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How Do We Research Tax Morale at the Subnational Level?

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Jalia Kangave, Giulia Mascagni and Mick Moore

Summary

One of the most effective ways of increasing voluntary tax compliance is by improving tax morale. Several studies have been undertaken to examine why some individuals pay taxes while others do not. While many of these studies have been conducted at the national level, there is an increasing body of research at the subnational level. Three main methods are used to study tax morale: surveys, simulation exercises and field experiments. In this paper, we describe each of these methods, highlighting their strengths and weaknesses. We also examine their usefulness to tax administrators and policymakers wishing to increase tax compliance. We conclude that to get a better understanding of the factors that affect tax morale at the subnational level, more studies need to be undertaken. This should include studies that use qualitative methods to understand taxpayer behaviour. Lastly, studies should also investigate the variations between categories of individuals.

Keywords: tax morale; tax compliance; surveys; simulation exercises; field experiments; subnational government.

Jalia Kangave, Giulia Mascagni and Mick Moore are Research Fellows at the Institute of Development Studies working on a variety of tax issues in developing countries under the auspices of the International Centre for Tax and Development.

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Acronyms

ATAF	African Tax Administration Forum
ICTD	International Centre for Tax and Development
RRA	Rwanda Revenue Authority

Practice summary

There is an increasing body of research that has been undertaken to understand the things that motivate individuals to pay taxes (also broadly referred to as tax morale). Most of this research has been carried out in developed countries and at the national level. There is considerably less research on tax morale at the subnational level, particularly in developing countries.

To research tax morale, three main methods have been used. Some researchers use surveys, in which they inquire about the experiences, perceptions and attitudes of individuals to the tax system. Others use simulation exercises where they put individuals in artificial interaction situations and observe how these individuals behave when they are asked to make decisions related to paying taxes. Lastly, some researchers use tax experiments, which involve measuring the effect on actual taxpaying behaviour of various kinds of messages sent to real taxpayers by revenue authorities. Each of these methods has its strengths and weaknesses and no one method is necessarily better than the other. The choice of method thus depends on a number of factors, including the purpose of the research, the information that researchers can access, the available resources, the tax type, and the time constraints.

Irrespective of the method chosen, the bulk of existing research on tax morale has concentrated on the human motivations behind tax compliance, including moral suasion, the cost-benefit analysis of non-compliance, the trust that people have in their governments, the links that taxpayers make between the taxes that they pay and the services provided by government, and the impact of tax incentives on individuals' behaviour. There are hardly any studies that explain variations in compliance among different categories of individuals. For example, are more-educated people more compliant than less-educated people? Are owners of saloons more compliant than owners of butcher shops? Are women more compliant than men? And what explains the variations in compliance? Such studies are more likely to reveal factors beyond human motivations and provide very practical solutions for how tax collectors can adjust policies and change their behaviour in order to encourage compliance.

Various conclusions can be drawn from the findings in existing research:

a. All those things that we think are generally likely to affect tax compliance in fact do so to some extent.
b. The factors affecting tax compliance vary according to place, time and context. Responses given to survey questions in one year, for example, may not be the same two years down the road – even where the respondents are the same. It is also quite likely that messages in field experiments that result in behavioural changes in one location will not have a similar effect in another location.
c. If revenue authorities changed the way they approached taxpayers in response to research, the behaviour of taxpayers would also change.

To get a better understanding of tax morale at the subnational level, many more studies are required. In addition to the three most common methods already noted, researchers need to conduct more studies that use qualitative methods (such as in-depth interviews) since these would provide the reasons behind taxpayer behaviour.

Development partners can support these efforts in the following ways:

a. By funding more research on tax morale. In the short term, international researchers will need to play a central role in this research since there is still limited capacity to undertake tax research in many of these countries. The long-term objective, however, should be to support research projects that build the capacity of local researchers to undertake future research independently. Researchers should also work closely with officials in subnational government offices.
b. By providing technical support to subnational governments for compiling comprehensive tax databases, digitalising processes and improving capacity to analyse the information compiled.
c. By working with governments in developing countries to ensure that the suggested reforms are implemented.

1 Introduction

With increasing emphasis being placed on the importance of domestic resource mobilisation in developing countries, revenue authorities in those countries are under pressure to widen their tax bases. This pressure is also felt at the subnational level, partly because, in addition to cuts in donor funding, fiscal transfers from central to local governments are rarely adequate to fund public services.

There are a number of ways in which revenue authorities can ensure that more people pay their taxes. One is to increase the number of tax audits they conduct (i.e. the examination of the financial records of taxpayers to detect non-compliance). However, tax audits are costly and revenue authorities in developing countries often have limited capacity to undertake them. This problem is magnified at the subnational level, where human and monetary resources are far more limited.

Another way to increase tax revenues would be to use force in the collection of taxes. While this approach is common in some developing countries, particularly at the subnational level, there are high economic and political costs associated with it (Therkildsen 2006; Fjeldstad and Therkildsen 2008). Economically, the use of force increases the costs of collection because it entails activities like setting up roadblocks, sending tax collectors into the field to physically collect taxes and, in extreme cases, imprisoning tax defaulters (Therkildsen 2006). The costs associated with such activities can be quite high relative to the income generated. Politically, force often results in resistance, which not only affects the relationship between taxpayers and tax collectors but also makes governments infamous with their citizens.

A third option is to encourage taxpayers to voluntarily comply with their tax obligations. However, it is difficult to achieve full voluntary compliance, even in developed countries. Consequently, any sustainable tax system – whether at the national or subnational level – has to rely significantly on quasi-voluntary compliance (Moore 2013). In other words, it has to rely on taxpayers' willingness to pay, backed by mechanisms of enforcement that are used only occasionally in the event of non-compliance.

To understand the factors that drive voluntary compliance, it has become routine for researchers to conduct studies on tax morale. Most of these studies have been conducted at the national level, even though there are an increasing number of studies at the subnational level. The results of such studies are often shared with various stakeholders, including policymakers, implementers, development partners, journalists and policy advocates (Fjeldstad, Schulz-Herzenberg and Sjursen 2012). Some studies (such as tax experiments) are undertaken by researchers in collaboration with revenue authorities.

1.1 What is tax morale?

There is no clear definition of the concept of tax morale. Researchers seeking to understand why some people pay taxes and others do not often use the phrase 'tax morale' interchangeably with the phrase 'tax compliance'. Broadly speaking, tax morale refers to the extent of willingness to pay taxes – i.e. the mental state of the individual. By contrast, tax compliance normally refers to the behaviour of taxpayers. To some extent, this behaviour is informed by the mental state of the taxpayer. An individual may decide to pay taxes because of intrinsic motivations such as guilt or shame, the influence of their peers, or prevailing social and cultural norms on paying taxes (Luttmer and Singhal 2014). On the other hand, this decision may also be driven by strictly economic considerations, such as whether evasion is likely to be detected by tax administrators and what punishment someone will suffer as a result of non-compliance. Because of the close link between tax morale and tax compliance, in this paper we also discuss the relevant compliance literature. For the rest of the paper, we shall mostly use the broader phrase 'tax compliance'.

Taxpayers do not always have the option of deciding whether to pay or not pay taxes. The type of the tax and the manner in which it is assessed and collected also affect compliance. For example, those liable to pay taxes on employment income (pay as you earn – PAYE) almost always pay their taxes because the decision of whether or not to pay is not in their hands. The PAYE is withheld – or should be withheld – directly from their income by their employer and remitted to the revenue authority. Similarly, if someone has a trading business and nearly all their suppliers are paying value added tax (VAT), it becomes difficult to avoid paying VAT due to the incentives associated with the system of refunds that is typical of the VAT and the corresponding paper trail that it leaves behind. By contrast, if compliance is purely up to an individual or company (as is more the case with some income taxes), taxpayers basically have a much wider scope to evade. Here, strengthening tax morale becomes more important.

Even for those tax types where taxpayers have a wider scope to evade, the choice of whether or not to pay taxes does not depend solely on the taxpayer. This decision is also affected by the tax authority's reputation on enforcement. If taxpayers know that the tax authority keeps proper records and goes after those who are not compliant, people are more likely to develop a culture of paying taxes. This is particularly important for subnational taxes where the tax base is more easily identifiable than national taxes. To use just one example, the tax base for property taxes (a potentially significant source of revenue for subnational governments) is easily identifiable. This means that if local governments have very good databases, capacity to use these databases and the will to enforce laws, then avoiding property taxes becomes more difficult. In such cases, it is the threat of detection and accompanying punishment that will greatly influence tax compliance.

Using methods such as surveys, simulation exercises and field experiments, researchers have identified various motives behind the decisions made by individuals on whether to pay or not pay their taxes. The results of such studies can be used to shape the design of tax policies and administrative processes, and thus ultimately improve tax compliance.

2 How do we investigate the factors that drive tax compliance?

Researchers use three main methods to collect data that are useful in understanding the drivers of tax compliance:

a. **Surveys,** in which respondents are asked tax-related questions and questions on broader issues such as governance, economic and social conditions, and other related issues. Examples include public opinion surveys such as the World Values Survey, the Latinobarómetro and the Afrobarometer.[1] Frequently, researchers design surveys specific to the contexts they wish to study and sometimes draw on the data and questions contained in public opinion surveys. To increase the chances of getting honest answers from respondents, researchers often ask indirect questions to avoid implying wrongdoing on the part of the respondents (Fjeldstad 2016). A typical survey will seek information on the following:

   i. The *attitudes* of respondents towards paying taxes and towards tax evasion. Respondents are thus asked questions such as: do you think it is justifiable to cheat on taxes if one has the opportunity? Do you view not paying taxes as not wrong at all, wrong but understandable, or wrong and punishable? As far as the duty to pay taxes is concerned, the Afrobarometer, for example, asks respondents: 'For each of the following actions, please tell me whether you think it is something a good citizen in a democracy should always do, never do, or do only if they choose – pay taxes they owe to government'.

   ii. The *perceptions* of respondents towards the tax system. Here, respondents may be asked whether they think that the taxes they pay are very high, very low or alright. They may also be asked for their views of tax officials such as tax collectors or those in the ministries of finance.[2] For example, in the Afrobarometer, respondents are asked how much they trust the tax department. They are also asked whether they think that tax officials are involved in practices such as corruption. Lastly, respondents may be asked about their perceptions on the use of collected revenues. For example, the Latinobarómetro asks respondents whether they are confident that taxpayers' money is well spent by the state.

   iii. The *experiences* of respondents with the tax system. Respondents may be asked how easy it is to find out what taxes and fees they are supposed to pay to the government. Or how easy or difficult it is to avoid paying taxes owed. They may also be asked how much time they spend dealing with government regulations on tax or how often they are visited or inspected by tax officials.[3] Lastly, they may be asked questions on informal payments that they make to public officials to 'get things done'. The World Bank Enterprise Survey, for example, asks: 'It is said that establishments are sometimes required to make gifts or informal payments to public officials to "get things done" with regard to customs, taxes, licences, regulations, services etc. On average, what percentage of total annual sales, or estimated total annual value, do establishments like this one pay in informal payments or gifts to public officials for this purpose?'

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1 These are not, strictly speaking, surveys on taxation. They are general surveys that contain tax-related questions. Among the three surveys, the Afrobarometer contains the most tax-related questions.

2 Officials in ministries of finance in this case serve as proxies for other government officials. While these officials are not involved in tax collection, they budget for the manner in which the revenue collected is spent. If these officials are perceived to be corrupt, for example, individuals will be less willing to pay taxes.

3 See, for example, the World Bank Enterprise Surveys www.enterprisesurveys.org/~/media/GIAWB/EnterpriseSurveys/Documents/Methodology/ES_Manufacturing_Questionnaire.pdf.

Survey respondents are usually chosen through random sampling. Respondents may be stratified into different subgroups before being randomly selected or they may be randomly selected from registers maintained by local authorities. Randomisation ensures that the respondents are representative of the locality being studied and, in the case of national surveys, that they are representative of the country. In addition to tax-specific questions, researchers may collect other kinds of information that they think might be relevant to understanding variations in tax compliance, including background information on aspects such as the age, sex, employment status and marital status of respondents. This information can be useful in determining factors such as whether women have a more positive attitude towards taxation than men or whether older people appear to be more compliant than younger people.

b. **Simulation exercises** put individuals in artificial interaction situations and observe how they would behave if they were asked to make decisions related to paying taxes. These exercises, also commonly referred to in tax compliance literature as 'laboratory experiments', can be carried out in laboratory settings or in the field. They try to mirror real-life situations by requiring participants to make decisions about paying taxes based on the financial benefits of the decisions made (Alm, Bloomquist and McKee 2015). Conventional simulation exercises often use students as their subjects but researchers can also recruit participants from the field who are more likely to have taxpaying experience than students would. Participants are required to make decisions on whether and how much they would like to report as income based on variables such as the rate of tax, the probability of audit, the severity of sanctions and what they think other 'taxpayers' are doing (Mascagni 2016).

Torgler (2003), for example, conducted an experiment to test whether factors such as fiscal exchange (the receipt of public goods and services in exchange for taxes paid), moral suasion and positive rewards influence tax compliance. He used 37 'real taxpayers' (as opposed to students) in a small village in Costa Rica. Each participant was given an envelope containing money and informed that they had to pay back one-third of that amount in taxes. However, it was up to the participants to decide what amount to pay back, if any. Participants were not allowed to consult with each other. The participants were divided into four groups: a control group, a fiscal exchange group, a moral suasion group and a positive rewards group. The control group was simply given the general instructions of the requirement to pay a third in taxes. Those in the fiscal exchange group were informed of a public good provided by the government. The moral suasion group was told: 'Although we will not be able to find out who among you might have been dishonest, we want to point out that we greatly appreciate your behaving honestly and paying back the amount we have asked for.' Lastly, those in the positive reward group were informed that those among them who would be audited and found to be fully honest would get a monetary reward. Unlike most other simulation exercises which have a number of rounds (to allow participants to adjust their decisions), Torgler conducted only one round of the experiment. The results revealed the control group as having the lowest level of compliance. The highest level of compliance was found in the positive reward group followed by the moral suasion group and then the fiscal exchange group. In fact, no one in the positive reward group evaded paying their taxes.

An experiment such as this provides useful indicators for the drivers of tax compliance. However, to draw policy conclusions, researchers would need a much larger sample of participants and repeated rounds of the exercise to reflect the fact that in practice, taxpayers often have a number of opportunities to change their behaviour. In other words, they do not pay tax only once. Indeed, many simulation exercises often involve more than one round of experiment.

c. **Field experiments** involve measuring the effect on actual taxpaying behaviour of various kinds of consistent messages from revenue authorities. These messages are also referred to as 'treatments' or 'nudges' in the tax compliance literature. Most of the published field experiments have been conducted in high-income and middle-income countries and often involve the analysis of taxpayer data at the national level. Researchers work alongside revenue authorities using taxpayer information that is obtained from anonymised tax returns that taxpayers file with revenue authorities. These experiments often involve revenue authorities contacting taxpayers either through letters specifically designed to communicate the message being tested or through messages that are included in the tax bills of the targeted taxpayers. In some cases, taxpayers have been contacted through email or using text messages that are sent to their mobile phones (Mascagni, Nell, Monkam and Mukama 2016). The researchers test the impact of various messages. Each message communicates a different determinant of compliance. For example, the message could state that the revenue authority is planning on undertaking random audits and that those who are found to be non-compliant will face severe fines. Or it may highlight some of the public services that are provided with the use of tax revenue. At the subnational level, messages could, for example, refer to the street lighting, sanitation or water services that local government provides.[4] Another common message is the one seeking to establish whether taxpayers are influenced by the behaviour of other people. Here, the recipient of the letter may be informed that the majority of individuals pay taxes and asked whether they are honouring their own obligations. The messages used in field experiments do not change actual tax parameters. In other words, they do not make it more likely that the recipients' financial records will be examined or that public services will be improved. The intention is to provide information to the taxpayer and to influence their perception of the tax system.

   An experiment may be designed to test the effect of just one message or it may include two or more messages. To establish the impact of the message, taxpayers are divided into different groups depending on the number of messages being tested. This includes a control group, which does not receive any message or receives a neutral message in the form of the routine communications sent to taxpayers to remind them of the due dates for paying taxes. The researchers then analyse the differences in taxpayer behaviour between the different groups, before and after they receive the messages. If there is a change in behaviour – such as an increase or decrease in the income reported in the treatment group when compared to the control group – the change can be attributed to the message, all other factors remaining constant.

Each of the above methods has its strengths and weaknesses. Surveys, for example, are useful in providing broad perceptions of taxpayer attitudes towards the tax system. Because they often involve studying large, randomly selected sample sizes and can be designed to cover a variety of questions, the information extracted from surveys is fairly representative of the views of taxpayers in the localities being studied. This allows for at least some generalisability. Surveys are also useful because, unlike field experiments, they can be administered even to individuals who are not submitting tax returns. This means that they can be used to capture information from individuals operating in both the formal and informal sectors. This latter category is particularly important in developing countries, and even more so at the subnational level, given the large percentage of people working in the informal sector. One weakness of surveys, however, is that they do not necessarily reflect how individuals will behave when making decisions on compliance in real-life situations (OECD 2013; Mascagni 2016). For example, just because a respondent says that cheating on taxes

[4] Because it is easier to show a direct link between taxes and public services at the subnational level than it is at the national level, local authorities can find this a useful tool in changing perceptions and attitudes towards paying taxes, particularly if they can document services that taxpayers can easily associate with.

is wrong does not necessarily mean that they will pay their taxes when the duty arises. Another weakness is that it is difficult to determine causality using surveys because researchers are unable to control the research environment to study the impact of specific factors. This is different from field experiments, for example, where researchers can link a certain intervention to a change in behaviour.

Simulation exercises are useful because researchers can use them to establish causal links by controlling the research environment for factors other than those under study. There is also arguably some advantage in the fact that participants in these exercises know from the onset that they are part of an artificial exercise and as such, there are no real-life consequences attached to their actions. This may increase the likelihood that they will be more honest about how they would act in real life. At the same time, knowing that a setting is artificial may have adverse effects. Because participants know that they are being observed, they may behave in a manner intended to please the researcher or to conform to what is thought of as morally acceptable. Lastly, because conducting simulation exercises with large sample sizes is expensive, these exercises often involve very few participants when compared to surveys and field experiments. This makes their findings less generalisable.

The advantage of field experiments is that they use information from real taxpayers who are filing real tax returns. Given the fact that those who are part of these experiments rarely know that their actions are under scrutiny, and since their interaction is with revenue authorities instead of researchers, their responses are real. Field experiments can also be undertaken at relatively low costs when compared both to the potential revenue that can be generated through the messages and the possible longer-term positive changes in taxpayer behaviour that emanate from such nudges. One shortcoming of field experiments, however, is that they are confined to data that are in the possession of revenue authorities. This means that they do not capture the behaviour of people who are not registered with the revenue authority. They also do not capture any income that is under-reported or unreported.

Another challenge that is likely to be faced by researchers seeking to use field experiments is that they rely on the willingness of revenue authorities to engage with researchers. They also rely on the revenue authorities being digitalised or modernised enough to have the information needed to undertake the experiments (Mascagni 2015). This can be challenging in developing countries and particularly so at the subnational level, where information is rarely digitalised and data quality is still a problem.[5] Lastly, these experiments require both a high degree of commitment and research capacity, which is often lacking in developing countries. This explains why there are very few field experiments in developing countries and hardly any in African countries. To our knowledge, the first published field experiment undertaken in an African country is the one that was conducted by the International Centre for Tax and Development (ICTD) in collaboration with the Rwanda Revenue Authority (RRA) and the African Tax Administration Forum (ATAF), where the researchers studied the impact of different messages on tax compliance in Rwanda (Mascagni, Nell and Monkam 2017; Mascagni *et al.* 2016).

[5] In the Fjeldstad and Semboja survey (2001), for example, the researchers reported that tax register books were not available in some of the survey areas and that in one area, the register book had just been compiled by the newly appointed local government officer.

Box 2.1 Rwanda tax experiment: compliance with income taxes (conducted by the ICTD, RRA and ATAF)

The researchers began with a pilot study covering 2,000 taxpayers in order to test the process of message delivery and gather initial insights on tax compliance. The taxpayers were stratified according to size, location and their previous behaviour on revisions to tax returns. They were then randomly divided into two groups: one group received a letter while the other did not. The letters were drafted in English, Kinyarwanda and French, and contained information on the penalties imposed under law for under-reporting of income and reduced penalties when taxpayers voluntarily disclosed their declarations.

Approximately 600 personalised letters were hand-delivered by RRA officials to the targeted group. The researchers found that taxpayers who received the letters increased compliance and were more likely to positively revise their tax returns instead of negatively reducing tax returns to pay less taxes or pay no taxes at all. The experiment also demonstrated that personalising letters to taxpayers can have a significant impact.

Following the pilot study, the researchers sought to establish the impact of different types of messages, which were sent out to taxpayers using different methods. The researchers sent out three different messages: a deterrence message (detailing the penalties for non-compliance); a benefits message (showing how taxes are used to fund public services); and a reminder (which simply informed taxpayers of the deadlines for paying taxes). More than 11,000 messages were sent out using letters, emails or SMS. The messages were in both English and Kinyarwanda. The deterrence message was found to be the least effective. While it had a great impact on small-scale taxpayers, these taxpayers were found not to contribute much for the public pool. The reminder and information on the use of taxes were found to elicit more positive responses. Lastly, the experiment demonstrated that the use of non-traditional methods in communicating with taxpayers can be quite effective and can significantly reduce the costs of collecting taxes. While letters were found to be effective in increasing compliance, there were also significant increases in declarations from those who received SMS and emails. In fact, more positive responses were found among those who received emails when compared to those who received letters.

Ultimately, the strengths of these methods outweigh their weaknesses. And given that each method contributes uniquely to our understanding of tax morale, there is no particular reason why one method would be preferable to another. The appropriate method to be used thus needs to be determined by a number of factors, including the purpose of the research, the information that researchers can access, the available resources, the tax type, and the time constraints. A key determining factor is the purpose of the research. If (for example) researchers want to evaluate what specific policy innovations would be more effective to increase compliance on the part of those already registered, then a field experiment would be most appropriate. However, if they would like to understand why tax morale is low (for example, why very few people are registered as taxpayers or why tax evasion is widespread), then the standard field experiment would probably not be the right choice. A survey would be much more informative.

3 The importance of distinguishing between tax compliance at the national and subnational levels

Most studies on tax compliance relate to taxes at the national level. While these studies are useful in understanding the factors that drive tax compliance more generally, it is important to distinguish between the national and subnational levels for a number of reasons.

- Subnational and national tax authorities collect different types of taxes. Taxes at the subnational level are more likely to take the form of: (a) user charges such as market fees, garbage collection fees, road user fees; (b) property taxes; and (c) business licences. In contrast, national tax authorities mainly collect import duties, taxes on personal and corporate incomes, and a range of taxes on business – sales taxes, turnover taxes, VAT and excise duties.
- It is relatively easier to identify those liable to pay taxes at the subnational level than it is at the national level. Whether it is the case of property taxes or market taxes, the tax base at the subnational level is easily observable. This is not the case with taxes on income, for example, where it is more difficult to observe those who should be paying taxes.
- The two levels of government often use different methods to assess and collect taxes. Taxes at the subnational level are more likely to be assessed and collected on a face-to-face basis while those at the national level rely largely on declarations made by taxpayers, with the payment of taxes increasingly being made through third parties such as banks and/or withholding agents (as is the case for many consumption taxes and taxes on employment income). These face-to-face processes at the subnational level have often resulted in relatively conflictual relationships between tax collectors and taxpayers, which is less often the case with national taxes.[6]

These differences at the national and subnational levels, between tax types and between identification, assessment and collection methods, mean that we cannot assume that the factors driving compliance at the national level will necessarily be the same at the subnational level. If we want to understand tax compliance at the local level, we need to conduct research at that level.

Lastly, anyone seeking to understand tax compliance at the subnational level also requires an understanding of the wider context of fiscal decentralisation. To encourage quasi-voluntary compliance, subnational tax authorities should have the capacity, authority and desire to detect and punish non-compliance. They should be able to operate independently from central government agencies. The success of fiscal decentralisation relies on a number of factors, including: (a) whether decentralisation generally and subnational revenue autonomy in particular are genuinely supported by the central government; (b) the capacity of subnational governments to implement the powers that are devolved to them; (c) the economic potential of the particular locality;[7] (d) the design of the policy framework; and (e) the political dynamics even within subnational governments[8] (Smoke 2013).

4 What does existing research tell us about drivers of tax compliance at the subnational level?

When conducting research on tax compliance, researchers can be addressing a wide range of different types of questions that one can, for convenience, arrange on a spectrum. At one end

6 This is not to suggest that conflict does not exist at the national level. However, in the case of disagreement between taxpayers and tax collectors at the national level, many tax statutes contain provisions on dispute resolution mechanisms such as lodging objections and appeals.

7 Some localities have a high incidence of poverty, meaning not much can be generated from taxes.

8 Power lies with different actors with different subnational governments. These include economic elites, ethnic groups, religious groups, civil society organisations, labour unions and political parties. Emphasis may be placed on taxing certain groups over others.

of the spectrum, researchers can seek to understand the broad human motivations that drive individuals to pay (or not pay) taxes by asking questions such as:

- Do individuals act in a purely rational and calculated way? To what extent are they influenced by the prospects of detection and punishment?
- Is compliance with taxes based on ability to pay, meaning that those who earn less will be more likely to evade taxes than those who earn more?
- To what extent are individuals influenced by the perceived behaviour of others within their network? Will individuals be more willing to pay taxes when, for example, they perceive that their family members, friends or neighbours are paying taxes?
- Does the perceived legitimacy of government matter? Will individuals be more likely to pay taxes when they feel a sense of national pride?
- Are people more willing to comply if they think that they are getting something in return?
- Do people decide to pay (or not pay) taxes based on how they perceive the government to be treating others relative to how it treats them?
- Do individuals who rely more on their community networks for access to public goods have lower tax morale than those who rely on the state?
- Are people more likely to be compliant when they are rewarded for being good taxpayers?

At the other end of the spectrum, one can ask very simple and pragmatic questions purely for purposes of tax administration:

- Are hairdressing salons more likely to be tax compliant than butchers shops?
- Do more-educated people exhibit stronger tax morale than those with little or no formal education?
- Are small businesses more compliant than larger ones?
- Are women more compliant than men?

If one is simply addressing these latter set of questions, the relevance of the different theories on human motivations might be limited.

Most of the existing research addresses the first category of questions (human motivations). One of the earliest studies was by Allingham and Sandmo (1972), who concluded that taxpayers behave like rational decision makers who weigh the benefits of evasion (lower or no tax payments) against the costs incurred if evasion is detected. It follows, therefore, that if there are high chances of detection and severe penalties, more people will be compelled to honour their tax obligations. While this argument explains variations in tax compliance to some extent, subsequent research has demonstrated that other factors are also important. Studies conducted at the subnational level have resulted in findings that can be categorised under various key motivations of human behaviour, from economic and social influence, to political legitimacy, fiscal exchange and the impact of tax incentives:

a. **Economic influence:** Confirming the findings of the Allingham and Sandmo study, other researchers have also found (see Box 4.1) that tax compliance is likely to be higher where individuals perceive a higher probability of being detected, accompanied by severe penalties (Castro and Scartascini 2015). However, harsh penalties produce mixed results. While they can result in increased compliance, they can also result in resistance, which has the effect of both decreasing compliance and lowering tax morale.[9] Researchers also find a relationship between tax compliance and ability to

[9] See, for example, Fjeldstad and Semboja (2001); Fjeldstad (2004).

pay. Some studies conclude that those who live in poorer households have lower compliance rates than those who are richer because the former are unable (as opposed to unwilling) to pay.[10]

Box 4.1 Property tax experiment in Argentina

Researchers carried out a field experiment on property taxes in a municipality in Argentina. They randomly divided a sample of 23,000 taxpayers into four groups: a control group (which received no communication) and three other groups that received different messages in their tax bills. One group received a deterrence message, which contained a calculation of the costs of a hypothetical tax debt for a one-year period. In addition, recipients were informed that failure to pay taxes could result in the municipal authorities taking administrative and legal actions against them. Another group was given information on the public services that were financed by property taxes, including street lights, water and sewerage. The last group was sent a message asking them whether they were aware that only three out of ten taxpayers did not pay their taxes. The message was concluded by asking: 'What about you?' The researchers found that the deterrence message was the most effective, increasing the probability of compliance by five percentage points higher than an individual in the control group. The other two messages had no significant effect on compliance. (See also Fellner, Sausgruber and Traxler (2013) for the impact of threats on compliance.)

Source: Castro and Scartascini 2015

b. **Social influence:** A field experiment conducted by Drago, Mengel and Traxler (2015) finds that information travels within networks, which means that tax compliance can be increased through the spillover effects of targeting some members within a community.[11] Similarly, surveys indicate that people are more willing to pay taxes when they perceive that others are paying.[12] This normally means one of two things: first, that individuals pay taxes when they perceive the tax system as fair (because others are contributing their fair share);[13] second, the fact that there is a high compliance rate can mean that there is a higher chance of being detected for non-compliance, hence encouraging even more compliance.[14]

c. **Political legitimacy:** Tax compliance is likely to be higher when people trust their government, including trusting that the revenue collected will be used to provide public services.[15]

d. **Fiscal exchange:** Compliance with tax obligations is more likely when people can link the public goods and services they receive to the taxes they pay. As such, individuals who rely on community groups (instead of government) for access to public goods are likely to have lower tax morale than those who rely on the state. Information from

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10 A survey conducted by Fjeldstad and Semboja (2001) in rural and urban-rural villages in Tanzania found, for example, that households with more than one income and those that were occupied by individuals who were considered to be relatively wealthier were more likely to pay the development levy when compared to single-income households. In fact, in some villages, compliance rates reduced in the year when the tax rate was increased.

11 The researchers investigate the impact of a field experiment on individuals who were not part of the experiment. They concentrate on the neighbours of those who received letters as part of the field experiment and seek to understand whether the news about these letters spread to others and what impact, if any, it had on their compliance. They find that there is a sizeable spillover from households that were part of the experiment to those that were not part of the experiment. They also found that letters that were sent to more centrally located households within the network produced larger spillover effects.

12 Jibao and Prichard (forthcoming).

13 Using survey data covering more than 3,000 respondents in rural and urban localities across South Africa, Fjeldstad (2004) examined the factors that explain the huge variation in compliance with user charges within communities with similar socioeconomic characteristics. He observed that many respondents felt that the law was not being enforced fairly against all defaulters. For example, only a small percentage of the respondents believed that those who did not pay their taxes were worried about getting into trouble for not paying. Similarly, most of the respondents did not consider sanctions imposed on defaulters to be credible. Lastly, some members of the white (usually affluent) community complained that they were paying taxes while a large majority (mostly black) did not pay.

14 See, for example, Fjeldstad and Semboja (2001).

15 Fjeldstad (2004) and Jibao and Prichard (forthcoming). See also Levy and Sacks (2009) and Levy, Sacks and Tyler (2009).

survey data in cities in Nigeria (see Box 4.2) revealed that individuals who lived in communities that were harmonious (thereby making collective action easier), those who participated in savings clubs and those who relied on vigilante groups for their security were more likely to substitute their tax payments with contributions to community groups (Bodea and LeBas 2014).

e. **The impact of tax incentives:** Tax incentives that have the effect of interrupting routinised behaviour (for example, through offering tax breaks) can negatively affect tax compliance, particularly among those who were previously compliant.[16]

Box 4.2 Survey on the impact of fiscal exchange in Nigeria

Researchers analysed data from a survey conducted in 11 cities in Nigeria in which 2,750 individuals were interviewed. The dependent variables were two alternative statements: 'citizens should always pay their taxes, even if they disagree with the government'" (statement A) or 'citizens should only pay taxes if they believe in government' (statement B). Around 42 per cent of respondents agreed to statement A. The researchers found that a significant proportion of respondents from Jos (a state that was prone to riots) agreed with statement A. In contrast, respondents from Ibadan (a state where the population was fairly homogenous and which never experienced any ethnic or religious riots) showed less support for statement A. The researchers concluded that individuals in places such as Ibadan were less likely to rely on the state and more likely to rely on collective action to provide 'self-help' services. For this reason, they were less motivated to contribute to the larger public fund through taxes. In contrast, those in places like Jos, which were experiencing conflict, were more likely to rely on the state for solutions and as such would be more willing to pay taxes. The conclusion was that individuals are more likely to support an unconditional obligation to pay tax (statement A) if they have received concrete benefits from the state and view the state's use of collected revenues favourably.

Similar observations are made in Jibao and Prichard (forthcoming), finding that those who belong to community or church organisations are more likely to have lower tax morale than those who rely on the state.

Source: Bodea and LeBas (2014)

A number of conclusions can be drawn from the above findings. The first is that all those things that we think are generally likely to affect tax compliance in fact do so, to some extent. The second is that the factors affecting tax compliance vary according to place, time and context. Responses given to survey questions in one year, for example, may not be the same two years down the road – even where the respondents are the same. It is also quite likely that messages in field experiments that result in behavioural changes in one location will not have a similar effect in another location. The third is a more specific action point: if revenue authorities changed the way they approached taxpayers in response to research, the behaviour of taxpayers would also change.

[16] Dunning *et al.*'s (2016) analysis of taxpayer data in a municipality in Uruguay for a period of 14 years (2000–14) reveals that instead of encouraging future compliance, winning a tax holiday in one year inhibits compliance in subsequent years. Specifically, they find that getting a tax holiday results in the percentage of good taxpayers reducing by three percentage points. This effect lasts for up to three years. This means that not only does the municipality lose revenue by foregoing it as a result of the tax holiday, it loses even more revenue because those who get the tax holiday do not return to their tax-paying habits after the holiday is over. They conclude that the tax holiday reduces tax compliance because it interferes with routinised behaviour.

5 To what extent are the tools used to measure tax morale useful to tax collectors and policymakers who wish to increase compliance?

The research on tax compliance is useful both to tax collectors wishing to raise more revenue and policymakers who want to reform tax policies to improve compliance. For example, the field experiment conducted by the ICTD, RRA and ATAF in Rwanda (see Box 2.1) not only resulted in an increase in tax revenues of millions of dollars, but also revealed that in Rwanda, non-threatening messages were more effective than deterrence messages in increasing compliance. This finding confirms the fact that context matters, because many of the previous field experiments conducted in developed countries find deterrence messages to be more effective. It also means that to get a better understanding of how to encourage tax compliance at the subnational level, many more studies need to be conducted at that level.

The second example of the relevance of tax compliance research can be drawn from the Dunning *et al.* (2016) experiment. The finding that tax holidays did not increase compliance and, worse still, negatively affected compliance even among previously good taxpayers, is an important caution to policymakers about the types of methods that they choose to reward good taxpayers. This means that policymakers wishing to use rewards as a way of encouraging compliance need to critically examine the impact of proposed reward schemes. Instead of providing tax holidays, they may choose to motivate taxpayers in other ways such as publicly recognising them in local newspapers or having award ceremonies in which non-monetary awards are given. Lastly, findings from surveys such as those conducted by Ali, Fjeldstad and Sjursen (2013) demonstrate that taxpayers in different localities value different public services.[17] Conducting surveys to establish which public services matter to taxpayers in particular localities can help authorities understand what subnational governments need to provide to the individuals in their communities in order to increase compliance.

There are still issues that can be addressed by tax compliance studies that remain largely unexplored. For example, surveys, simulation exercises and field experiments are rarely used to establish variations in compliance among different categories of individuals. For example, are more-educated people more compliant than less-educated people? Are owners of saloons more compliant than owners of butcher shops? Are women more compliant than men? And what explains the variations in compliance? All three methods can be used to establish variations in compliance. However, only surveys can be used to explain why there are variations. The answers to all these questions would provide very practical solutions for how tax collectors can adjust policies and change their behaviour in order to encourage compliance. For example, it may be that less-educated people are less compliant because they do not understand the tax rules. At the subnational level, those liable to pay property taxes (for example) may confuse the taxes paid to central government for letting out property with the property taxes payable to local government. Female traders may be more compliant than male traders because they are harassed by male tax collectors. Or they may be less compliant because tax collectors are more lenient with them.

[17] Ali *et al.* (2013), for example, used data from Round 5 of the Afrobarometer survey to establish the factors that contribute to tax morale in South Africa, Kenya, Uganda and Tanzania. They found that in all four countries, there was evidence of the fact that tax morale was boosted by the provision of public services. However, the kinds of services that mattered to respondents differed between countries. In Kenya, respondents were more interested in the provision of infrastructure such as roads and electricity. In Uganda and Tanzania, health and education services were found to be the most important. Lastly, in South Africa, respondents favoured the provision of police services and issuance of identity cards.

In addition to the comparisons between different categories of individuals, researchers need to investigate the factors that affect compliance with the different taxes paid at subnational level. One tax type that needs to be further studied – particularly given its great potential to increase local government revenues – is property tax. A good starting place would be to use field experiments to test the impact of different messages. The messages could, for example, be included in the tax bills of property owners. Before sending out these messages, however, it would be useful for local authorities to update their databases with all the properties within their localities, including the values of those properties. Field experiments can also be used for traders who have to pay for trading licences. Local governments can work alongside central government tax agencies and business registration agencies to compile comprehensive databases of traders within their localities. Property taxes and trading licences are likely to have most significance in urban centres. In rural areas, user charges such as market fees and garbage collection fees are likely to be more prominent. Here, surveys would be the most appropriate tools since these taxpayers are unlikely to be registered with tax authorities and the collection of taxes is likely to be physically done by tax collectors with no formal communication being sent to individual taxpayers.

Researchers also need to conduct more studies that use qualitative methods (such as in-depth interviews) to understand the reasons behind taxpayer behaviour. Very few studies have been conducted in this regard. Rillstone (2015) investigated the impact of rewards on improving tax compliance in New Zealand. For his research, he interviewed tax practitioners and small business owners. Interviewees were asked about the potential effectiveness of using rewards to encourage compliance, the features that should be included in a reward system and the feasibility of implementing such a system. The interviewees reported that financial rewards such as partial refunds and non-financial rewards such as sending recognition letters to good taxpayers or giving them a special status (similar to frequent flyer status) can be good incentives in encouraging compliance. Yucedogru (2016) used a combination of surveys and in-depth face-to-face interviews with owner–managers of small enterprises in Turkey to understand how religious beliefs affect tax compliance and tax morale. He found that the religious beliefs of the taxpayers positively influenced tax morale. The advantage of qualitative studies over surveys is that they can be used to investigate deeper social, economic and political issues that influence taxpaying behaviour.

Ultimately, subnational governments wishing to increase tax compliance and improve tax morale would benefit from more studies carried out in different local contexts. Development partners can support this effort by funding more research on this issue. Much of the focus of development partners on tax issues in developing countries has so far concentrated on international and national issues. More support is needed for subnational tax issues, and tax morale studies are a good candidate since they can inform policy and practice to increase local revenues. In the short term, international researchers will need to play a central role in this research since there is still limited capacity to undertake tax research in many of these countries. The long-term objective, however, should be to support research projects that build the capacity of local researchers to undertake future research independently. Researchers should also work closely with officials in subnational government offices. Development partners can also provide technical support to subnational governments for compiling comprehensive tax databases, digitalising processes and improving capacity to analyse the information compiled.

As a final note, it is one thing to conduct research and quite another for the research to be acted on. Governments and development partners need to follow up on the studies that they support to ensure that the suggested reforms are implemented if improvements on the ground are to be realised.

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