a springboard, they started valuing other things such as environment protection, participatory democracy (Marks, 1997) improved quality of life, focus on social equality –e.g. gender equality and minorities rights -, and an increased desire for being part of the political decision making process (Davis and Davenport, 1999, Wenzel and Inglehart, 2005). However, because those new aspirations run counter to the established practices of representative democracy, the established authority was seen as guardians of the old order and therefore mistrusted and resisted<sup>11</sup>. With younger generations of taxpayers upholding values that make them see authorities with disdain and suspicion, and resentful for being given token voice in policy-making, it may not be a surprise that their tax compliance attitudes and behavior would be affected.

Talking about a possible parallel process regarding tax compliance attitudes, recent evidence has found that younger individuals are more hostile to authorities (Braithwaite et al., 2010). What is perhaps more surprising is that attitudes towards tax

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<sup>11</sup> Struggles for increasing participation in policymaking, or gaining civil rights for disenfranchised minorities (women, or ethnic minorities) illustrate how new generations fight against what was established norm to achieve their goals.

authorities and tax compliance do not change as taxpayers grow older. The study found that the attitudes towards tax authorities and tax compliance of those 30 years old and below are almost indistinguishable from those in the middle-aged (30-55) group. Inglehart (2008) reported a similar stability on post-materialist values since the 1970s; the rise on post-materialist values is linked to the increased proportion of post-materialists in developed democracies as the younger and less materialistic cohorts replaced the older ones in the population (Inglehart 2008, p. 136). Thus, as older, more trustful, and compliant individuals get progressively replaced by less trustful, less compliant and more cynical ones (Dalton, 2005) we may expect attitudes towards tax compliance and tax compliance itself to become more contentious. Individual value change may not necessarily mean lower Tax Morale and more tax evasion, however.

Individuals may positively respond with higher tax compliance if authorities give them a more direct role in policy decisions. Feld and Frey (2002a) studied the behavior of Swiss taxpayers and whether their behavior was affected by institutions of direct democracy at the cantonal level. They found that the average size of tax evasion was lower for those cantons where institutions of direct democracy were more developed. Moreover, taxpayers reported feeling better treated by tax authorities in those same cantons. Because all Swiss citizens are exposed to institutions of participative democracy at the federal level, they may evaluate positively that their cantons provide them with the same or better instruments for participation and reciprocate with higher tax compliance when they are satisfied.

What the theoretical findings derived from post-materialist value change hypothesis and the limited empirical evidence available suggest is that the “psychological



tax contract” among taxpayers and authorities proposed by Feld and Frey (2007) may need to be renegotiated. The contractual metaphor posited that individuals and tax authorities have rights and duties; if each side sticks to its side of the bargain, voluntary tax compliance emerged as result of increased trust and cooperation between the contracting parties. However, citizen/taxpayer expectations have changed since representative democracy was adopted in the 19<sup>th</sup> century, therefore making reasonable to assume that authorities may need to adjust their side of the bargain since the society it serves has changed (Dalton, 1999). In other words, tax authorities in particular and political authorities more generally may need to broaden the scope of individual participation in policy-making and expand their fair treatment of taxpayers to other areas as well if they want to keep taxpayers’ positive attitude towards compliance at a high level.

We may therefore test the following proposition

**Individuals holding post-materialist values are less likely to exhibit Tax Morale than individuals who uphold materialistic values.**

If testing results support the proposed hypothesis, it would provide an application of the post-materialist value change hypothesis to an issue - tax compliance – that lies beyond the hypothesis’ original scope.

Policy implications of an empirically supported hypothesis are more difficult to elaborate. On the one hand, fostering a relationship of respect and trust between citizen-taxpayers and authorities has been proposed and recommended as the most effective way to improve voluntary tax compliance (Alm and Martinez-Vazquez, 2007). If newer generations of taxpayers are less trustful of authorities, it becomes less clear what may

happen with authorities' appeal to individuals to trust government because those taxpayers are less willing to trust them. In those circumstances, a return to the old paradigm of deterrence and control, although possible, it would be counter-productive because it will reinforce individuals' negative perceptions about tax authorities and perhaps alienate not only the new generations of taxpayers but also older generations as well. On the other hand, Feld and Frey's study results suggest that governments may affect individual willingness to comply with taxes by giving taxpayers channels to influence policymaking more directly. Therefore, the kind of outcome that would emerge would be some kind of evolution about fostering trust and cooperation between taxpayers and authorities.

Two other factors might mitigate the impact of post-materialist values on Tax Morale. One, individual value change may be slowing down because of the slowing in population growth. Inglehart (2008) finding that individual value change is driven by population replacement means that declining birth rates should slow down the shift towards post-materialist values. In addition, if the economic and political environment becomes more uncertain that may also affect individual value formation further slowing post-materialist shifts.

The four hypotheses to be tested in the next chapter are summarized in Table 4.2

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**Table 4.2. Summary of Hypotheses**

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Trust In Government	Individuals that trust the output organizations of government - courts, government bureaucracies, or law enforcement - would be more likely to exhibit Tax Morale than those who do not trust them.
Ideology Individuals	upholding views a limited role for the state in society – congruent with conservative or right-wing ideological position - would have lower Tax Morale than those whose support a more active role for state activity in different aspects of society’s life –consistent with liberal or left-wing ideological beliefs.
Support for Democracy	Individuals who support a certain political regime are more likely to exhibit Tax Morale if their preferences are represented by the regime that actually rules in their countries.
Post-Materialism	Younger individuals are less likely to exhibit Tax Morale than older ones because they are more likely to uphold post-materialist values. Overall, individuals holding post-materialist values are less likely to exhibit Tax Morale than individuals who uphold “materialistic” values.

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## 5. Empirical Model

### 5.1. Data and Methods

The proposed hypotheses will be tested using data from the last wave of the World Values Survey (WVS) collected from 2005 to 2008. Instead of focusing on a single country we will use individuals from several different countries (e.g. Alm and Torgler 2006, Torgler 2006) as we look for testing on as broad basis as possible. Working on individuals from different countries brings the issue of the accuracy of surveys across different languages, specifically the extent to which each version of the survey keeps with the original version's intent. The team running the WVS controls the accuracy of surveys using the following method; the original questionnaires (written in English) are translated to the local language(s) by the team responsible for administering the survey in that country. The translated survey undergoes a second translation, from the local language(s) back into English made by a different translator. The local language(s) questionnaire(s) and the one(s) translated back into English are then sent to the central team that designs the main questionnaire for approval. By controlling local teams' translations the deviations from the original may be contained and in this way the survey as a measurement instrument will remain constant across translations.

There are a couple of issues that should be taken into account. First, when testing the first hypothesis that posits that trust in government is influenced by the actions of the output side of government - as opposed to the input side of government – it is necessary to control for other factors that may affect individual trust in government organizations.

In particular, the process leading to the appointment of representatives to input organizations (parliaments and the executive) should be scrutinized because it may affect individual trust in those organizations. If elections are not transparent because they are rigged to favor specific candidates or there are restriction on the candidates and/or political parties that may compete for public office, those representatives and the organizations to which they belong may not be trusted because of that circumstance<sup>12</sup>. To control for that possibility I would use the level of political rights and civil liberties enjoyed by individuals in those countries surveyed by the World Values Survey using the 2006 edition of the Freedom in the World survey produced by Freedom House<sup>13</sup>. Although one possible limitation of using this particular survey is that it reflects liberal notions of democracy (Norris, 2008), it is also true that such notion of liberal democracy is the one that is followed by the advanced western democracies, and several of the newly established democracies in Eastern Europe and the older ones in Latin America also follows that ideal (although the extent to which they achieve it may be matter for discussion).

Back to the Freedom in the World survey, it ranks most of the countries in the world on political rights and civil liberties producing a single number in a scale from 1 to 7, where the lower the score the higher the degree of political rights and civil liberties.

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<sup>12</sup> We do not know for sure whether the measure of trust in parliament measures trust in the institution or in those who populate it (Citrin 1974)

<sup>13</sup> The survey assesses a country's level of political rights and civil liberties enjoyed by their inhabitants based on questionnaires that score how they perform on political rights and civil liberties. Each dimension generates a rank from 1 to 7 which lower values meaning higher degree of political and civil rights.

From those ranking numbers, Freedom House groups countries in three defined categories,

- Free countries with a combined score between 1 and 2.5. Those living in those countries enjoy the largest degree of political rights and civil liberties
- Partial Free countries scoring between 3 and 5. Individuals living in those countries face some stronger limitations to their political rights and civil liberties although in some cases those may not be due to government action (e.g. civil war, internal unrest)
- Not Free countries scoring from 5.5 through 7. Individuals living in those countries have little to no rights and freedoms

Second, given the uneven situation in the exercise of individual rights and freedoms across the countries that form the WVS, it may be possible that in those places where individual rights and freedoms are curtailed individual answers to survey questions may be affected by the perceived threat that some answers may bring to the respondent. Because of those two circumstances I will separate the WVS survey in different sets of countries as described in the coming paragraphs.

The first group will use individuals from the Free countries (combined rating of up to 2.5, also called liberal democracies). Table 5.1 lists those countries.

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**Table 5.1 List of Free countries**

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Germany (East/West)*	Italy* Spain*		Canada*
Australia* Norway*		Sweden*	Finland*
Poland* Switzerland*		Chile*	Slovenia*
Taiwan* Uruguay*		Cyprus*	United States*
Japan	South Africa	South Korea	Bulgaria
Mexico Brazil		India	Romania
Ukraine Indonesia		Serbia	Mali
Trinidad and Tobago			

Source: 2005-2008 World Values Survey, 2006 Freedom in the World Survey

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In the countries listed in Table 5.1., individuals enjoy a broad array of political rights and civil liberties that do not impinge on the legitimacy of those selected by public office and also provides a fair degree of confidence that their survey responses would not be influenced by fear of expressing their views.

In addition, two additional set of regressions will be run. A second run will include only those individuals coming from what Freedom House survey qualifies as Partial Free countries in their survey (those with ratings between 3 and up to 5), and those ranked as Not Free (with scores from 5.5 to 7, marked in Table 5.2 with a #). Those countries are,

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**Table 5.2 List of Partial Free and Not Free Countries**

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Turkey Moldova		Georgia	Thailand
Burkina Faso	Ethiopia	Zambia	
China #	Vietnam #		

Source: 2005-2008 World Values Survey, 2006 Freedom in the World Survey

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One possible issue would be the extent to which empirical results may represent the situation of Tax Morale in those countries. Because of the diminished status of individual rights and freedoms in those countries, survey responses may be biased because of fear of getting into trouble with authorities and instead providing an “adequate” answer instead of what they really think or believe. Even with that limitation in mind, those countries engage in tax reform to improve tax administration, increase tax revenue and reduce tax evasion; because of that it is still useful to examine what happens in those countries in terms of their taxpayers’ Tax Morale even in the light of those potential issues.

The last set of regressions will restrict the set of Free countries in Table 5.1 to those with the best ranking in political rights and civil liberties (identified with an asterisk). That subset includes the developed countries of Western Europe and North America. In addition for that arrangement being necessary for testing the fourth hypothesis about post-materialist values and Tax Morale (the post-materialist value change hypothesis was proposed for individuals in advanced industrial democracies that is those with both high level of rights and freedoms, and high levels of economic development) it carries the additional interest to see the extent to which the results match (or diverge from) those obtained from the broader Free countries category. With the basic data setup in place, the model specification and its variables will be now introduced.

## **5.2 Variables**



### 5.2.1 Dependent variable: Tax Morale.

To measure individual willingness to comply with taxes, I will use the same question from the World Values Survey that has been used in many of the earlier studies reviewed. That question asks individual justifiability or not of engaging in certain behaviors, among which cheating on taxes is asked as follows;

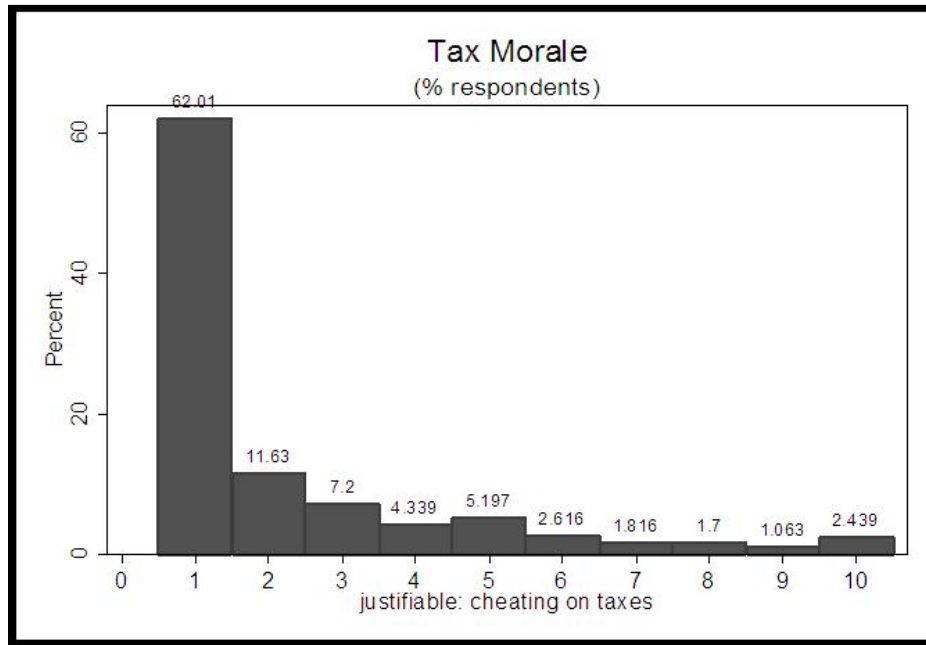
*“Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between (1-10 scale: 1: “never justifiable; 10: always justifiable)”*  
*“Cheating on taxes if you have a chance” (V200)*

Among the shortcomings of using a self-reported answer to assess one’s level of Tax Morale the most prominent one is that individual answers to the question may not correlate with tax behavior. Some individuals may want to make up for past behavior by asserting high Tax Morale in survey responses; there are not observable measures of Tax Morale (Martinez-Vazquez and Torgler, 2009). However, a similar disconnection between attitudes and behavior besets the neoclassical model of tax evasion. Consider the assumption that individuals cheat on their taxes to profit from it. Empirical testing of the model has assumed it as true, but data on tax non-compliance is used to empirically test the model. Observed non-compliance may be attributed to misinterpretation of tax laws or lack of resources when filing out one’s taxes (Braithwaite et al, 2009) and not simply to a deliberate intention of cheating. To put it differently, Tax Morale is no more difficult to measure (or more problematic) than the cheating intentions assumed to motivate non-compliant behavior in the neoclassical model. In any event, Tax Morale may not be constructed as an absolute mandate. It would not be reasonable to expect that individuals would uphold Tax Morale and voluntarily pay their taxes if the government collecting them is illegitimate; individuals would resist it by withholding their taxes (Torgler 2002)

Although the direct relationship between Tax Morale and compliant behavior has yet to be developed in detail, average levels of Tax Morale in a country have been shown to relate with the country's size of the underground economy which in turn has been interpreted as the impact of Tax Morale on tax evasion (Torgler and Schneider 2007, Alm and Torgler 2006).

Another objection to the question is that individuals may want to redeem themselves for past non-compliant behavior and report higher Tax Morale than they really have. However, the way the question is being asked in the World Values Survey does not intrude by asking individual behavior directly. Moreover, the item asking about the degree of justifiability of cheating on taxes is one among a block of several other items including items as disparate as the justifiability of homosexuality, divorce, accepting bribes, euthanasia, and suicide. Given the question's eclectic array of topics covered, its place in the survey questionnaire (about mid-way) and the general matters covered in it, it seems unlikely that respondents may be able to be guarded about that specific question in order to save face before the interviewer. Other issues, such as the problems derived from using a single question to measure Tax Morale are counter-balanced by the difficulties in assembling indexes in terms of correlation among components and deciding on the relative importance (weights) of each component (Martinez-Vazquez and Torgler, 2009)

A brief inspection at the proposed measure for Tax Morale taken from the WVS shows that there is a clear cut-off point once the question takes on values larger than one - individuals who answer that they find cheating on taxes is never justified are all coded with 1.



**Figure 5.1 Tax Morale. Survey Answers**  
(1: never justifiable)

Figure 5.1 shows that others who find cheating on taxes somewhat justifiable place themselves somewhere between 2 and 9 (about 38 percent of respondents), whereas those for whom cheating on taxes is always justifiable are coded with the number 10. Because of that, the dependent variable would be re-coded to express – with the number 1 - those who find cheating on taxes never justifiable, and zero otherwise. An additional set of regressions using the original variable will be estimated, and the results of both sets will be compared side to side.

Because we are interested in what makes an individual most likely to report that he would not justify cheating, a non-linear estimation method is advisable to avoid the

problems of using linear estimation techniques in such contexts - predicted probabilities may become negative (Kennedy, 1993). Previous empirical work has used different types of Probit estimation to keep with the nature of the dependent variable – (binomial and ordinal) (Wooldridge, 2002). Furthermore, weights will be used to reflect a country's share of population

### 5.2.2 Main Independent Variables.

Frist, the variables used to test each proposed hypothesis – trust in government, ideology, support for democracy, and post-materialism – will be introduced; all the other control variables to be used will follow after that. Table 5.3 lists the hypotheses, the proposed measures with their reference to the World Values Survey, its scale, and the expected sign for the coefficients,

<b>Table 5.3. List of Independent Variables</b>			
<b>Independent variable</b>	<b>Measure(s)</b>	<b>Scale</b>	<b>Expected impact</b>
Trust in Government	(v141) Trust in Civil Service (v136) Trust in Police (v137) Trust in Courts and Justice System (v140) Trust in Parliament	4-point	( + )
Ideology	(v116) Income Inequality (v118) Individual Responsibility	10-point	( - )
Support for Democracy	Rejection of Non-democratic alternatives (v148) ruled by strong leaders (v149) ruled by experts (v150) ruled by the military	1: all non-democ. alternatives rejected, 0: otherwise <i>(original 4-point variables recoded into accept/reject)</i>	( + )
Post-Materialism	(y001) 12-item Post-materialist index	6-point	( - )
Other variables	(v186) Religiosity (attendance to services) (v209) National Pride (pride in one's nationality)		( + ) ( + )
Controls	(v235) Female (gender) (v237) Age (v238) Education (v253) Income (v55) Marital status (v241) Employment Status Country-specific dummies		( + ) ( + ) varies ( - ) varies varies varies

### 5.2.2.1 Trust in Government

It has been hypothesized that individuals form their evaluations of trust in government at the way its output organizations treat them in their daily dealings with them, such as delivery of public goods and services, getting protections for their rights, and how individuals are treated by those organizations whose task is detecting and

punishing deviant behavior. Consequently, I will use variables measuring individual degree of trust in government organizations. All the questions dealing with trust in government organizations in this section share the same text and we will include the specific item from the World Values Survey that is being included,

*“I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (4-scale item, coded 1=a great deal... 4=none at all)”*

We will measure individual trust in government by using four different measures each corresponding with a specific area of government (the question number in the WVS is also included between parenthesis)

**Trust in the Civil Service (V141).** Individuals go before government bureaucracies in order to get their share of goods and services –health, education, social services, and so on. We have hypothesized that to the extent that those organizations treat individuals according to the principles of procedural justice they will be trusted. Conversely, if individuals are mistreated when they interact with public bureaucracies that deliver public goods and services they would not trust them. I would expect a positive coefficient meaning a higher degree of trust in the civil service will increase an individual’s Tax Morale. One potential issue that may undermine the usefulness this measure is the extent to which “civil service” captures individual experience with the

output side of government; using measures of trust in specific organizations (e.g. school system or social welfare) would be a better alternative<sup>14</sup>.

**Trust in Police** (V136). Its role is protecting individuals' lives and patrimony, detecting deviant behavior, and capturing those suspected of infringing legal norms to later process by the courts. In performing those roles, the police should behave according to principles of procedural fairness. Protection of individuals' lives and patrimony should be provided without exception, and in capturing potential criminals they should exhibit the same concern for the individual's rights that for those that seek its protection. We expect a positive relationship between trust in police and Tax Morale; with higher degree of confidence in police eliciting higher Tax Morale. Unlike the previous variable, the functions of police (and their malfunctions) are far more uniform across countries so we do not have a priori concerns about this particular measure of trust in government

**Trust in Courts** (V137). The role of the courts and legal system in eliciting individual Tax Morale has been hypothesized in previous studies which found empirical evidence of its significance; individuals trusting courts were more likely to report considering tax cheating as never justifiable. Moreover, our hypothesis contemplates that courts may affect individual Tax Morale because of the way their tasks should be carried out (in accordance with procedural fairness/justice considerations). One possible issue with this measures concerns to the extent to which individuals get exposed and involved

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<sup>14</sup> Even if we were to have measures of individual trust from several output organizations, we have no way to ascertain the relative relevance of each in shaping individual Tax Morale; not only because different individuals may interact with different agencies but also because the international basis of the WVS means different government arrangements and different functions. For instance, healthcare in the U.S. is provided mainly by private providers with little or no intervention from the government, whereas in many Western European countries, Canada, and Japan, the arrangements include government organizations in varied degrees.

with the legal system and courts. Unlike law enforcement (police) with which individuals interact directly or indirectly (by observation of their behavior) the extent to which the common citizen may get involve with courts is limited to those with affairs to settle either because of being accused of norm violations, or because of interest conflicts with another private party.

**Trust in Parliament** (V140). The review of the literature in chapter 2 showed that individuals trusting Parliaments are more likely to report higher Tax Morale, and explained on the grounds that parliaments may elicit trust from taxpayers when delivering what taxpayers want. One issue to note, however, is the concern with the meaning of measures of trust in political institutions that may be found in the political trust literature. Specifically, those measures may gauge individual trust in the institution, trust in incumbents, or something else entirely (Citrin, 1974)<sup>15</sup>. This particular issue has not been discussed before but it is nevertheless relevant. In any event, if the proposed hypothesis is rejected I would expect this variable to affect Tax Morale positively.

#### *5.2.2.2 Ideology*

The hypothesis contends that those who see taxes and government actions as detrimental for society (commonly defined as conservative or right-leaning positions) would have lower Tax Morale than those who see government actions in a positive way (liberal or left-leaning positions). Ideology provides individuals with clues to understand

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<sup>15</sup> Citrin, J. (1974). "Comment: The Political Relevance of Trust in Government." *The American Political Science Review* 68(3): 973-988.



the world and how individuals should deal with it (Denzau and North, 1994) and it has shown to influence individual attitudes on policy issues, particularly government spending (e.g. Jacoby, 1991 1994; Rudolph and Evans, 2005) – less support to government spending among those upholding conservative views. Therefore, I expect individuals upholding conservative views to exhibit lower Tax Morale than those upholding liberal positions.

There are different possibilities regarding how to measure ideology. One possibility would be using a measure asking respondents to locate themselves along the left-right continuum, which is available in the WVS (coded v114). Some issues that may arise from using such a measure would be potential for respondents' biases that would make them to avoid placing themselves in positions that are perceived as negative even if those are the ones they feel identified with. Another possible limitation of using that measure consists that given the cross-country nature of the WVS what is "left" or "right" may not mean the same among individuals in different countries.

Another possibility for measuring individuals' ideology would be using their party affiliation or support. Party allegiance or identification has been shown to be important when deciding an individuals' position on issues they do not know that much about. They use the party's position on the matter to decide their own (Jacoby, 1988). Although it looks as a promising possibility, there are technical issues that prevent it from using it here. In order to use individuals' party allegiances as a measure for ideology, it is necessary to code the different party choices along the left-right continuum for each country included in the WVS that becomes part of the estimation. In two or three-party systems (e.g. the UK or the U.S.) it is straightforward; however, where multi-party

systems are in place (e.g. France, Germany, Italy), or where parties' ideological positions may shift over time<sup>16</sup> it may become particularly time-consuming to develop.

The third alternative uses separate but related variables that tap into individual ideology (Jacoby 1995, p. 315) without explicitly mentioning “right” or “left” or ideology. One such measure was used by Evans et al. (1996); they used several questions to establish individual left-right ideology to predict individual support for candidates in the UK. Some of those questions are included in the World Values Survey (WVS),

*“Now, I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between” (10-point scale)*

Unlike Evans et al. where the different elements were combined to form a left-right index, the two items to be used to measure an individual's level of ideology will be used separately. Those elements are,

<b>Table 5.4. Ideology. Measurement</b>		
<b>(Question #) / variable</b>	<b>“Left”</b>	<b>“Right”</b>
(V116) Income Inequality	Incomes should be made more equal	We need larger income differences as incentives for individual effort
(V118) Individual Responsibility	The government should take more responsibility to ensure that everyone is provided for	People should take more responsibility to provide for themselves

<sup>16</sup> To illustrate, Argentina's Peronist party in the 1990s shifted away from its interventionist roots to become a free-market advocate; in the 2000s it shifted again into a moderate leftist party.

Both items refer to issues that are salient among the left-right dimension; on the one hand, whether income differences between individuals should be left unchecked – a position upheld by the right because of concerns of government action encroaching on individual freedoms – or instead should be reduced through government action. On the other hand, whether governments should become more involved in ensuring individual well-being – position upheld by the left – instead of leaving individuals to fend off themselves. We expect that individuals whose answers lean closer to the “right” of the ideological spectrum in each of those questions would be less likely to exhibit Tax Morale because they favor a limited role for government in society translated into low taxes and less government involvement in the private sphere.

### *5.2.2.3 Support for Political Regimes*

Given the issues with measures of overt support for democracy, I will follow the approach introduced by Linde (2009). He measured individual support for democracy in former communist countries of Eastern Europe by measuring whether individuals support non-democratic government alternatives; an individual that rejects all non-democratic regime alternatives is interpreted as supportive of the democratic system (Linde 2009, 12). The same coding that Linde used for the variable will be used; a value of one means the individual has rejected all non-democratic government alternatives, and zero otherwise (s/he supports at least one non-democratic regime alternative). I expect that individuals who reject all non-democratic government alternatives would be most likely

to exhibit Tax Morale the political regime they experience is itself democratic.

Conversely, I would expect individuals who support democracy but live under authoritarian regimes to exhibit their discontent by exhibiting lower Tax Morale.

It is more difficult to predict the impact of support for democracy on Tax Morale for those living under political regimes that fall short of democracy – defined by the Freedom in the World survey as Partial Free countries – but also short of outright dictatorships. In principle, I would expect that if they prefer non-democratic regimes, their Tax Morale might be higher because it seems reasonable to provide support to the political system they favor. However, in those countries there may be several elements of democratic systems but they face significant shortcomings or limitations (or those may become completely absent). For instance, there may be elections but they fall short of the democratic ideal because there may be coercion, intimidation, electoral fraud, government-controlled media, and plain physical threats (Norris, 2008) or proscription of candidates and/or political parties. On the one hand, individuals who support democracy may exhibit higher Tax Morale out of the hope the system would eventually improve. On the other hand, they may exhibit lower Tax Morale because they are fully aware of the limitations and instead of hope for improvement they want to withhold support for a regime that falls short of their expectations.

In assembling the “rejection of non-democratic alternatives” variable, Linde (2009) used four items that was adequate for the Eastern European environment - return to communist rule, having the army rule, strong man rule, and suspension of parliament and abolition of parties. The World Values Survey (WVS) also measures the extent of individual support for different political regimes, as follows,

*“I’m going to describe various types of political systems and ask what you think about each as a way of governing this country. For each one, would you say it is very good, fairly good, fairly bad or very bad way of governing this country?” (4-point questions)*

<b>Table 5.5 Support for Political Regimes</b>	
<b>Item # (WVS)</b>	<b>Measure</b>
V148	Having a strong leader who does not have to bother with parliaments and elections
V149	Having experts, not government, make decisions according to what they think is best for the country
V150	Having the army rule
V151	Having a democratic political system

Because of the issues with overt measures of support for democracy (Inglehart, 2003) the last item will not be used. Talking about the other items, exhibiting support for leaders that do not care about parliaments and elections implies rejection of democratic principles, namely the legitimacy of access to office via free and fair elections, and that the leader can delete the division of powers between government branches by subordinating the other branches to his authority; some call the later principle horizontal accountability (O’Donnell, 1998). Empirically, this measure appears correlated with lower levels of political and civil liberties at the aggregate level (Rose and Mishler, 1996, Inglehart, 2003).

The second item gauges preference for being rule by experts (technocrats). This measure is a little more complex to interpret. On the one hand, although it may be associated with support for a non-democratic form of government, what constitutes

“expert advice” or “expertise” is subject of debate in the literature on regime support. For instance, a reform-oriented government may source economic advice from several competing sources besides neo-classical economics. Moreover, the choice of economic expertise may vary according to specific views on the kinds of expertise needed, the goals to be achieved, and its cost for the population (Rose and Mishler, 1996). On the other hand, Inglehart (2003) reported a statistical correlation between aggregate scores to this question and long-term averages of country rankings in the Freedom House index; higher preference for expertise ruling is correlated with lower level of political rights and civil liberties.

Finally, talking about having the army rule as preferred political regime it may be said that, military governments have been commonplace in certain parts of the world (e.g. Latin America and some Asian countries). In the communist countries of Eastern Europe, however, the military was tightly controlled to ensure loyalty to the regime - special police forces exerted control over society. The military was the last defense when civil unrest threatened the government; internal or external military intervention (the latter by the former Soviet Union army and other eastern satellites) brought civil unrest to an end (Hungary and former Czechoslovakia). Because the military appeared one way or another associated with non-democratic regime alternatives I have included it as another item to measure individual commitment with democracy.

#### *5.2.2.4 Post-Materialist Values*

In order to test whether post-materialist values influence individual willingness to comply with taxes, the 12-item version of the index included in the World Values Survey will be used. Coded on a six-point scale; higher values mean higher level of individual post-materialist values. Survey respondents are asked to choose two items - one item as the most important for them, and then the second most important - one out of a list of four items; the same situation is repeated two more times in the same fashion. The questions are of the following form,

*“If you had to choose, which one of the things on this card would you say is most important?...And which would be the next most important?”*

Table 5.6 displays the three sets of items (one per column) that respondents are asked to choose when questioned about values they uphold.

<b>Questions (1<sup>st</sup> set)</b>	<b>Questions (2<sup>nd</sup> set)</b>	<b>Questions (3<sup>rd</sup> set)</b>
A high level of economic growth	Maintaining order in the nation	A stable economy
Making sure this country has strong defense forces	Giving people more say in important government decisions (*)	Progress toward a less impersonal and more humane society (*)
Seeing that people have more say about how things are done at their jobs and in their communities (*)	Fighting rising prices	Progress toward a society in which Ideas count more than money (*)
Trying to make our cities and countryside more beautiful (*)	Protecting freedom of speech (*)	The fight against crime

For the first column (questions V69-70) individuals choosing the options marked with asterisks are considered post-materialists; those who pick the unmarked items are labeled materialists, and those choosing one marked and one unmarked item are labeled as mixed-valued. Similar criteria apply for the remaining two columns. In turn, individual answers are combined to produce the six-point scale commented earlier. I expect that the higher the individual scores in the post-materialist scale, the less likely for the individual to report Tax Morale.

### **5.2.3. Other Independent Variables**

In addition to the independent variables measuring the different hypotheses, other variables that have shown to affect individual Tax Morale in previous studies will be also included. Those are included below.

**Religiosity** (V186). It measures individual involvement with formal religion by gauging attendance to religious services. The impact expectation coming from earlier studies posits that individuals who reported being religious exhibited higher Tax Morale than those who were not religious.

**National Pride** (V209). Individuals reporting being proud of their nationality were more likely to report willingness to comply with taxes.

Other variables used customarily as controls will also be included,



**Age (V237).** Earlier studies found that older individuals are more likely to exhibit Tax Morale than younger ones. Unlike other studies in which individuals' age was recoded to fit different categories, here it will be used as collected in the WVS.

**Gender (V235).** Women (coded 1) are more likely to have Tax Morale compared to men (baseline)

**Marital status (V55).** Married individuals have been found more likely to have Tax Morale than singles, or divorced ones. Dummy variables will be created for all married categories other than married, which will be used as baseline.

**Education (V238).** The original variable in the WVS will be recoded and turned into binary variables to reflect completeness of each level of study –elementary, and tertiary- or no education. Secondary education (incomplete or complete) will be used as baseline (all other education variables equal to zero). Previous studies have found that the higher the educational attainment the lower the Tax Morale; this result has been explained as education opening the doors to more sophisticated way to evade taxes. On the other hand, higher education could also make more evident for the individual on the benefits derived from government actions.

**Employment status (V241).** Previous studies have found that unemployed individuals were less likely to have Tax Morale when compared with full-time ones. Dummy variables will be created for the different employment categories described in the WVS; unemployed, partially employed, student, stay at home individuals, retired, and so on. Full-time employed individuals will be the baseline (all other employment variables equal to zero)

**Income (V253).** The variable collects the self-reported income levels on 10-decile scale (a value of 1 corresponds to the lowest decile and 10 to the highest decile).

Individuals with higher incomes were reported to be less likely to exhibit Tax Morale, which has been explained as the result that at higher income levels and in the presence of progressive income taxes, individuals may have an increased reward from cheating. I expect a similar result when testing the hypotheses.

**Country Variables.** In order to account for unobserved factors related to characteristics pertaining to the respondents;’ countries (e.g. culture, traditions), dummy variables representing the respondents’ place of residence will be included. For each set of countries for which the model will be run there would be a different baseline country which will be indicated together with the results.

## 6. Model Results

### 6.1 Individuals from Free Countries

The first set of results obtained from individuals coming from countries defined as Free by Freedom House are presented in Table 6.1 below. Models 1 through 3 test the hypothesis about trust in government and Tax Morale; 4 through 6 test the results for the ideology hypothesis while models 7 and 8 do the same for the third and fourth hypotheses. Model 9 actually provides the results for the full model; the last column (10) computes the marginal effects for the full model. Marginal effects provide a more straightforward way to gauge the size of the impact of the explanatory variables on the dependent variable; Probit coefficients merely state the impact on the z-scores of the dependent variable when the independent variable increases by one unit (In our case, holding all other explanatory variables at their mean values)

TABLE 6.1 TAX MORALE - INDIVIDUALS FROM "FREE" COUNTRIES (2005-08 World Values Survey - Freedom House scores up to 2.5)											
	Trust in Government			Ideology			Support for democracy		Post Materialism	Full Model	Marginal Effects
	1	2	3	4	5	6	7	8	9	10	
<b>TRUST IN GOVERNMENT</b>											
Trust Justice	0.0238** (0.0115)		0.0057 (0.0134)						0.0023 (0.0150)		0.0009 (0.0058)
Trust Parliament	-0.0100 (0.0121)		-0.0234* (0.0136)						-0.0230 (0.0151)		-0.0089 (0.0059)
Trust Civil Service		0.0013 (0.0118)	0.0123 (0.0135)						0.0329** (0.0151)		0.0127** (0.0059)
Trust Police		0.0311*** (0.0113)	0.0313** (0.0132)						0.0478*** (0.0149)		0.0185*** (0.0058)
<b>IDEOLOGY</b>											
Income inequality (preference for)				-0.0005 (0.0030)		0.0016 (0.0031)			0.0041 (0.0036)		0.0016 (0.0014)
Individual responsibility					-0.00827*** (0.0029)	-0.00827*** (0.0030)			-0.00726** (0.0035)		-0.00281** (0.0014)
<b>DEMOCRATIC SUPPORT</b>											
Rejection Non-Democratic alternatives							0.194*** (0.0205)		0.191*** (0.0217)		0.0731*** (0.0082)
<b>POST-MATERIALISM</b>											
Post-Materialist Index (12 items)								-0.0332*** (0.0075)	-0.0299*** (0.0085)		-0.0115*** (0.0033)
<b>Country Dummies (baseline USA)</b>											
Constant	YES -0.665*** (0.0825)	YES -0.711*** (0.0833)	YES -0.710*** (0.0846)	YES -0.603*** (0.0800)	YES -0.581*** (0.0797)	YES -0.584*** (0.0812)	YES -0.666*** (0.0833)	YES -0.521*** (0.0821)	YES -0.733*** (0.0976)	YES -0.733*** (0.0976)	YES -0.733*** (0.0976)
Observations	31,414	31,294	30,612	32,305	32,482	32,016	27,939	31,085	25,155	25,155	25,155

(Robust standard errors in parentheses)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Sources: World Values Survey 2005 official data file v.20090901, and 2006 Freedom in the World Survey

With regards to the first hypothesis, the full model (#9) support the expectation that individual trust in government is shaped by government organizations on the output side of government. Both Trust in Civil Service and Trust in Police are statistically significant (5 percent level and 1 percent level respectively) and show the expected positive sign. Higher trust in those organizations make individuals more likely report that they would never justify cheating on their taxes even if they were to have the chance. Looking at the strength of the relationship, using the marginal effects (#10) show that one unit increase in Trust in Police increases the probability of reporting Tax Morale by 1.85 percent, whereas one unit increase in trust in civil service increases the probability of reporting that cheating on taxes is never justifiable by about 1.2 percent, holding all other variables at their mean values. Even though the effects are arguably small, they are similar to others obtained earlier on similar multi-country settings (e.g. Torgler, 2005a, b)

Interestingly, neither Trust in Justice nor Trust in Parliament influence individual Tax Morale. Even though they had been found to be statistically significant in earlier studies, when placed together with the variables measuring trust in output government organizations they would be no longer become statistically significant. Thus, the mechanism behind the hypothesis - that individuals come to trust government out of the treatment received at the end of government where public goods and services are delivered -receives empirical support. In other words, individuals assess whether to trust government by the way its agencies exercise their powers over the citizenry, that is they assess government legitimacy by the way it exercises its power (Rothstein 2009, Rothstein and Teorell, 2008).

The results give additional support to the suggestion that building a relationship of trust and cooperation between taxpayers and authorities may improve individual tax compliance (Alm, 1999, Alm and Martinez-Vazquez, 2007). They also suggest building compliant attitudes among taxpayers may be a task to be accomplished not only by the tax administration but also may be affected by other government agencies. Thus, a government that wants to improve tax compliance attitudes (and compliance with legal norms in general) should treat individuals in ways consistent with principles of procedural justice; in return, individuals would be more likely to reciprocate such treatment and become more willing to comply with their taxes and government norms in general. One interesting thing to notice comes from looking at columns 1 through 3. Trust in Justice was statistically significant when none of the proposed trust variables were present, but when they were included (model 3) Trust in Courts was no longer statistically significant, and Trust in Parliament was statistically significant (10 percent level) but with a negative sign that contradicted earlier results. By contrast, Trust in Police always exhibited the expected sign and was statistically significant.

One final topic to address concerns the lack of statistical significance for the Trust in Courts variable commented in the previous paragraph. Although it seems to contradict the hypothesis' basic postulate that trust in government is primarily built on its output side –the role of justice system is delivering justice to individuals – the lack of statistical significance may be also the result of individuals being more likely to interact with other government organizations – such as the Police - than with Courts. Individuals are most likely to interact with police forces or observe their behavior than to experience an interaction with courts except for the cases in which individuals become part in a trial.

Therefore, although all government organizations in the output side may affect individual trust in government with their actions, the degree to which they interact with taxpayers would indicate which ones may be more likely to affect evaluations of trust in government.

Talking now about the effects of individuals' ideology on their Tax Morale, the results from the sample of individuals from free countries provide some support for the hypothesis that individuals' ideological leanings may influence their willingness to comply with taxes. Individuals that believe strongly that people should take care of themselves – a position associated with conservative or right-wing ideology were less likely to exhibit Tax Morale; the coefficient is statistically significant at the five percent level. Looking at the marginal effects, however, reveals that the strength of the impact of ideological beliefs on Tax Morale is quite small; one point increase on preference for Individual Responsibility decreases the probability of reporting Tax Morale by 0.1 percentage points holding all other independent variables at their means. Moreover, the second measure used for gauging individuals' ideology – individual opinion regarding income inequality – is not statistically significant, something that may also be observed from the partial models 4 through 6. Despite the very small size of the impact, one issue about ideology may put it on a different light compared to trust in government. Unlike individual evaluations of trust in government, ideological beliefs may be more impervious to government influence; in turn, population's underlying beliefs on how society and the state should be organized may either facilitate or obstruct government action regarding taxation. Again, we will carry out more testing to see whether those insights derived from liberal democracies (free countries) are also relevant in other

contexts. As with the previous hypothesis, more results will come from individuals in Partial Free and Not Free countries, and in the most advanced democracies to confirm or deny the results obtained so far.

Before presenting the results for the hypothesis about support for political regimes (in this case democracy) and its relationship with Tax Morale, I would introduce some descriptive information derived from the variable used to measure individual support for democracy originally developed by Linde (2009) as a way to contrast the information introduced in Chapter 3 regarding support for democracy in the World Values Survey. Here, an individual supports democracy when s/he rejects all non-democratic government alternatives.

**Table 6.2. Support for Democracy stratified by Freedom House survey scores (1)**

	Best	Free Countries scores	All	Partial Free	Not Free
Not support		57.9	68.1	82.6	61.2
Support For Democracy		42.1	31.9	17.4	38.8
Observations	17,681		32,343	11,264	2,038

(1): coded by using rejection for non-democratic alternatives variable  
Sources: World Values Survey and Freedom in the World Survey

The Freedom in the World Survey has been used to separate WVS's respondents into three categories. The first two columns measures support for democracy among individuals from free countries – the first only counts those who got the highest scores for



individual rights and freedoms, and the second includes also those from other free countries.

A quick glance at Table 6.2 shows that, unlike the consistently very high degree of support for democracy using measures of overt support for democracy, a pattern of declining support parallels the decline of individual rights and freedoms measured by the Freedom in the World survey. Thus, among those from the best scoring free countries, support for democracy (rejecting of all non-democratic regime alternatives) tops at about 42 percent; when broadening the sample to consider individuals from all countries meeting the free definition in the Freedom in the World Survey, support for democracy falls to about a third of all respondents (32 percent). For those living in Partial Free countries, support for democracy is even smaller standing at about 17 percent. However, declining support for democracy increases when measuring individuals living in not free countries (about 38 percent). Given the situation of rights and freedoms in those countries – where personal opinions that diverge from the government’s official ones may put individuals in trouble with authorities – the results might reflect individuals’ reporting the official view regarding how the political regime should be considered in those countries. Another possibility would be that the meaning individuals give to the concept of democracy might differ to a substantial extent from the meaning given to it in the other countries.

The figures also show that, when measured that way, individual support for democracy is less widespread than suggested by measures of overt support listed on Chapter 3. Although the low figures for support for democracy suggest that the measure may underestimate the extent of real support for democracy, the measure nevertheless

provides a solid lower bound – a “hard core” - of support for democratic principles and practices - that in turn may be more reliable when testing the relationship between support for democracy and Tax Morale. Moreover, because the measure also includes support for non-democratic regime alternatives it may allow – for the first time – to explore whether supporting non-democratic government alternatives may affect Tax Morale for those living under those regimes.

Talking now about whether individual support for democracy (measured as rejection of non-democratic government alternatives) affects Tax Morale, the results shows support for democracy increases the probability of reporting Tax Morale with the variable being statistically significant at the 1 percent level. The strength of the relationship, on the other hand, it is better seen by considering the marginal effects, which indicates that the impact of one unit change in the support for democracy variable (that is, going from accepting at least one non-democratic political regime to rejecting all non-democratic alternatives) increases the likelihood of reporting Tax Morale by about 7 percentage points. The results thus confirm that one part of the proposed hypothesis is supported when tested among living in democratic regimes, namely that when individuals uphold preferences for democratic regimes and the regime in place is democratic, they become more willing to sustain the current regime by paying their taxes.

The results confirm earlier results – using a different measure – that individual support for democracy increases Tax Morale. However, in order to fully test the hypothesis, it is necessary to see whether it holds also when considering individuals living in countries that fall far from the democratic ideal. Specifically, it would allow to test whether support for non-democratic regimes increases the Tax Morale of those living

under non-democratic regimes. It may be the case that only democratic regimes may promote Tax Morale when they perform well because of the “goods” provided to the citizenry – individual rights and freedoms. Alternatively, it may also be possible that supporters of non-democratic regimes living in system different from a democracy may focus more narrowly on receiving from government material goods and be less concerned about individual rights and freedoms.

In presenting the results for the last hypothesis – the impact of post-materialist values on Tax Morale, it should be noted that the post-materialist value change hypothesis proposed by Ronald Inglehart (1971) was originally developed to explain individual value change among those living in the advanced industrial democracies of Western Europe, North America, and Asia which would broadly match the best scoring free countries in the Freedom in the World Survey. Therefore, the current set of results should be taken with some reservation because they include individuals from democracies in which the conditions that were envisioned in the original hypothesis – material needs satisfied by the development of the welfare state – are not met in several of those. Even with those reservations in mind, two observations may be made. First, the coefficient measuring an individual’s post-materialist values (the 12-item index developed by Inglehart and included in the WVS) shows the expected negative sign (higher post-materialist values decrease probability of individual reporting Tax Morale) and it is statistically significant (1 percent level). Second, the size of the impact seems to be small (as measured by the marginal effects); a one point increase in the level of post-materialism decreases the probability of reporting Tax Morale by about 1 percentage

point which points out to an impact that is like the one linking Trust in the Civil Service and Tax Morale.

To finish the presentation of the first set of results we will briefly review some of the remaining results that -to a great extent repeat those observed in earlier studies (those can be seen in the full tables in the appendix). Thus, Pride in one's nationality – National Pride - positively affects Tax Morale (e.g. Torgler 2005a); one unit increase in national pride increases the probability of reporting Tax Morale by about 5 percentage points (holding all other independent variables at their means). Females are about 5 percent more likely to report Tax Morale than men (other variables constant at their means). Income is also associated with Tax Morale but in this case higher income makes individuals less likely to report Tax Morale; a similar result is observed regarding younger individuals compared to their older counterparts. Individual level of education also affects Tax Morale; individuals with no formal education and with elementary education are less likely to report Tax Morale than those with high school education (baseline group). By contrast, individuals with college education are indistinguishable in their Tax Morale from those of the baseline group. Single individuals are less likely to report Tax Morale than married ones, and talking about employment those who are retirees are more likely to report willingness to comply with their taxes compared with full-time individuals that are similar (average) on all other respects.

While the results so far provide support for the proposed hypotheses, it is time to introduce the results of testing the same hypotheses on individuals from the group of part-free and not free countries to see whether the results contradict or confirm the ones obtained in this section.

## **6.2 Individuals from Partial Free and Not Free Countries**

Although the results have provided support for the different hypotheses (to a varied extent) when tested with individuals living in countries where their rights and freedoms are for the most part established and effective. The broader question this section explores is whether those results would be affected when testing them with individuals living where individual rights and freedoms are compromised.

Before proceeding with the results, it should be noted that if the limitations to individual rights and freedoms become important they may in turn compromise the validity of the answers provided to opinion surveys (such as the WVS. However, even in light of those potential issues, it is useful to explore the hypotheses in those contexts because projects of tax reform are being undertaken by those countries. Those reforms attempts - under the guidance and financing of international organizations – seek to reform tax systems and tax administrations in the mold of advanced countries; moreover, they aim to shape the relationship of taxpayers and tax authorities as one in which the former should be treated as customers and not subjects (e.g. World Bank 2008, pp. 28-29) which has also been the purpose of tax reform in Australia (Braithwaite, 2003a). Because developing countries seek to adopt the tax reforms undertaken in developed democracies, it may be useful to get a first glimpse regarding how differences in the levels of individual rights and freedoms may affect Tax Morale in ways different from those of the democratic countries. Table 6.3 presents the results of testing the hypotheses with individuals from partial free and not-free countries.

<b>TABLE 6.3 TAX MORALE - INDIVIDUALS FROM "PART-FREE" AND "NON-FREE" COUNTRIES</b> (2005-08 World Values Survey - Freedom House scores 3 and higher)										
	Trust in Government			Ideology			Support for Post-Democracy Materialism			Marginal Effects
	1	2	3	4	5	6	7	8	9	10
<b>TRUST IN GOVERNMENT</b>										
Trust Justice	0.0529*** (0.0176)		0.0547** (0.0213)						0.0483** (0.0241)	0.0189** (0.0095)
Trust Parliament	0.0051 (0.0187)		0.0203 (0.0215)						0.0052 (0.0248)	0.0020 (0.0097)
Trust Civil Service		0.0039 (0.0182)	-0.0200 (0.0209)						-0.0112 (0.0248)	-0.0044 (0.0097)
Trust Police		0.0359** (0.0175)	-0.0005 (0.0215)						0.0037 (0.0246)	0.0015 (0.0097)
<b>IDEOLOGY</b>										
Income inequality (preference for)				0.0194*** (0.0042)		0.0249*** (0.0043)			0.0211*** (0.0060)	0.00828*** (0.0024)
Individual responsibility					-0.0251*** (0.0043)	-0.0306*** (0.0044)			-0.0426*** (0.0058)	-0.0167*** (0.0023)
<b>DEMOCRATIC SUPPORT</b>										
Rejection Non-Democratic alternatives							0.201*** (0.0325)		0.213*** (0.0362)	0.0825*** (0.0137)
<b>POST-MATERIALISM</b>										
Post-Materialist Index (12 items)							0.0121 (0.0109)		0.0059 (0.0143)	0.0023 (0.0056)
<b>Country Dummies (baseline Turkey)</b>										
Constant	YES -0.0742 (0.1230)	YES -0.0088 (0.1230)	YES -0.0815 (0.1260)	YES -0.189* (0.1080)	YES 0.0272 (0.1080)	YES -0.0619 (0.1100)	YES -0.1060 (0.1180)	YES -0.1580 (0.1110)	YES 0.0423 (0.1530)	YES 0.0423 (0.1530)
Observations	10,847	10,778	10,452	14,366	14,480	14,246	11,783	14,110	7,894	7,894

(Robust standard errors in parentheses)  
\*\*\*,  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Sources: World Values Survey 2005 official data file v.20090901, and 2006 Freedom in the World Survey

Starting with the hypothesis of trust in government, the results differ a great deal from those coming from individuals in free countries. Notably, none of the variables we proposed to measure trust in the output side of government -Trust in Police and Trust in the Civil service –is statistically significant (both were statistically significant in the subset of individuals from free countries). Moreover, unlike the earlier studies reviewed Trust in Parliament also failed to reach statistical significance. However, Trust in Justice is statistically significant at the five percent level shows the expected positive sign; from the marginal effects (column 10) one unit increase in trust increases the probability of reporting Tax Morale by close to two percent (columns 9 and 10) holding all other explanatory variables at their means.

The results obtained seem to question the rationale behind the hypothesis that individuals form their evaluations of trust in government from the direct, face-to-face interaction with street level bureaucrats belonging to organization in the government's output side. Although a country's courts are part of the output side of government – they administer the policies decided by the political (input) side – because individuals are far more likely to interact with police forces or bureaucrats in the civil service the expectation was that those variables measuring trust in Police and the Civil Service to affect Tax Morale. Moreover, because the Freedom in the World Survey country ratings indicates that the situation of individual rights and freedoms for the countries considered here suggest that evaluations of trust in justice and courts would be not likely to come from direct experience with the judiciary or its performance. In order to better understand the latter point, it would be useful to illustrate by using one of the country reports that are

part of the yearly Freedom in the World Surveys. Specifically, I will introduce parts of the country report done for Turkey as part of the 2010 survey<sup>17</sup>.

Turkey makes for a good illustration because its scores of individual rights and civil liberties are at the top of the range for what Freedom House considers partial free countries; other countries in this group perform considerably worse<sup>18</sup>. For instance, talking about the judiciary in Turkey, the report indicates,

*“...The constitution envisions an independent judiciary. The government in practice can influence judges through appointments, promotions, and financing ....the judiciary has been improved in recent years... however, Amnesty International has accused the Heavy Penal Courts of accepting evidence extracted under torture...” (Freedom House, 2010)*

Another interesting topic is the practical limitation in the freedom of expression rights. Although constitutionally guaranteed, Turkish citizens may be incarcerated and prosecuted for discussing issues such as the division of Cyprus, the 1915 mass killings of Armenians by Turks, or insulting the armed services. A particularly insidious case involves legislation under which individuals may be incarcerated and prosecuted for denigrating “Turkishness” (quotes on original) (Freedom House, 2010). In other words, freedom of expression in Turkey (and by extension for the group of partial free countries) is a problematic right to exercise for individuals; although the rights exist on paper, the reality of their use is affected by other pieces of legislation or abuse and neglect of government officials. In turn, those developments might affect the extent to which individuals may respond faithfully to survey questions such as those from the World

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<sup>17</sup> Because the country ratings do not vary substantially from year to year, the choice of 2010 is as relevant as that of choosing an earlier year

<sup>18</sup> Incidentally, Turkey had sought membership to the European Union, which may indicate that even if the situation of individual rights and freedoms there was seen at least with potential for improvement.



Values Survey, thus adding an additional layer of complexity when interpreting empirical results.

The situation illustrated by Freedom House's report on Turkey and its implications for the other partial free countries suggest that individual evaluations of trust in justice and courts may hardly reflect individual assessments of fairness or performance for that institution. Moreover, other evaluations of trust in government may be affected by practical restrictions to freedom of expression. Nevertheless, those results have to be explained. One possibility is that statements of trust in justice would reflect individuals' desire of being treated fairly by authorities. If that is indeed the case, it is remarkable that individuals hold a sense of fairness despite the experience of unfairness in their daily lives. Another possibility is that individuals avoid answering those questions they consider problematic (such as whether they trust the Police or public bureaucrats in the Civil Service) and instead give an answer of convenience.

Turning now into the result for the second hypothesis - ideology - both variables measuring individuals' ideological leanings - Income inequality and Individual responsibility - are statistically significant and thus associated with Tax Morale. However, Income Inequality shows the opposite sign (positive) to the one expected, meaning that, for those living in partial free and not free countries, viewing income inequalities in society as positive and useful are more likely to report Tax Morale than those who would prefer a more egalitarian income distribution. One possible explanation for the unexpected sign would be that those upholding more income distribution equality would be less likely to report Tax Morale if they dislike the current situation regarding

income inequality; their lower Tax Morale would be therefore a result of their unwillingness to support governments that fail to address the situation.

In any event, the impacts of ideology on Tax Morale seem small. One point increase in preferring income inequality raises the probability of reporting Tax Morale by less than one percentage point (all other independent variables hold at their means). With regards to Individual Responsibility, an increase of one point decreases the probability of reporting Tax Morale by about 1.7 percentage points (holding all other variables to their means). Overall, the results suggest that individuals' ideological beliefs have an effect on Tax Morale, although the relationship between ideological beliefs, and Tax Morale seems more complex than what we assumed since the ideological statements may also include some evaluation of the actual environment and not ideological beliefs in isolation.

The results show that individual support for democracy increases the probability of reporting Tax Morale as expected. The coefficient for the variable is statistically significant at the one percent level, and has the expected positive sign; marginal effects also indicate that individuals who reject all of the non-democratic government alternatives are more likely to report Tax Morale by eight percentage points (column 10).

At the same time, the results reveal that support of non-democratic regimes is not statistically associated with Tax Morale, while we expected that those who supported non-democratic regimes would be more likely to exhibit Tax Morale in this particular context. Because of the way the variable was set up, it made possible to gauge individual support for democratic or non-democratic government alternatives, although in the latter case it does not discriminate which non-democratic alternative the individual prefers. That might be an explanation for the observed result; the group of partial free and not free

countries has a wide array of political systems, ranking from electoral democracies with moderate to serious restrictions to individual exercise of rights and freedoms (Turkey as a case in point) to outright one-party dictatorships (e.g. Vietnam, China). It may be also possible that non-democratic regimes might not generate the degree of support among the population as to affect their willingness to comply with taxes.

Overall, the results obtained support the idea that those who reject non-democratic government alternatives are more likely to be unwilling to cheat on their taxes even when living in countries where democracy is generally absent. In any event, the proportion of individuals who support democracy in those countries is rather small as shown in Table 6.2 (about 17 percent) so even in the case those countries would manage to transition into a full-fledged democracy the reservoir of support for democracy and the extent to which it may affect Tax Morale remains limited to a minority group in the population.

Finally, the results for the fourth hypothesis will not be discussed because individuals living in those countries do not represent the environment where the post-materialist value change hypothesis was developed. Perhaps predictably, given the mismatch between the hypothesis and the sample in which it is tested, the post-materialist value index is not statistically significant.

I would now comment briefly on the results for other control variables included in the sample that are not pictured in Table 6.3 (due to space reasons, those results are available in the Appendix). Pride in one's national origin affects Tax Morale in a positive way; one point increase in pride raises the probability of reporting Tax Morale by almost nine percentage points (column 10). By contrast, religiosity (measured as attendance to religious services) is not statistically significant in the full model (although it was so in

all the partial models). Interestingly, neither gender nor age was found to affect Tax Morale whereas reviewed studies found that females and elder people were more likely to report Tax Morale Education was also not statistically related to Tax Morale except for those with university education that were more likely to report Tax Morale than their high-school graduate counterparts (and average in all other respects). In line with earlier results, higher income individuals were less likely to report Tax Morale than their lower income counterparts (but otherwise average in all other respects).

Overall, the results in Table 6.3 should be taken with some caution because of the political environment individuals face in those countries; the accuracy and faithfulness of their survey responses may suffer in unexpected ways as a result. First, trust in government affects Tax Morale positively, although the mechanism underlying it seems different from that of individuals in democratic (free) countries. Trust in government organizations that directly interact with taxpayers do not influence Tax Morale, whereas Trust in Justice does affect the likelihood of reporting Tax Morale in a positive way. Thus, there is either a different mechanism for eliciting individual trust in government in those countries, or the condition of political rights and civil liberties there affect the extent to which survey respondents provide trustworthy answers to the questions presented to them.

Second, ideological beliefs do affect Tax Morale, but the results suggest a more complex relationship than hypothesized. For instance, if an individual's preference for income inequality is such that he accepts only small differences, to the extent that he perceives large income inequalities his Tax Morale may be lower than that of those

preferring large income differences; he may be unwilling to support a government that does nothing to address those issues.

Third, support for democracy drives Tax Morale. Although the results confirm those already available in the Tax Morale literature, there are a few differences. The use of a different measure to avoid the shortcomings of measures of overt support for democracy is one of those differences. The second difference resides in the fact that the measure used here also allowed to test a broader proposition, namely that individual support for a given political regime would affect reported Tax Morale if the preferred regime was the one actually in place; this last proposition failed to receive empirical support.

Fourth, the results regarding the influence on post-materialist values on Tax Morale (specifically, the lack of empirical support) may not be surprising because the environment in which it has been tested differs substantially from the one for which the hypothesis of post-materialist values was developed.

Now it is the turn of introducing the last set of results for individuals living in the best-scoring free countries (according to the Freedom House Survey) which will provide for an additional test in a narrower set of free countries, and also allow for testing the proposition that upholding post-materialist values may affect Tax Morale.

### **6.3. Tax Morale in advanced democracies**

Table 6.4 presents the results for individuals living in the best scoring countries according to the Freedom in the World Survey.

<b>TABLE 6.4 TAX MORALE - INDIVIDUALS FROM SELECTED "FREE" COUNTRIES</b>										
(2005-08 World Values Survey - Freedom House scores 1 only)										
	Trust in Government			Ideology	Support for Democracy			Post-Materialism	Full Model	Marginal Effects
	1	2	3	4	5	6	7	8	9	10
<b>TRUST IN GOVERNMENT</b>										
Trust Justice	0.0687*** (0.0193)		0.0234 (0.0223)						0.0226 (0.0236)	0.0086 (0.0089)
Trust Parliament	-0.0100 (0.0203)		-0.0417* (0.0224)						-0.0611*** (0.0235)	-0.0232*** (0.0089)
Trust Civil Service		0.0293 (0.0201)	0.0428* (0.0227)						0.0611** (0.0239)	0.0232** (0.0091)
Trust Police		0.0959*** (0.0200)	0.0901*** (0.0229)						0.110*** (0.0241)	0.0418*** (0.0091)
<b>IDEOLOGY</b>										
Income inequality (preference for)				-0.0042 (0.0053)		-0.0029 (0.0055)			0.0014 (0.0059)	0.0005 (0.0023)
Individual responsibility					-0.0060 (0.0052)	-0.0055 (0.0054)			-0.0032 (0.0057)	-0.0012 (0.0022)
<b>SUPPORT FOR DEMOCRACY</b>										
Rejection Non-Democratic alternatives							0.191*** (0.0271)		0.190*** (0.0284)	0.0716*** (0.0107)
<b>POST-MATERIALISM</b>										
Post-Materialist Index (12 items)								0.0156 (0.0112)	0.0177 (0.0120)	0.0067 (0.0046)
<b>Country Dummies (baseline USA)</b>										
Constant	YES -0.707*** (0.1160)	YES -0.845*** (0.1180)	YES -0.849*** (0.1200)	YES -0.538*** (0.1110)	YES -0.552*** (0.1100)	YES -0.532*** (0.1120)	YES -0.613*** (0.1110)	YES -0.601*** (0.1130)	YES -1.000*** (0.1350)	YES -1.000*** (0.1350)
Observations	13,944	13,892	13,664	14,205	14,238	14,109	13,445	13,872	12,432	12,432

(Robust standard errors in parentheses)  
 \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Sources: World Values Survey 2005 official data file v.20090901, and 2006 Freedom in the World Survey

The main goal is finding if post-materialist values influence Tax Morale in the same setting – advanced democracies both politically and economically – in which the post-materialist value change hypothesis was developed. –The results plainly show that upholding post-materialist values has no effect on Tax Morale - the coefficient lacks statistical significance. One obvious explanation for the results would be that there is no common cause behind low trust in political institutions and low Tax Morale. Even though there are studies that find a relationship between low trust in political institutions and a process of value change with empirical evidence going back to the 1960s, there is no similar evidence for checking the evolution of Tax Morale over time. Some also question whether post-materialism constitutes a real value dimension (Davis, Dowley, and Silver, 1999)

Second, if the process of value change has slowed down in recent years there would be little difference in values for individuals of different generations; indeed, Inglehart (2008) noted that value change has become slower in the 2000s when compared with the first observations of the phenomenon (Inglehart, 1971).

There are also concerns regarding the consistency of the measure used to gauge post-materialist values. Davis and Davenport (1999) reviewed the literature on post-materialist values and contended that the measures used (the 4-item index or the 12-item index) could be sensitive to the economic environment, yielding higher post-materialism at times of economic bonanza and lower post-materialism when unemployment is high. Inglehart and Abramson (1999) in turn countered that even after controlling for economic factors there is evidence of value shift towards post-materialist ones. In the present case, had the post-materialist values measure been affected by the economic cycle, the results

would have been biased towards a positive relationship between post-materialist values and Tax Morale because the economy was expansionary during most of the period in which the WVS was collected. In any event, further work is necessary in order to sort out those issues and identify – by examining the post-materialist literature in further depth – specific aspect of individual values and attitudes that may affect Tax Morale.

Examination of other results reveals some similarities and differences compared with the group of free countries estimated earlier. For instance, the results for the trust in government variables are mostly similar to those of the free countries; Trust in Civil Service is statistically significant at the 5 percent level, and one point increase in trusting it increases the probability of reporting Tax Morale by about two percentage points. Similarly, Trusting Police also increases the probability of reporting Tax Morale. One point increase in trust in police raises the probability of reporting that cheating on taxes is never justified by about 4 percentage points; the coefficient is statistically significant at the one percent level. Those results confirm that Tax Morale is driven by individuals' evaluation of government legitimacy when exercising power over the citizenry, which happens at the time individuals interact with street level bureaucrats to receive their share of public goods and services (Rothstein, 2005, 2009, Rothstein and Teorell, 2008).

One result for the Trust in Government variables is different, however. Trust in Parliament, that was previously not statistically significant is now so at the one percent level, but the sign of the effect is actually the opposite compared to earlier studies. It may be possible to claim lower trust in Parliaments would reflect higher individual attachment to the system, as citizens scrutinize the work of political institutions in detail never granting a blank check. Although feasible, measuring Trust in Parliament is also open to



conflicting interpretations; Citrin (1974) observed that measures of trust in Parliaments might measure either trust in its incumbents, trust in the institution, or capture something else. In turn, his interpretation suggests that trust in political institutions may be more questionable in terms of what they effectively measure.

With regards to the hypothesis linking ideology with Tax Morale, none of the proposed measures for individuals' ideology show a statistically significant relationship with reported Tax Morale. Perhaps ideological differences between what is “left” and “right” may not be as relevant for individuals in this particular group of countries. New forms of political participation (including direct democracy), declines in voter turnout, and party affiliation, are transforming those representative democracies into advocacy democracies (Dalton, Scarrow, and Cain, 2004). Thus, it may be possible that ideological cleavages are getting eroded and become less important.

Alternatively, other measures may be better at capturing individuals' ideological leanings. For instance, Wahlund (1992) studied the determinants of tax evasion among Swedish subjects and found that party support – his measure for ideology - explained tax evasion; individuals supporting conservative parties evaded more taxes than those supporting liberal ones<sup>19</sup>.

The impact of individual support for democracy – measured as rejecting non-democratic government alternatives – has remained unaltered. The effect is positive;

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<sup>19</sup> Developing that measure in a multi-country setting would have involved arranging about 50 political parties along the left-right continuum for the 13 countries that are part of the best scoring democracies alone. A further expansion to cover all of the free countries would have demanded to arrange the political party systems of 29 countries along the same left-right continuum. That was the main reason for pursuing more readily available measures of individual ideology.

rejecting all non-democratic government alternatives increases probability of reporting Tax Morale by seven percentage points; the coefficient is statistically significant at the one percent level. One thing to note is that the size of the impact is broadly similar whether we consider all free countries, the smaller subset of the best scoring democracies, or the partial free and not free countries. The results suggest that democracy generates a degree of support not only from the population exposed to them – case of free countries – and it also exerts attraction for the minorities in partial free and not free countries that reject non-democratic regime alternatives.

Other results (available in the appendix) show that national pride and religiosity positively affect Tax Morale. Similarly, females, and older individuals are more likely to report Tax Morale than males and younger ones. Higher incomes are associated with lower probability of reporting Tax Morale but the impact is small.

The next section will introduce an additional test, running the same models ran earlier but with a different specification for the dependent variable to see the impact on the results already obtained.

#### **6.4. Comparison between Probit and Ordered Probit**

Tax Morale has been measured so far as a binary yes-no because all values above 1 (cheating on taxes never justifiable) justified cheating. In order to check whether the results are not affected by the chosen form of the dependent variable, the original 10-point scale included in the World Values Survey will be used instead. To make results' comparison easier the only transformation in the variable would be changing the direction of the variable so higher values mean higher Tax Morale. Table 6.5 introduces the results

for the full binary Probit models presented earlier versus the ordered Probit models obtained from using the original WVS dependent variable to measure Tax Morale.

TABLE 6.5 TAX MORALE - RESULT COMPARISON (PROBIT REGRESSIONS)						
(2005-08 World Values Survey - Freedom House)						
	All "Free"		Part + Non-Free		Best of "Free"	
	Ordered	Binomial	Ordered	Binomial	Ordered	Binomial
<b>TRUST IN GOVERNMENT</b>						
Trust Justice	0.0023 (0.0150)	0.0039 (0.0145)	0.0483** (0.0241)	0.0415** (0.0205)	0.0226 (0.0236)	0.0228 (0.0241)
Trust Parliament	-0.0230 (0.0151)	-0.0028 (0.0139)	0.0052 (0.0248)	0.0000 (0.0222)	-0.0611*** (0.0235)	-0.0272 (0.0223)
Trust Civil Service	0.0329** (0.0151)	0.0290** (0.0141)	-0.0112 (0.0248)	-0.0075 (0.0219)	0.0611** (0.0239)	0.0711*** (0.0230)
Trust Police	0.0478*** (0.0149)	0.0421*** (0.0142)	0.0037 (0.0246)	-0.0178 (0.0213)	0.110*** (0.0241)	0.124*** (0.0245)
<b>IDEOLOGY</b>						
Income inequality (preference for)	0.0041 (0.0036)	-0.0010 (0.0034)	0.0211*** (0.0060)	0.0250*** (0.0060)	0.0014 (0.0059)	-0.0029 (0.0058)
Individual responsibility	-0.00726** (0.0035)	-0.00881*** (0.0034)	-0.0426*** (0.0058)	-0.0418*** (0.0057)	-0.0032 (0.0057)	-0.0015 (0.0058)
<b>SUPPORT FOR DEMOCRACY</b>						
Rejection Non-Democratic alternatives	0.191*** (0.0217)	0.210*** (0.0194)	0.213*** (0.0362)	0.179*** (0.0328)	0.190*** (0.0284)	0.211*** (0.0264)
<b>POST-MATERIALISM</b>						
Post-Materialist Index (12 items)	-0.0299*** (0.0085)	-0.0330*** (0.0077)	0.0059 (0.0143)	0.0011 (0.0127)	0.0177 (0.0120)	0.0220** (0.0112)
<b>National Pride</b>						
(Religiosity) Attendance Religious Ser	0.145*** (0.0140)	0.122*** (0.0123)	0.227*** (0.0276)	0.213*** (0.0232)	0.105*** (0.0201)	0.0890*** (0.0184)
Gender (female)	0.0232*** (0.0053)	0.0274*** (0.0048)	0.0122 (0.0095)	0.0201** (0.0085)	0.0403*** (0.0079)	0.0416*** (0.0074)
Age	0.132*** (0.0202)	0.130*** (0.0178)	-0.0057 (0.0336)	0.0043 (0.0289)	0.166*** (0.0293)	0.163*** (0.0266)
COUNTY DUMMIES (yes, no/baseline)	0.00785*** (0.0009)	0.00762*** (0.0008)	0.0009 (0.0015)	0.0007 (0.0012)	0.00818*** (0.0014)	0.00834*** (0.0013)
Constant	YES/USA YES	YES/USA YES	YES/TURKEY/YES/TURKEY YES	YES YES	YES/USA YES	YES/USA YES
Observations	25,155	25,155	7,894	7,894	12,432	12,432

(Robust standard errors in parentheses)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Sources: World Values Survey 2005 official data file v.20090901, and 2006 Freedom in the World Survey

The results are grouped by level of political rights and civil liberties - – all free countries, partial free and not-free countries, and best scoring free countries (also called advanced democracies). Overall, three of the hypotheses show no changes regardless of the specification of the dependent variable.

The results for the first hypothesis - trust in government organizations of the output side and Tax Morale - are consistent across the binomial and ordinal regressions. The only difference comes from Trust in Parliament in the best scoring free countries sample. Although statistically significant in the model using the binomial dependent variable, it is not statistically significant in the alternate ordinal Probit model.

Likewise, the results for the hypotheses dealing with the role of ideology and support for political regimes on Tax Morale do not change regardless of how the dependent variable is defined. Where ideology appeared as statistical significant (free and partial-free plus not free countries) has remained so. Results regarding Support for democracy - rejection for non-democratic government alternatives – have also remained statistically significant; only support for democracy raises Tax Morale.

The only substantial difference concerns the post-materialist value hypothesis. Using the original 10-point scale dependent variable, the coefficient for post-materialist values has a positive (rather than negative) influence on Tax Morale, being statistically significant at the 5 percent level. Unlike expectations, higher levels of post-materialist values appear associated with higher Tax Morale. However, the result is consistent with the criticism that measures of post-materialist values are affected by the economic cycle – economies in expansion would tilt individuals towards post-materialist values since materialistic ones are less of a concern. The results are far from definitive so if additional

exploration of this hypothesis is desired, a more detailed review of the literature for modified or customized measures of post-materialist values would be necessary.

Table 6.5 also reports some of the additional explanatory variables (the rest may be consulted in the appendix tables) Many of those independent variables are not affected by the change of specification for the dependent variable; that is the case of national pride, gender, age, and income. Religiosity, education level, marital status, and employment status, show a few differences but keep many similarities. Overall, the theoretical underpinnings of the model do not seem to be affected a big deal by changes in the specification of the dependent variable.

## **6.5. Summary**

It is time to summarize the results obtained from testing the four hypotheses. First, the evidence on trust in government being driven by the actions of government organizations in the output side is solid when considering individuals living under democratic regimes (the “free” category of the Freedom in the World survey). The same results held when testing among individuals living in the best performing democracies in terms of upholding political rights and civil liberties (those with Freedom House scores of 1). In contrast, trust in justice – a government’s organization of the output side – has not been statistically significant, which may be attributed to taxpayers being less likely to have direct exposure to courts - at least when compared to the exposure to Police forces and bureaucrats in the civil service.

Trust in political organizations (in this case, Parliament) appear to play a lesser role in shaping Tax Morale than what earlier studies’ result suggest; it was not

statistically significant for the “free” countries model and statistically significant - but with a negative impact on Tax Morale – when tested among those living in the best scoring Free countries, result that contradicts findings from previous studies. Testing among individuals from partial free and not-free countries, by contrast, showed no impact for all the trust variables but for the Justice and Courts trust variable. The explanation of that particular result is difficult, but because of the information provided by the Freedom House survey we know that the performance of the judiciary in those countries is far from satisfactory (e.g. tolerance for torture of prisoners, application of vague laws that criminalize individuals’ freedom of expression, and so on). Overall, the findings are consistent among those living under established and functional democratic regimes.

Support for the relationship between ideology and Tax Morale shows an almost opposite pattern compared to that of the first hypothesis. Ideology influences Tax Morale among those living in partial free and not free countries, although one of the variables showed the opposite sign to what was predicted. For individuals living among the best scoring democracies, by contrast, it seems that ideological beliefs play no role in shaping individual Tax Morale. For those living in free countries only one of the measures showed statistical significance. However, whenever ideology was found to affect Tax Morale, the size of the impacts was very small.

The influence of support for democracy on Tax Morale has held across the different environments to which it was tested. Although those results are not new, two things have to be highlighted. First, individual support for democracy was measured using a different instrument that emerged out of the limitations of measures of overt support for democracy (Inglehart, 2003). Second, what is perhaps more surprising is the

relative stability of its impact among individuals living in different political regimes – marginal effects in the order of seven to eight percent for the three different samples for which the model was run.

Finally, the evidence for a link between upholding post-materialist values and Tax Morale seems mixed. On the one hand, under the binary specification for the explanatory variable, there is no statistical impact of post-materialist values on Tax Morale. When the original WVS variable that measures Tax Morale is used, however, the variable is statistically significant but with an opposite sign to what was expected. Given the scarce evidence regarding the relevance of post-materialist values on economic matters, and the concerns about the validity of the measures used to gauge it, it seems that additional theoretical work may be necessary if a further examination of the issue is desired.

## **7. Discussion**

### **7.1. Trust in Government**

The results for the “free” countries support the hypothesis that Tax Morale is affected by the actions of government organizations in the output side when interacting with taxpayers in the delivery of public goods and services. Conversely, the evidence for the effect of trust in political organizations – Parliaments - on Tax Morale (previously found to be statistically significant and positive) has not been supported. Moreover, higher trust in Parliaments was found to negatively influence Tax Morale when tested among those living in the best scoring free countries (advanced democracies).

Those results do not preclude that trust in government may be driven on certain cases by political leadership; a charismatic leader may help boost citizen commitment to a nascent democracy (Levi, 1998). Over time, however, the basic mechanism –trust in government is the result of individuals direct experience of fair treatment received from officials on the output side of government –would provide the main thrust of trust in government.

The results suggest that if governments want to increase taxpayer willingness to comply with taxes – Tax Morale – they should extend to other government organizations that interact with citizens what the tax compliance literature recommends for tax administrations; building a relationship of trust between them and the tax authorities by treating them fairly (Alm and Martinez-Vazquez, 2007) Specifically, treat individuals with respect, apply procedures and rules consistently across individuals, give them voice



in the agency's procedures, among others. Those recommendations fall along the lines of what has been known as principles of procedural justice (Tyler, 1988), or more recently, by treating individuals with impartiality (Rothstein and Teorell, 2008) defined as treating everybody without any preconceived ideas or biases.

The recommendations for partial free and not-free countries seem less clear because of the results obtained when testing among individuals from countries in those categories. Unlike the case of free countries, only the measure of Trust in Justice appeared positively affecting individual Tax Morale. However, because of the precarious situation about political rights and civil liberties, it is difficult to justify those results as consequence of the judiciary's good performance, a possibility that has been already discussed.

Even with those issues in mind, I would suggest that a similar recommendation – build a relationship of trust between taxpayers and authorities across the public sector – is still applicable based on evidence (to be introduced shortly) indicating that individuals respond positively to signals of trust. What it is unclear, however, is how to effectively implement that recommendation in places where the rights and freedoms that make such treatment possible are undermined. In those countries, taxpayers as individuals have limited rights and what is being proposed requires those rights to be enhanced and upheld by the same authorities that fail (either by impossibility or disinterest) to uphold them.

A legitimate question is whether doing those things would actually increase tax compliance given the concerns raised by Halla (2010) regarding the still underdeveloped links between tax compliance attitudes and behavior already addressed in earlier chapters. In response to that, there is evidence that linking average levels of tax evasion with the

size of the underground economy (Alm and Torgler, 2006). At the individual level, recent experimental evidence indicates that individuals recognize signals of trust or mistrust received and react accordingly (for a review, see Fehr, Fischbacher and Kosfeld, 2005); unlike earlier experiments where only behavior is recorded, those new experiments also register subjects' physiological parameters (e.g. brain activity imaging, level of neurochemicals).

Zak, Kurzban, and Matzner (2005) found that subjects that receive a signal of trust – a monetary transfer from a partner - experience an increase in a compound – oxytocin – that has been found to promote social interaction in animals and facilitates mother-child bonding after birth in humans. Those individuals were more likely to respond positively to the trust signal received by transferring back higher amounts to their partners. Interestingly, oxytocin may help promoting cooperation but does not induce gullible behavior. Individuals who have received the substance still withheld cooperation when they were in the presence of a partner that seems untrustworthy in the same way as the control group exposed to placebo (Mikolajczak et al., 2010).

Conversely, individuals respond in kind when they receive signals of distrust from a third party. Zak et al. (2005) found that distrust signals also trigger a physiological reaction that make individuals more likely to punish the mistrusting party; in the experiment's case, individuals who received low offers in the ultimatum game were more likely to reject them. Overall, experimental results give additional support for the recommendation that treating taxpayers with respect would increase the probability that they would reciprocate the treatment and comply with their taxes voluntarily. They also suggest that unfair treatment at the hand of authorities would make individuals more likely to

reciprocate in kind by abstaining to pay their taxes voluntarily. Further experiments may help in connecting the dots between tax compliance attitudes and tax compliant behavior.

## **7.2 Ideology**

The results of testing the influence of ideological beliefs on Tax Morale have shown less conclusive results. Among those living in free countries, only one of the measures gauging ideology showed the expected negative effect on Tax Morale. In the case of those living in partial free and not free countries, both measures showed statistical significance but one exhibited a direction of effect opposite to theoretical expectations. In all cases, however, the size of those effects was noticeably small. Finally, ideology failed to show any impact on Tax Morale among those living in the best scoring of the free countries (what is also known as advanced democracies). To the extent that the proposed measures of individuals' ideology may accurately tap into those beliefs, it seems that there is little impact of ideology on Tax Morale. It may be possible, however, that other measures may better measure taxpayers' ideology.

A strict interpretation of results allows exploring what would be the policy implications of the impact of ideology on Tax Morale. It seems that governments may have little chance of changing ideological beliefs among the population in the same way they may not influence religious beliefs. As a result, ideology may be seen as a parameter to be considered in policy formulation, either facilitating or impeding policy implementation regarding tax compliance. A case in point can be made regarding public finance reform during the democratic transition in the 1970s and 1980s in Spain. A substantial reform of the public sector including tax administration and new taxes (such

as VAT) were implemented with one result being a considerable increase in tax collections and a similar increase in government expenditures. The reform may have been facilitated by Spaniards' attitudes that were supportive of government action to reduce social inequality and ameliorate economic crisis (McDonough Barnes and Lopez Pina, 1998, p. 72). Conversely, if government policies in the area of taxation are seen as undermining values such as a belief in individual responsibility and overcoming inequalities with one's effort rather than the government's (as it would be the case with a progressive income tax) it may affect Tax Morale negatively among those who uphold such beliefs. Prospective work in the area of ideology should include a re-evaluation of alternative measures of ideological beliefs in order to engage in further testing.

### **7.3 Support for Political Regimes**

The situation regarding support for political regimes and how it may affect policy formulation has to be discussed separately, depending on the type of political regime under consideration.

Talking about democratic regimes, the results support the finding that individual support for democracy increases Tax Morale among those preferring democratic regimes over non-democratic ones, a finding that has held regardless of the sub-sample under consideration (free countries, partial free plus not free, or best scoring free countries). For those living in free countries where democracy runs reasonably well, individual attitudes towards democracy may be affected by direct experience with democracy and some of its values – especially tolerance. However, it may be the case that support for democracy is built during the individual's formation years like post-materialist values; if that is the

case, government performance may matter less in the short run but instead matter for younger generations to be raised and socialized in a democratic environment.

Still, the results obtained allow for some degree of inference regarding policy formulation. First, newly established democracies may not expect that support for democracy would help in eliciting voluntary tax compliance among the population; the proportion of individuals who support democracy would be a minority of the population, as Inglehart (2003) insights suggested.

The second part concerns whether non-democratic political regimes may elicit voluntary tax compliance among their supporters; the results provided no support to that proposition. It may be that the measure chosen did not capture support for those regimes. However, in light of the experimental results reviewed earlier in the chapter, I believe the results reflect the inability of non-democratic regimes of generating a climate of trust and cooperation between authorities and taxpayers. For instance, restrictions to individual rights and freedoms may be read by the population as a sign that authorities do not trust them, which may undermine taxpayers' willingness to comply with taxes. That raises the question of whether tax policies aimed to create a climate of trust and cooperation between authorities and taxpayers may succeed in such an environment. North (1994) discussed the same issue, namely whether institutional transplant had a chance for success; he was skeptical,

*“...economies that adopt the formal rules of another economy will have very different performance characteristics than the first economy because of different informal norms and enforcement...transferring the formal political and economic rules of successful Western market economies to third world and Eastern European economies is not a sufficient condition for good economic performance...” (p. 366)*

In the case of tax administration reform, trust and cooperation between taxpayers and authorities requires that both parties have the same standing. In the partial free and not free countries, authorities have the upper hand; individual rights and freedoms in those countries are either formally curtailed, informally unenforced, or both. Therefore, tax reforms based on models implemented in developed democracies may not produce the same results when implemented in countries where the underlying conditions are different from those of the originating countries.

#### **7.4 Post-Materialist Values**

The results obtained are inconclusive regarding the influence of post-materialist affecting Tax Morale. The first set of results revealed that there is no statistically significant impact; however, using the ordinal variable for measuring Tax Morale included in the World Values Survey showed a positive (rather than negative) relationship between upholding post-materialist values and Tax Morale. A positive relationship between upholding post-materialist values and Tax Morale is feasible. The most developed democracies offer their citizens more avenues to provide direct input in policymaking – e.g. referenda and petitions – that those upholding post-materialist values prefer. Taxpayers may respond by becoming more willing to comply with their taxes. One counter-argument has been already offered, namely that in light of controversy regarding the measure to gauge individuals' post-materialist values, a booming economy would yield a result consistent to the one obtained in the second set of results. Further work may be necessary to determine the impact of post-materialist values on Tax Morale along the lines of assessing the theoretical and empirical relevance of the concept.

Likewise, policy implications would have to wait further work on the topic. However, if the basic theoretical underpinnings hold true – individual values are acquired during the formation years and remain the same afterwards, governments may only take notice of the conditions imposed by post-materialist values when drafting tax policy.

## APPENDIX A: TABLES

The tables included in the appendix are the more complete versions of the results tables included in Chapter 6. Table A.1 presents the results for individuals living in Free countries and corresponds to Table 6.1. Table A.2 presents the results for individuals living in Partial Free and Not Free countries (same as in Table 6.3). Table A.3 presents the results for individuals living in the best scoring democracies (Table 6.4), and Table A.4 compares the results of the previous Probit models with Ordered Probit models (Table 6.5). Results do not include the country dummy variables, and in the case of Table A.4 the ordered Probit models do not include the cutoff coefficients.



TABLE A.1. TAX MORALE - INDIVIDUALS FROM FREE COUNTRIES (2005-08 World Values Survey - Freedom House scores up to 2.5)										
	1	2	3	4	5	6	7	8	9	10
	Trust in Government			Ideology			Support for democracy	Post Materialism	Full Model	Marginal Effects
TRUST IN GOVERNMENT										
Trust Justice	0.0238** (0.0115)		0.0057 (0.0134)						0.0023 (0.0150)	0.0009 (0.0058)
Trust Parliament	-0.0100 (0.0121)		-0.0234* (0.0136)						-0.0230 (0.0151)	-0.0089 (0.0059)
Trust Civil Service		0.0013 (0.0118)	0.0123 (0.0135)						0.0329** (0.0151)	0.0127** (0.0059)
Trust Police		0.0311*** (0.0113)	0.0313** (0.0132)						0.0478*** (0.0149)	0.0185*** (0.0058)
IDEOLOGY										
Income inequality (preference for)				-0.0005 (0.0030)		0.0016 (0.0031)			0.0041 (0.0036)	0.0016 (0.0014)
Individual responsibility					-0.00827*** (0.0029)	-0.00827*** (0.0030)			-0.00726** (0.0035)	-0.00281** (0.0014)
DEMOCRATIC SUPPORT										
Rejection Non-Democratic alternatives							0.194*** (0.0205)		0.191*** (0.0217)	0.0731*** (0.0082)
POST-MATERIALISM										
Post-Materialist Index (12 items)								-0.0332*** (0.0075)	-0.0299*** (0.0085)	-0.0115*** (0.0033)
National Pride	0.163*** (0.0124)	0.164*** (0.0124)	0.165*** (0.0126)	0.162*** (0.0121)	0.164*** (0.0121)	0.164*** (0.0121)	0.156*** (0.0130)	0.154*** (0.0125)	0.145*** (0.0140)	0.0561*** (0.0054)
Attendance Rel. Services	0.0232*** (0.0047)	0.0207*** (0.0047)	0.0215*** (0.0048)	0.0217*** (0.0046)	0.0222*** (0.0046)	0.0222*** (0.0047)	0.0237*** (0.0050)	0.0216*** (0.0047)	0.0232*** (0.0053)	0.00896*** (0.0021)
Gender (female)	0.109*** (0.0180)	0.110*** (0.0180)	0.110*** (0.0183)	0.115*** (0.0178)	0.113*** (0.0177)	0.113*** (0.0178)	0.126*** (0.0190)	0.121*** (0.0181)	0.132*** (0.0202)	0.0509*** (0.0078)
Age	0.00759*** (0.0008)	0.00753*** (0.0008)	0.00749*** (0.0008)	0.00739*** (0.0008)	0.00757*** (0.0008)	0.00751*** (0.0008)	0.00745*** (0.0009)	0.00759*** (0.0008)	0.00785*** (0.0009)	0.00303*** (0.0004)
EDUCATION (baseline secondary educ.)										
No education	-0.205*** (0.0534)	-0.183*** (0.0544)	-0.197*** (0.0552)	-0.195*** (0.0521)	-0.173*** (0.0513)	-0.186*** (0.0527)	-0.202*** (0.0589)	-0.185*** (0.0553)	-0.173** (0.0677)	-0.0681** (0.0269)
Primary Ed.	-0.120*** (0.0245)	-0.115*** (0.0246)	-0.114*** (0.0249)	-0.116*** (0.0242)	-0.122*** (0.0241)	-0.118*** (0.0243)	-0.121*** (0.0267)	-0.116*** (0.0248)	-0.125*** (0.0285)	-0.0486*** (0.0112)
Univr. Ed.	0.0087 (0.0207)	0.0134 (0.0208)	0.0138 (0.0209)	0.0042 (0.0204)	0.0060 (0.0204)	0.0053 (0.0205)	0.0000 (0.0217)	0.0044 (0.0209)	0.0117 (0.0229)	0.0045 (0.0088)

**TABLE A.1. TAX MORALE - INDIVIDUALS FROM FREE COUNTRIES**

(2005-08 World Values Survey - Freedom House scores up to 2.5)

	1	2	3	4	5	6	7	8	9	10
	Trust in Government			Ideology			Support for democracy	Post Materialism	Full Model	Marginal Effects
<b>INCOME</b>	-0.0122*** (0.0040)	-0.0121*** (0.0040)	-0.0116*** (0.0040)	-0.0113*** (0.0039)	-0.0115*** (0.0039)	-0.0106*** (0.0040)	-0.0158*** (0.0043)	-0.0128*** (0.0040)	-0.0159*** (0.0046)	-0.00614*** (0.0018)
<b>MARITAL STATUS (baseline married)</b>										
Divorced	-0.0067 (0.0402)	0.0010 (0.0402)	0.0027 (0.0407)	0.0037 (0.0397)	-0.0054 (0.0398)	0.0016 (0.0399)	-0.0003 (0.0422)	-0.0109 (0.0406)	0.0040 (0.0443)	0.0015 (0.0171)
Couples	-0.101*** (0.0314)	-0.109*** (0.0317)	-0.107*** (0.0319)	-0.102*** (0.0313)	-0.101*** (0.0310)	-0.101*** (0.0313)	-0.105*** (0.0342)	-0.115*** (0.0320)	-0.122*** (0.0359)	-0.0475*** (0.0141)
Separated	-0.0958* (0.0580)	-0.0979* (0.0579)	-0.0970* (0.0586)	-0.102* (0.0568)	-0.102* (0.0570)	-0.100* (0.0572)	-0.122* (0.0636)	-0.132** (0.0580)	-0.139** (0.0675)	-0.0546** (0.0267)
Widow	0.0000 (0.0382)	0.0009 (0.0390)	-0.0088 (0.0390)	0.0097 (0.0372)	0.0052 (0.0371)	0.0047 (0.0374)	0.0010 (0.0409)	-0.0005 (0.0385)	-0.0430 (0.0441)	-0.0167 (0.0172)
Single	-0.0515** (0.0251)	-0.0513** (0.0252)	-0.0552** (0.0255)	-0.0453* (0.0248)	-0.0471* (0.0247)	-0.0448* (0.0249)	-0.0553** (0.0268)	-0.0504** (0.0253)	-0.0571** (0.0283)	-0.0222** (0.0110)
<b>EMPLOYMENT STATUS (baseline full-time employed)</b>										
Unemployed	0.0064 (0.0342)	0.0034 (0.0342)	0.0097 (0.0347)	0.0074 (0.0336)	-0.0002 (0.0335)	0.0050 (0.0337)	0.0059 (0.0363)	-0.0040 (0.0344)	0.0106 (0.0387)	0.0041 (0.0149)
Part-time employed	-0.0392 (0.0337)	-0.0511 (0.0336)	-0.0490 (0.0340)	-0.0401 (0.0332)	-0.0483 (0.0331)	-0.0455 (0.0334)	-0.0499 (0.0354)	-0.0435 (0.0340)	-0.0530 (0.0373)	-0.0206 (0.0146)
Self-employed	-0.0515* (0.0312)	-0.0632** (0.0313)	-0.0542* (0.0317)	-0.0617** (0.0306)	-0.0662** (0.0306)	-0.0624** (0.0307)	-0.0517 (0.0335)	-0.0755** (0.0313)	-0.0375 (0.0358)	-0.0145 (0.0139)
Retired	0.0713** (0.0314)	0.0590* (0.0314)	0.0710** (0.0318)	0.0668** (0.0309)	0.0578* (0.0308)	0.0623** (0.0310)	0.0580* (0.0331)	0.0568* (0.0317)	0.0627* (0.0352)	0.0241* (0.0135)
Stay @ home	0.0595* (0.0322)	0.0563* (0.0323)	0.0590* (0.0327)	0.0561* (0.0317)	0.0519 (0.0316)	0.0535* (0.0319)	0.0811** (0.0356)	0.0409 (0.0324)	0.0591 (0.0379)	0.0227 (0.0145)
Student	0.0216 (0.0368)	0.0231 (0.0371)	0.0286 (0.0375)	-0.0038 (0.0362)	0.0089 (0.0361)	-0.0041 (0.0364)	0.0083 (0.0389)	0.0187 (0.0371)	0.0395 (0.0412)	0.0152 (0.0158)
Other employment	-0.0366 (0.0649)	-0.0364 (0.0650)	-0.0411 (0.0658)	-0.0585 (0.0637)	-0.0573 (0.0637)	-0.0609 (0.0642)	-0.0410 (0.0689)	-0.0363 (0.0658)	-0.0291 (0.0721)	-0.0113 (0.0281)
Country Dummies (baseline USA)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	-0.665*** (0.0825)	-0.711*** (0.0833)	-0.710*** (0.0846)	-0.603*** (0.0800)	-0.581*** (0.0797)	-0.584*** (0.0812)	-0.666*** (0.0833)	-0.521*** (0.0821)	-0.733*** (0.0976)	-0.0976 (0.0976)
Observations	31,414	31,294	30,612	32,305	32,482	32,016	27,939	31,085	25,155	25,155

(Robust standard errors in parentheses)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Sources: World Values Survey 2005 official data file v.20090901, and 2006 Freedom in the World Survey.

TABLE A.2. TAX MORALE - INDIVIDUALS FROM PARTIAL FREE AND NOT FREE COUNTRIES (2005-08 World Values Survey - Freedom House scores 3 and higher)										
	1	2	3	4	5	6	7	8	9	10
	Trust in Government			Ideology			Support for Democracy	Post-Materialism	Full Model	Marginal Effects
TRUST IN GOVERNMENT										
Trust Justice	0.0529*** (0.0176)		0.0547** (0.0213)						0.0483** (0.0241)	0.0189** (0.0095)
Trust Parliament	0.0051 (0.0187)		0.0203 (0.0215)						0.0052 (0.0248)	0.0020 (0.0097)
Trust Civil Service		0.0039 (0.0182)	-0.0200 (0.0209)						-0.0112 (0.0248)	-0.0044 (0.0097)
Trust Police		0.0359** (0.0175)	-0.0005 (0.0215)						0.0037 (0.0246)	0.0015 (0.0097)
IDEOLOGY										
Income inequality (preference for)				0.0194*** (0.0042)		0.0249*** (0.0043)			0.0211*** (0.0060)	0.00828*** (0.0024)
Individual responsibility					-0.0251*** (0.0043)	-0.0306*** (0.0044)			-0.0426*** (0.0058)	-0.0167*** (0.0023)
DEMOCRATIC SUPPORT										
Rejection Non-Democratic alternatives							0.201*** (0.0325)		0.213*** (0.0362)	0.0825*** (0.0137)
POST-MATERIALISM										
Post-Materialist Index (12 items)							0.0121 (0.0109)		0.0059 (0.0143)	0.0023 (0.0056)
National Pride	0.214*** (0.0235)	0.224*** (0.0235)	0.224*** (0.0239)	0.247*** (0.0209)	0.250*** (0.0208)	0.247*** (0.0210)	0.263*** (0.0230)	0.258*** (0.0213)	0.227*** (0.0276)	0.0889*** (0.0108)
Attendance Rel. Services	0.0201** (0.0081)	0.0185** (0.0081)	0.0175** (0.0082)	0.0321*** (0.0066)	0.0319*** (0.0066)	0.0317*** (0.0066)	0.0240*** (0.0072)	0.0317*** (0.0067)	0.0122 (0.0095)	0.0048 (0.0037)
Gender (female)	0.0233 (0.0284)	0.0194 (0.0284)	0.0215 (0.0288)	0.0230 (0.0266)	0.0158 (0.0265)	0.0182 (0.0267)	0.0057 (0.0299)	0.0172 (0.0269)	-0.0057 (0.0336)	-0.0022 (0.0132)
Age	0.0016 (0.0012)	0.0015 (0.0012)	0.0015 (0.0013)	0.00262** (0.0011)	0.00237** (0.0011)	0.00235** (0.0011)	0.00206* (0.0012)	0.00301*** (0.0011)	0.0009 (0.0015)	0.0003 (0.0006)
EDUCATION (baseline secondary educ.)										
No education	-0.0283 (0.0546)	-0.0195 (0.0546)	-0.0104 (0.0560)	-0.106** (0.0421)	-0.122*** (0.0420)	-0.116*** (0.0424)	-0.0858* (0.0474)	-0.119*** (0.0427)	0.0183 (0.0698)	0.0072 (0.0273)
Primary Ed.	-0.0128 (0.0360)	-0.0185 (0.0360)	-0.0197 (0.0365)	-0.0197 (0.0322)	-0.0234 (0.0320)	-0.0199 (0.0324)	-0.0464 (0.0360)	-0.0235 (0.0324)	-0.0462 (0.0429)	-0.0181 (0.0169)
Univr. Ed.	0.0792* (0.0360)	0.0724* (0.0360)	0.0748* (0.0365)	0.107*** (0.0322)	0.115*** (0.0320)	0.109*** (0.0324)	0.119*** (0.0360)	0.116*** (0.0324)	0.0827* (0.0429)	0.0322* (0.0169)

**TABLE A.2. TAX MORALE - INDIVIDUALS FROM PARTIAL FREE AND NOT FREE COUNTRIES**  
(2005-08 World Values Survey - Freedom House scores 3 and higher)

	1	2	3	4	5	6	7	8	9	10
	Trust in Government			Ideology			Support for Democracy	Post-Materialism	Full Model	Marginal Effects
<b>INCOME</b>	(0.0420)	(0.0422)	(0.0427)	(0.0372)	(0.0372)	(0.0374)	(0.0402)	(0.0377)	(0.0480)	(0.0185)
	-0.0508***	-0.0508***	-0.0500***	-0.0492***	-0.0437***	-0.0454***	-0.0384***	-0.0460***	-0.0353***	-0.0138***
	(0.0068)	(0.0068)	(0.0069)	(0.0061)	(0.0061)	(0.0062)	(0.0068)	(0.0061)	(0.0081)	(0.0032)
<b>MARITAL STATUS (baseline married)</b>										
Divorced	-0.0972	-0.0633	-0.0800	-0.0584	-0.0665	-0.0688	-0.1010	-0.0513	-0.1150	-0.0455
	(0.0952)	(0.0958)	(0.0980)	(0.0884)	(0.0893)	(0.0894)	(0.0957)	(0.0889)	(0.1080)	(0.0429)
Couples	-0.0915	-0.0885	-0.0917	-0.0848	-0.0483	-0.0643	-0.1020	-0.0825	-0.0875	-0.0345
	(0.0676)	(0.0677)	(0.0687)	(0.0669)	(0.0663)	(0.0676)	(0.0740)	(0.0679)	(0.0804)	(0.0319)
Separated	-0.1040	-0.0986	-0.1210	-0.0769	-0.0507	-0.0730	-0.0176	0.0167	-0.0411	-0.0162
	(0.1140)	(0.1150)	(0.1160)	(0.1040)	(0.1040)	(0.1050)	(0.1180)	(0.1050)	(0.1370)	(0.0540)
Widow	-0.0488	-0.0466	-0.0616	-0.0116	0.0012	-0.0144	-0.0139	-0.0111	-0.1000	-0.0396
	(0.0612)	(0.0611)	(0.0626)	(0.0506)	(0.0502)	(0.0509)	(0.0587)	(0.0509)	(0.0794)	(0.0315)
Single	-0.0499	-0.0581	-0.0529	-0.0572	-0.0584*	-0.0631*	-0.0919**	-0.0474	-0.0845*	-0.0332*
	(0.0381)	(0.0382)	(0.0387)	(0.0348)	(0.0347)	(0.0350)	(0.0386)	(0.0351)	(0.0445)	(0.0175)
<b>EMPLOYMENT STATUS (baseline full-time employed)</b>										
Unemployed	0.0420	0.0433	0.0477	0.0470	0.0470	0.0570	0.0974**	0.0488	0.121**	0.0470**
	(0.0474)	(0.0475)	(0.0481)	(0.0430)	(0.0429)	(0.0433)	(0.0461)	(0.0434)	(0.0532)	(0.0204)
Part-time employed	-0.0743	-0.0571	-0.0731	-0.0729	-0.0750	-0.0661	-0.0056	-0.0745	0.0144	0.0056
	(0.0623)	(0.0626)	(0.0632)	(0.0610)	(0.0603)	(0.0612)	(0.0669)	(0.0617)	(0.0718)	(0.0281)
Self-employed	-0.0007	0.0009	0.0055	-0.0039	0.0033	0.0100	0.0323	0.0019	0.0730	0.0285
	(0.0425)	(0.0426)	(0.0432)	(0.0392)	(0.0392)	(0.0395)	(0.0442)	(0.0396)	(0.0494)	(0.0192)
Retired	0.0904	0.0859	0.1030	0.106*	0.100*	0.114**	0.165***	0.108*	0.200***	0.0766***
	(0.0644)	(0.0648)	(0.0658)	(0.0565)	(0.0560)	(0.0568)	(0.0622)	(0.0569)	(0.0767)	(0.0286)
Stay @ home	0.0739	0.0261	0.0519	0.0563	0.0417	0.0534	0.0581	0.0505	0.138**	0.0534**
	(0.0555)	(0.0555)	(0.0565)	(0.0436)	(0.0435)	(0.0438)	(0.0477)	(0.0440)	(0.0651)	(0.0248)
Student	0.0638	0.0509	0.0604	0.0945*	0.0873	0.0989*	0.0912	0.0660	0.0639	0.0249
	(0.0579)	(0.0582)	(0.0589)	(0.0540)	(0.0540)	(0.0545)	(0.0601)	(0.0546)	(0.0683)	(0.0264)
Other employment	0.197***	0.185**	0.193***	0.121*	0.122*	0.135**	0.0665	0.1070	0.202**	0.0775**
	(0.0719)	(0.0725)	(0.0735)	(0.0655)	(0.0652)	(0.0661)	(0.0736)	(0.0664)	(0.0865)	(0.0322)
Country Dummies (baseline Turkey)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	-0.0742	-0.0088	-0.0815	-0.189*	0.0272	-0.0619	-0.1060	-0.1580	0.0423	
	(0.1230)	(0.1230)	(0.1260)	(0.1080)	(0.1080)	(0.1100)	(0.1180)	(0.1110)	(0.1530)	
Observations	10,847	10,778	10,452	14,366	14,480	14,246	11,783	14,110	7,894	7,894

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

<b>TABLE A.3. TAX MORALE - INDIVIDUALS FROM SELECTED FREE COUNTRIES</b> (2005-08 World Values Survey - Freedom House scores 1 only)										
	1	2	3	4	5	6	7	8	9	10
	Trust in Government		Ideology			Support for Democracy	Post-Materialism	Full Model	Marginal Effects	
<b>TRUST IN GOVERNMENT</b>										
Trust Justice	0.0687*** (0.0193)		0.0234 (0.0223)					0.0226 (0.0236)		0.0086 (0.0089)
Trust Parliament	-0.0100 (0.0203)		-0.0417* (0.0224)					-0.0611*** (0.0235)		-0.0232*** (0.0089)
Trust Civil Service		0.0293 (0.0201)	0.0428* (0.0227)					0.0611** (0.0239)		0.0232*** (0.0091)
Trust Police		0.0959*** (0.0200)	0.0901*** (0.0229)					0.110*** (0.0241)		0.0418*** (0.0091)
<b>IDEOLOGY</b>										
Income inequality (preference for)				-0.0042 (0.0053)		-0.0029 (0.0055)		0.0014 (0.0059)		0.0005 (0.0023)
Individual responsibility					-0.0060 (0.0052)	-0.0055 (0.0054)		-0.0032 (0.0057)		-0.0012 (0.0022)
<b>SUPPORT FOR DEMOCRACY</b>										
Rejection Non-Democratic alternatives							0.191*** (0.0271)	0.190*** (0.0284)		0.0716*** (0.0107)
<b>POST-MATERIALISM</b>										
Post-Materialist Index (12 items)								0.0156 (0.0112)	0.0177 (0.0120)	0.0067 (0.0046)
<b>National Pride</b>	0.115*** (0.0186)	0.107*** (0.0187)	0.106*** (0.0188)	0.121*** (0.0183)	0.123*** (0.0183)	0.122*** (0.0184)	0.118*** (0.0188)	0.123*** (0.0188)	0.105*** (0.0201)	0.0400*** (0.0076)
Attendance Rel. Services	0.0414*** (0.0074)	0.0395*** (0.0074)	0.0406*** (0.0075)	0.0427*** (0.0073)	0.0433*** (0.0073)	0.0440*** (0.0073)	0.0393*** (0.0075)	0.0430*** (0.0074)	0.0403*** (0.0079)	0.0153*** (0.0030)
Gender (female)	0.161*** (0.0276)	0.160*** (0.0277)	0.156*** (0.0280)	0.171*** (0.0273)	0.170*** (0.0273)	0.171*** (0.0274)	0.179*** (0.0281)	0.168*** (0.0276)	0.166*** (0.0293)	0.0629*** (0.0111)
Age	0.00861*** (0.0013)	0.00821*** (0.0013)	0.00843*** (0.0013)	0.00817*** (0.0013)	0.00817*** (0.0013)	0.00821*** (0.0013)	0.00776*** (0.0013)	0.00817*** (0.0013)	0.00818*** (0.0014)	0.00310*** (0.0005)
<b>EDUCATION (baseline secondary educ.)</b>										
No education	-0.0665 (0.1360)	-0.0436 (0.1390)	-0.0536 (0.1390)	-0.0222 (0.1370)	-0.0139 (0.1380)	-0.0099 (0.1390)	-0.0367 (0.1440)	-0.0428 (0.1400)	-0.0278 (0.1540)	-0.0106 (0.0588)
Primary Ed.	-0.105*** (0.0429)	-0.0998** (0.0428)	-0.0977** (0.0432)	-0.107** (0.0424)	-0.109*** (0.0423)	-0.111*** (0.0425)	-0.105** (0.0441)	-0.0967** (0.0430)	-0.0897* (0.0462)	-0.0344* (0.0178)
Univr. Ed.	-0.0100 (0.0303)	-0.0023 (0.0304)	-0.0028 (0.0307)	-0.0045 (0.0300)	-0.0077 (0.0301)	-0.0060 (0.0301)	-0.0231 (0.0307)	-0.0229 (0.0305)	-0.0240 (0.0321)	-0.0091 (0.0122)

TABLE A.3. TAX MORALE - INDIVIDUALS FROM SELECTED FREE COUNTRIES (2005-08 World Values Survey - Freedom House scores 1 only)											
	Trust in Government			Ideology			Support for Democracy		Post-Materialism	Full Model	Marginal Effects
	1	2	3	4	5	6	7	8	9	10	
INCOME	-0.0179*** (0.0060)	-0.0179*** (0.0060)	-0.0167*** (0.0061)	-0.0166*** (0.0060)	-0.0161*** (0.0060)	-0.0156*** (0.0061)	-0.0170*** (0.0061)	-0.0178*** (0.0061)	-0.0153*** (0.0065)	-0.00582*** (0.0025)	
MARITAL STATUS (baseline married)											
Divorced	-0.0223 (0.0530)	-0.0170 (0.0527)	-0.0087 (0.0534)	-0.0125 (0.0525)	-0.0271 (0.0525)	-0.0161 (0.0526)	-0.0137 (0.0538)	-0.0402 (0.0531)	-0.0078 (0.0558)	-0.0030 (0.0212)	
Couples	-0.0626 (0.0521)	-0.0713 (0.0529)	-0.0642 (0.0530)	-0.0641 (0.0520)	-0.0716 (0.0521)	-0.0646 (0.0521)	-0.0758 (0.0533)	-0.0804 (0.0521)	-0.0723 (0.0550)	-0.0277 (0.0213)	
Separated	-0.164* (0.0938)	-0.173* (0.0944)	-0.166* (0.0953)	-0.168* (0.0925)	-0.166* (0.0929)	-0.167* (0.0932)	-0.181* (0.0944)	-0.191** (0.0933)	-0.207*** (0.0988)	-0.0806*** (0.0391)	
Widow	0.0634 (0.0629)	0.0425 (0.0623)	0.0380 (0.0635)	0.0599 (0.0617)	0.0603 (0.0617)	0.0521 (0.0620)	0.0439 (0.0648)	0.0519 (0.0624)	-0.0026 (0.0679)	-0.0010 (0.0258)	
Single	-0.0666* (0.0394)	-0.0685* (0.0396)	-0.0665* (0.0399)	-0.0708* (0.0391)	-0.0685* (0.0390)	-0.0688* (0.0392)	-0.0678* (0.0400)	-0.0630 (0.0395)	-0.0611 (0.0418)	-0.0233 (0.0160)	
EMPLOYMENT STATUS (baseline full-time employed)											
Unemployed	-0.0155 (0.0676)	-0.0091 (0.0679)	-0.0059 (0.0687)	-0.0181 (0.0667)	-0.0133 (0.0668)	-0.0141 (0.0671)	-0.0190 (0.0684)	-0.0401 (0.0674)	0.0051 (0.0722)	0.0019 (0.0274)	
Part-time employed	0.0040 (0.0487)	-0.0161 (0.0486)	-0.0056 (0.0491)	-0.0009 (0.0481)	-0.0110 (0.0479)	-0.0049 (0.0481)	-0.0204 (0.0495)	-0.0249 (0.0486)	-0.0216 (0.0515)	-0.0082 (0.0196)	
Self-employed	-0.146*** (0.0512)	-0.148*** (0.0515)	-0.143*** (0.0519)	-0.148*** (0.0506)	-0.150*** (0.0507)	-0.143*** (0.0508)	-0.137*** (0.0520)	-0.155*** (0.0510)	-0.111** (0.0545)	-0.0428*** (0.0212)	
Retired	0.0533 (0.0476)	0.0478 (0.0478)	0.0556 (0.0482)	0.0509 (0.0473)	0.0533 (0.0473)	0.0546 (0.0476)	0.0663 (0.0486)	0.0433 (0.0481)	0.0800 (0.0510)	0.0301 (0.0190)	
Stay @ home	0.112** (0.0554)	0.101* (0.0555)	0.104* (0.0559)	0.100* (0.0546)	0.101* (0.0545)	0.100* (0.0547)	0.0831 (0.0570)	0.0893 (0.0555)	0.0711 (0.0596)	0.0267 (0.0222)	
Student	0.0085 (0.0647)	0.0437 (0.0657)	0.0350 (0.0658)	0.0091 (0.0639)	0.0234 (0.0643)	0.0128 (0.0641)	-0.0116 (0.0656)	0.0178 (0.0649)	0.0276 (0.0681)	0.0104 (0.0256)	
Other employment	-0.0337 (0.0846)	-0.0106 (0.0846)	-0.0247 (0.0852)	-0.0474 (0.0842)	-0.0313 (0.0838)	-0.0478 (0.0842)	-0.0273 (0.0863)	-0.0382 (0.0849)	-0.0409 (0.0879)	-0.0156 (0.0337)	
Country Dummies (baseline USA)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Constant	-0.707*** (0.1160)	-0.845*** (0.1180)	-0.849*** (0.1200)	-0.538*** (0.1110)	-0.552*** (0.1100)	-0.532*** (0.1120)	-0.613*** (0.1110)	-0.601*** (0.1130)	-1.000*** (0.1350)	YES	
Observations	13,944	13,892	13,664	14,205	14,238	14,109	13,445	13,872	12,432	12,432	

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

TABLE A.4. TAX MORALE - RESULT COMPARISON (PROBIT REGRESSIONS)						
(2005-08 World Values Survey - Freedom House)						
All "Free"						
	Part + Non-Free		Best of "Free"			
	Probit	Ordered	Probit	Ordered	Probit	Ordered
TRUST IN GOVERNMENT						
Trust Justice	0.0023 (0.0150)	0.0039 (0.0145)	0.0483** (0.0241)	0.0415** (0.0205)	0.0226 (0.0236)	0.0228 (0.0241)
Trust Parliament	-0.0230 (0.0151)	-0.0028 (0.0139)	0.0052 (0.0248)	0.0000 (0.0222)	-0.0611*** (0.0235)	-0.0272 (0.0223)
Trust Civil Service	0.0329** (0.0151)	0.0290** (0.0141)	-0.0112 (0.0248)	-0.0075 (0.0219)	0.0611** (0.0239)	0.0711*** (0.0230)
Trust Police	0.0478*** (0.0149)	0.0421*** (0.0142)	0.0037 (0.0246)	-0.0178 (0.0213)	0.110*** (0.0241)	0.124*** (0.0245)
IDEOLOGY						
Income inequality (preference for)	0.0041 (0.0036)	-0.0010 (0.0034)	0.0211*** (0.0060)	0.0250*** (0.0060)	0.0014 (0.0059)	-0.0029 (0.0058)
Individual responsibility	-0.00726** (0.0035)	-0.00881*** (0.0034)	-0.0426*** (0.0058)	-0.0418*** (0.0057)	-0.0032 (0.0057)	-0.0015 (0.0058)
SUPPORT FOR DEMOCRACY						
Rejection Non-Democratic alternatives	0.191*** (0.0217)	0.210*** (0.0194)	0.213*** (0.0362)	0.179*** (0.0328)	0.190*** (0.0284)	0.211*** (0.0264)
POST-MATERIALISM						
Post-Materialist Index (12 items)	-0.0299*** (0.0085)	-0.0330*** (0.0077)	0.0059 (0.0143)	0.0011 (0.0127)	0.0177 (0.0120)	0.0220*** (0.0112)
National Pride	0.145*** (0.0140)	0.122*** (0.0123)	0.227*** (0.0276)	0.213*** (0.0232)	0.105*** (0.0201)	0.0890*** (0.0184)
(Religiosity) Attendance Religious Service	0.0232*** (0.0053)	0.0274*** (0.0048)	0.0122 (0.0095)	0.0201** (0.0085)	0.0403*** (0.0079)	0.0416*** (0.0074)
Gender (female)	0.132*** (0.0202)	0.130*** (0.0178)	-0.0057 (0.0336)	0.0043 (0.0289)	0.166*** (0.0293)	0.163*** (0.0266)
Age	0.00785*** (0.0009)	0.00762*** (0.0008)	0.0009 (0.0015)	0.0007 (0.0012)	0.00818*** (0.0014)	0.00834*** (0.0013)
EDUCATION (baseline secondary educ.)						
No education	-0.173** (0.0677)	-0.178*** (0.0629)	0.0183 (0.0698)	0.0722 (0.0624)	-0.0278 (0.1540)	-0.0998 (0.1500)
Primary Ed.	-0.125*** (0.0285)	-0.143*** (0.0267)	-0.0462 (0.0429)	0.0143 (0.0363)	-0.0897* (0.0462)	-0.119*** (0.0439)
Univr. Ed.	0.0117 (0.0229)	0.0478** (0.0201)	0.0827* (0.0480)	0.0277 (0.0436)	-0.0240 (0.0321)	0.0321 (0.0283)

<b>TABLE A.4. TAX MORALE - RESULT COMPARISON (PROBIT REGRESSIONS)</b>						
(2005-08 World Values Survey - Freedom House)						
	All "Free"		Part + Non-Free		Best of "Free"	
	Probit	Ordered	Probit	Ordered	Probit	Ordered
<b>INCOME</b>	-0.0159*** (0.0046)	-0.0172*** (0.0043)	-0.0353*** (0.0081)	-0.0366*** (0.0075)	-0.0153** (0.0065)	-0.0219*** (0.0061)
<b>MARITAL STATUS (baseline married)</b>						
Divorced	0.0040 (0.0443)	-0.0488 (0.0408)	-0.1150 (0.1080)	-0.0784 (0.0933)	-0.0078 (0.0558)	-0.0660 (0.0529)
Couples	-0.122*** (0.0359)	-0.113*** (0.0317)	-0.0875 (0.0804)	-0.186*** (0.0680)	-0.0723 (0.0550)	-0.0736 (0.0495)
Separated	-0.139** (0.0675)	-0.121** (0.0581)	-0.0411 (0.1370)	-0.1530 (0.1220)	-0.207** (0.0988)	-0.205*** (0.0884)
Widow	-0.0430 (0.0441)	-0.0604 (0.0412)	-0.1000 (0.0794)	-0.121* (0.0699)	-0.0026 (0.0679)	-0.0297 (0.0662)
Single	-0.0571** (0.0283)	-0.0542*** (0.0252)	-0.0845* (0.0445)	-0.0967** (0.0388)	-0.0611 (0.0418)	-0.0629* (0.0382)
<b>EMPLOYMENT (baseline full-time employed)</b>						
Unemployed	0.0106 (0.0387)	-0.0069 (0.0340)	0.121** (0.0532)	0.0640 (0.0462)	0.0051 (0.0722)	-0.0577 (0.0666)
Part-time employed	-0.0530 (0.0373)	-0.0423 (0.0322)	0.0144 (0.0718)	-0.0322 (0.0629)	-0.0216 (0.0515)	-0.0010 (0.0451)
Self-employed	-0.0375 (0.0358)	-0.0407 (0.0314)	0.0730 (0.0494)	0.0732* (0.0410)	-0.111** (0.0545)	-0.0856* (0.0464)
Retired	0.0627* (0.0352)	0.0423 (0.0322)	0.200*** (0.0767)	0.124* (0.0721)	0.0800 (0.0510)	0.0634 (0.0475)
Stay @ home	0.0591 (0.0379)	0.0512 (0.0352)	0.138** (0.0651)	0.0792 (0.0585)	0.0711 (0.0596)	0.0681 (0.0576)
Student	0.0395 (0.0412)	0.0565 (0.0360)	0.0639 (0.0683)	0.0639 (0.0593)	0.0276 (0.0681)	0.0724 (0.0579)
Other employment	-0.0291 (0.0721)	-0.0722 (0.0672)	0.202** (0.0865)	0.1230 (0.0862)	-0.0409 (0.0879)	-0.0893 (0.0859)
<b>COUNTY DUMMIES (Y/N, baseline)</b>	YES/USA YES	YES/USA YES	YES/TURKEY YES	YES/TURKEY YES	YES/USA YES	YES/USA YES
Constant	25,155	25,155	7,894	7,894	12,432	12,432
Observations	25,155	25,155	7,894	7,894	12,432	12,432

(Robust standard errors in parentheses)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Sources: World Values Survey 2005 official data file v.20090901, and 2006 Freedom in the World Survey



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