

- Reintroduce the 50% top rate of income tax rate to replace the current 45% top rate of income tax on earnings over £150,000.

Q6: Using this card, please say how you think inheritances should be taxed

- No inheritances should be taxed.
- Only inheritances over £1 million should be taxed.
- Only inheritances over £½ million should be taxed.
- Only inheritances over £¼ million should be taxed, as now.
- Only inheritances over £125,000 should be taxed.
- Only inheritances over £50,000 should be taxed.
- All inheritances should be taxed.
- Refused.
- Don't know.

Q7a: Would you say that the income tax rate of 45p for each £1 earned for people earning over £150,000 a year is at about the right level, too high or too low?

Similar questions next for people earning:

Q7b: £45,000 to £150,000 a year (tell them the rate is 40p for every £1 earned in this band).

Q7c: £10,000 to £45,000 a year (tell them the rate is 20p for every £1 earned in this band).

Q7d: Under £10,000 (tell them no income tax now paid in this band).

- Much too high
- Too high
- About right
- Too low
- Much too low
- (Refused)
- (Don't know)

Q8: May I just check if your household income, before tax is paid and from all sources such as employment and benefits is:

- Under £20,000 a year
- £20,000–39,999
- £40,000–99,999
- £100,000–149,000
- £150,000 or more

Q9: If you could change one thing about the tax system in the UK at present what would it be?

WEALTHY TAX NON-FILERS IN A DEVELOPING NATION: THE ROLES OF TAXPAYER KNOWLEDGE, PERCEIVED CORRUPTION AND SERVICE ORIENTATION IN PAKISTAN

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and Benno TORGLER

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ABSTRACT

Although tax non-filing and the resulting tax evasion are a challenge to public welfare, particularly in developing countries, scholarly knowledge on taxable citizens who do not register as taxpayers, also known as the 'ghosts', is minimal. To expand this knowledge base, this empirical chapter compares rich self-employed individuals identified as non-filers with a randomised group of tax filers with similar socio-demographic backgrounds in terms of two bases of perceived tax system legitimacy: knowledge of taxpayers' rights and perceived corruption in the tax administration. The results indicate not only that both of these factors

are related to tax non-filing but that a perceived service orientation of the tax administration is related to increased tax knowledge and lower perceptions of corruption. These findings imply that services which reduce citizens' ignorance of their tax rights and reduce doubts about authorities' correct behaviour might foster the perceived legitimacy of the tax system and in turn increase willingness to pay taxes in developing countries.

1. INTRODUCTION

Taxes are essential for financing public goods, particularly in developing countries, which are afflicted by an extensive shadow economy and ample tax evasion.¹ Such nations urgently need sufficient tax funds to build up their infrastructure and provide essential public goods like health care, education and social security.² Nevertheless, a substantial part of the tax gap in these countries is the result of non-filers: potential taxpayers in the informal sector who not only evade taxes but fail to even register as taxpayers.³ The estimates of tax non-filing in developing countries are alarming; for example, in India, only about one in six potential taxpayers actually files a tax return.⁴ Yet despite being a serious problem for developing countries, tax non-filing has gained little attention in the research, and empirical evidence on determinants of tax non-filing in developing countries is rare, primarily because it is difficult to obtain data on wealthy non-filing residents with substantial taxable income. It is, however, possible to draw indirect conclusions on the legitimacy/non-filing relationship based on experimental results,⁵ US Internal Revenue Service

- ¹ M. ALI, O.H.FJELDSTAD and I.H. SJURSEN, 'To Pay or Not to Pay? Citizens' Attitudes Towards Taxation in Kenya, Tanzania, Uganda, and South Africa' (2014) 64 *World Development* 828–842; J. ALM, R. BAHL and M.N. MURRAY, 'Tax Base Erosion in Developing Countries' (1991) 39 *Economic Development and Cultural Change* 849–872; R. GORDON and W. LI, 'Tax Structure in Developing Countries: Many Puzzles and a Possible Explanation' (2009) 93 *Journal of Public Economics* 855–866; F. SCHNEIDER, A. BUEHN and C.E. MONTENEGRO, 'New Estimates for the Shadow Economies all Over the World' (2010) 24 *International Economic Journal* 443–461.
- ² D. BRÄUTIGAM, 'Building Leviathan: Revenue, State Capacity, and Governance' (2009) 33 *IDS Bulletin* 1–17.
- ³ B. ERARD and C.-C. HO, 'Searching for Ghosts: Who are the Nonfilers and How Much Tax do they Owe?' (2001) 81 *Journal of Public Economics* 25–50.
- ⁴ S. CHATTOPADHYAY, and A. DAS-GUPTA, *The Personal Income Tax in India: Compliance Costs and Compliance Behaviour of Taxpayers*, National Institute of Public Finance and Policy (NIPFP), New Delhi 2002.
- ⁵ J. ALM, T. CHERRY, M. JONES and M. MCKEE, 'Taxpayer Information Assistance Services and Tax Compliance Behaviour' (2010) 31 *Journal of Economic Psychology* 577–586.

(IRS) statistics,⁶ and surveys and field experiments on the informal economy in developing countries.⁷

This present study investigates the reasons for, and possible measures against, tax non-filing by comparing a sample of wealthy known tax non-filers with a comparable sample of registered self-employed taxpayers in Pakistan, a developing country with high rates of corruption and particularly low numbers of registered taxpayers.⁸ Given that less than one per cent of the total 180 million Pakistani residents file a tax return,⁹ this comparison seems a promising approach to gain first insights into the determinants and potential dynamics of non-filing. To the best of our knowledge, studies on non-filing have not yet been conducted in developing countries and no empirical evidence exists on the relation between legitimacy and tax non-filing or the role of a tax administration's service orientation in fostering legitimacy.

The literature does, however, suggest certain key contributors to the high rate of citizens whose feelings of disengagement from their state makes them

- ⁶ J.A. DUBIN, M.J. GRAETZ and L.L. WILDE, 'The Effect of Audit Rates on the Federal Individual Income Tax, 1977–1986' (1990) 43 *National Tax Journal* 395–409; B. ERARD and C.-C. HO, 'Searching for Ghosts: Who are the Nonfilers and How Much Tax do they Owe?' (2001) 81 *Journal of Public Economics* 25–50.
- ⁷ G.H. DE ANDRADE, M. BRUHN and D. MCKENZIE, 'A Helping Hand or the Long Arm of the Law? Experimental Evidence on What Governments can do to Formalize Firms' (2014) *The World Bank Economic Review* 1–31; G. DE GIORGI and A. RAHMAN, 'SME's Registration: Evidence from an RCT in Bangladesh' (2013) 120 *Economics Letters* 573–578; S. DE MEL, D. MCKENZIE and C. WOODRUFF, 'The Demand for, and Consequences of, Formalization among Informal Firms in Sri Lanka' (2013) 5 *American Economic Journal: Applied Economics* 122–150; P. FAJNZYLBER, W.F. MALONEY and G.V. MONTES-ROJAS, 'Does Formality Improve Micro-Firm Performance? Quasi-experimental Evidence from the Brazilian SIMPLES Program' (October 2009) *Discussion Paper No. 4531*, IZA, Bonn; N. MCCULLOCH, G.G. SCHULZE and J. VOSS, 'What Determines Firms' Decisions to Formalize? Empirical Evidence from Rural Indonesia' (2010) *Discussion Paper Series No. 13*, UNIVERSITY OF FREIBURG; D. MCKENZIE and Y.S. SAKHO, 'Does it Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability' (2010) 91 *Journal of Development Economics* 15–24; J.C.M. MONTEIRO and J.J. ASSUNÇÃO, 'Coming out of the Shadows? Estimating the Impact of Bureaucracy Simplification and Tax Cut on Formality in Brazilian Microenterprises' (2012) 99 *Journal of Development Economics* 105–115.
- ⁸ U. JAVAID, 'Corruption and its Deep Impact on Good Governance in Pakistan' (2010) 48 *Pakistan Economic and Social Review* 123–134; TRANSPARENCY INTERNATIONAL, 'Corruption Perception Index 2014' <<http://www.transparency.org/cpi2014/results#myAnchor2>> accessed 02.05.2015; A. WARIS, 'Growing Tax Evasion a Serious Threat: Only 1.2m Pakistanis File Tax Returns, Which is Even Less than 1%', *Daily Times Pakistan*, 29 December 2013 <<http://www.dailytimes.com.pk/business/29-Dec-2013/growing-tax-evasion-a-serious-threat-only-1-2m-pakistanis-file-tax-returns-which-is-even-less>> accessed 08.05.2014.
- ⁹ A. WARIS, 'Growing Tax Evasion a Serious Threat: Only 1.2m Pakistanis File Tax Returns, Which is Even Less than 1%', *Daily Times Pakistan*, 29 December 2013 <<http://www.dailytimes.com.pk/business/29-Dec-2013/growing-tax-evasion-a-serious-threat-only-1-2m-pakistanis-file-tax-returns-which-is-even-less>> accessed 08.05.2014.

unwilling to pay taxes, including a lack of basic political legitimacy and related deficiencies in tax collection legitimacy and the use of tax money.¹⁰ Tax collection legitimacy is related to the rights of citizens to voice their concerns over perceived corruption and lack of accountability.¹¹ Such legitimacy – as it relates to both governing authorities in general and tax collection in particular – can be fostered in developing countries by good governance¹² and in particular, by empowering citizens through involvement in public decision-making and improving both their lives and confidence in the state.¹³ To achieve this goal, tax collection should be administered by service-oriented tax authorities who act professionally, treat taxpayers fairly and respectfully, provide assistance and educate taxpayers on taxation procedures and tax law.¹⁴

¹⁰ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447–457; M.S. GRINDLE, 'Good Enough Governance: Poverty Reduction and Reform in Developing Countries' (2004) 17 *Governance: An International Journal of Policy, Administration, and Institutions* 525–548.

¹¹ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; D. BRÄUTIGAM, 'Building Leviathan: Revenue, State Capacity, and Governance' (2009) 33 *IDS Bulletin* 1–17; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447–457; A. DREHER and F. SCHNEIDER, 'Corruption and the Shadow Economy: An Empirical Analysis' (2010) 144 *Public Choice* 215–238; D. MCKENZIE and Y.S. SAKHO, 'Does it Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability' (2010) 91 *Journal of Development Economics* 15–24; D. MCKENZIE and Y.S. SAKHO, 'Does it Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability' (2010) 91 *Journal of Development Economics* 15–24.

¹² M.S. GRINDLE, 'Good Enough Governance: Poverty Reduction and Reform in Developing Countries' (2004) 17 *Governance: An International Journal of Policy, Administration, and Institutions* 525–548;

¹³ T. BOVAIRD and E. LÖFFLER, 'Evaluating the Quality of Public Governance: Indicators, Models and Methodologies' (2003) 69 *International Review of Administrative Science* 313–328; D. BRÄUTIGAM, 'Building Leviathan: Revenue, State Capacity, and Governance' (2009) 33 *IDS Bulletin* 1–17; M.S. GRINDLE, 'Good Enough Governance: Poverty Reduction and Reform in Developing Countries' (2004) 17 *Governance: An International Journal of Policy, Administration, and Institutions* 525–548.

¹⁴ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447–457; B. ERARD and C.-C. HO, 'Searching for Ghosts: Who are the Nonfilers and How Much Tax do they Owe?' (2001) 81 *Journal of Public Economics* 25–50; K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23; K. GANGL, S. MUEHLBACHER, G. ANTONIDES, S. GOSLINGA, M. DE GROOT, E. HOFMANN, C. KOGLER and

Based on the above observations, this study examines the legitimacy of tax collection – defined as taxpayers' knowledge of their rights and the corruption they perceive in the tax administration – as a possible cause of tax non-filing in the developing country of Pakistan. It also examines the influence of a good governance approach – as measured by the tax administration's perceived service orientation – in increasing legitimacy and thus tax morale. This perceived orientation is expected to foster knowledge of rights and decrease perceptions of tax administration corruption, which should indirectly reduce non-filing behaviour. Our analysis thus tests two major assumptions on a sample of 847 non-filers and filers in Pakistan. First, it assumes that ignorance of one's own rights as a taxpayer and perceived tax administration corruption are threats to tax collection legitimacy and thus possible causes of non-filing in developing countries. Secondly, it assumes that a tax administration's service orientation may serve as a potential counter-measure to non-filing. We report the results of these tests after reviewing the relevant literature and then draw practical conclusions about their implications for combating non-filing.

2. TAX NON-FILING IN DEVELOPING COUNTRIES

Because the legitimacy of tax collection is an important determinant of tax compliance, perceived illegitimacy may be a driver of tax non-filing in developing countries.¹⁵ Thus, two precursor conditions to perceiving the tax authorities as trustworthy and tax collection as fair and legitimate are taxpayer knowledge about their rights and taxpayer perceptions of the tax authorities as not being corrupt.¹⁶ Tax knowledge, assumed to be one of the most important determinants of tax compliance,¹⁷ includes knowing about the registration

E. KIRCHLER, 'How Can I Help You? Perceived Service Orientation of Tax Authorities and Tax Compliance' (2013) 69 *Public Finance Analysis* 487–510.

¹⁵ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447–457; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.

¹⁶ M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.

¹⁷ E. KIRCHLER, *The Economic Psychology of Tax Behaviour*, Cambridge University Press, Cambridge 2007; E.C. LOO, M. MCKERCHAR and A. HANSFORD, 'Understanding the Compliance Behaviour of Malaysian Individual Taxpayers using a Mixed Method Approach' (2009) 4 *Journal of Australasian Tax Teachers' Association* 181–202; P. NIEMIOWSKI, S. BALDWIN and A.J. WEARNING, 'Tax Related Behaviours, Beliefs, Attitudes and Values and Taxpayer Compliance in Australia' (2003) 1 *Journal of Australian Taxation* 132–165.

process, taxable income and tax rate, and understanding legal rights such as privacy protection, the right to claim refunds and make deductions, and the right to a comprehensible assessment of tax liability. According to the literature, the positive relation between tax knowledge and tax compliance stems from positive attitudes towards taxation, including perceived legitimacy, trust and fairness. Quasi-experimental evidence, for example, indicates that students who attend a course on tax law rather than marketing have more knowledge of tax duties and rights, hold more positive attitudes towards taxation and perceive the tax system as fairer.¹⁸ Training in tax law also leads students to judge their own tax evasion and that of others more strictly.¹⁹ Survey data likewise suggest that tax ethics (i.e. the opinion that tax evasion is a crime) and the intention to pay taxes honestly, increase with accurate knowledge of the tax rate.²⁰

Knowledge of rights is particularly important for the perceived legitimacy of tax collection because taxpayers who know their legal rights are more able to participate and have a voice in the tax collection process and thus more likely to feel that their tax payments are legitimate rather than a tribute to corrupt authorities.²¹ Knowledge of rights also increases citizens' willingness to rely on legal mechanisms, thereby increasing their access to the justice system and preventing taxpayers from being exploited by others.²² In particular, awareness of rights, being a first step towards exercising those rights, makes the law and tax authorities seem less socially distant and hostile, and gives legitimacy to their tax-collecting role.²³ Such awareness is low, however, in developing countries,

¹⁸ K. ERIKSEN and L. FALLAN, 'Tax Knowledge and Attitudes Towards Taxation: A Report on a Quasi-experiment' (1996) 17 *Journal of Economic Psychology* 387-402; L. FALLAN, 'Gender, Exposure to Tax Knowledge, and Attitudes Towards Taxation: An Experimental Approach' (1999) 18 *Journal of Business Ethics* 173-184.

¹⁹ K. ERIKSEN and L. FALLAN, 'Tax Knowledge and Attitudes Towards Taxation: A Report on a Quasi-experiment' (1996) 17 *Journal of Economic Psychology* 387-402;

²⁰ A. LEWIS, 'Perception of Tax Rates' (1978) 6 *British Tax Review* 358-366; Y.-D. SONG and T.E. YARBROUGH, 'Tax Ethics and Taxpayer Attitudes: A Survey' (1978) 38 *Public Administration Review* 442-452.

²¹ M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354-375.

²² D. BANIK, 'Legal Empowerment as a Conceptual and Operational Tool in Poverty Eradication' (2009) 1 *Hague Journal of the Rule of Law* 117-131; N. SINGH, 'The Commission on Legal Empowerment of the Poor' in P. GALIZZI and L. HERKLOTZ (eds.), *The Role of the Environment in Poverty Alleviation*, Fordham University Press, New York 2008, pp. 305-328.

²³ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55-71; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354-375; N. SINGH, 'The Commission on Legal Empowerment of the Poor' in P. GALIZZI and L. HERKLOTZ (eds.), *The Role of the Environment in Poverty Alleviation*, Fordham University Press, New York 2008, pp. 305-328; M.N. TRAUTNER, E. HATTON and K.E. SMITH, 'What Workers Want Depends: Legal Knowledge and the Desire for Workplace Change Among Day Labourers' (2013) 35 *Law & Policy* 319-340.

with surveys in Brazil and Bolivia revealing that many citizens not only do not know how to register for a tax number but have no understanding of the tax number concept.²⁴ Likewise, in Sri Lanka, only two per cent of informal businesses know the correct tax rate on their profits.²⁵

Another threat to perceived tax collection legitimacy and willingness to pay taxes in developing nations is corruption.²⁶ corrupt administrations are likely to collect fewer taxes than non-corrupt administrations because businesses bribe tax officials instead of paying their taxes²⁷ and public confidence (and thus taxpayer morale) is destroyed by the perception of corruption and widespread tax evasion.²⁸ Corruption also destroys trust in the honesty of fellow citizens.²⁹ If tax collectors are suspected of pocketing revenues meant for the public, and if other citizens are believed to pay bribes instead of their taxes, taxpayers will question their own tax honesty³⁰ or willingness to be corrupt.³¹ Hence, corruption in the tax administration weakens personal and social norms of tax compliance and has the potential to produce a vicious circle of law violation.³² Corruption thus fuels tax evasion, which in turn fuels even more corruption.

²⁴ G.H. DE ANDRADE, M. BRUHN and D. MCKENZIE, 'A Helping Hand or the Long Arm of the Law? Experimental Evidence on What Governments can do to Formalize Firms' (2014) *The World Bank Economic Review* 1-31; D. MCKENZIE and Y.S. SAKHO, 'Does it Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability' (2010) 91 *Journal of Development Economics* 15-24.

²⁵ S. DE MEL, D. MCKENZIE and C. WOODRUFF, 'The Demand for, and Consequences of, Formalization among Informal Firms in Sri Lanka' (2013) 5 *American Economic Journal: Applied Economics* 122-150.

²⁶ M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354-375.

²⁷ A. DREHER and F. SCHNEIDER, 'Corruption and the Shadow Economy: An Empirical Analysis' (2010) 144 *Public Choice* 215-238; J. HINDRIKS, M. KEEN and A. MUTHOO, 'Corruption, Extortion and Evasion' (1999) 74 *Journal of Public Economics* 395-430.

²⁸ R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447-457.

²⁹ B. DONG, U. DULLECK and T. TORGLER, 'Conditional Corruption' (2012) 33 *Journal of Economic Psychology* 609-627; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354-375.

³⁰ M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354-375.

³¹ B. DONG, U. DULLECK and T. TORGLER, 'Conditional Corruption' (2012) 33 *Journal of Economic Psychology* 609-627.

³² M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55-71; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447-457; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354-375; B. TORGLER and F. SCHNEIDER, 'The Impact of Tax Morale and Institutional Quality on the Shadow Economy' (2009) 30 *Journal of Economic Psychology* 228-245.

This relation between corruption and tax non-filing in the informal economy has wide empirical support,³³ with both cross-sectional data and panel data indicating that the two go hand in hand, particularly in developing countries.³⁴ Empirical studies also suggest that corruption leads to lack of confidence and of legitimacy; for example, survey data from Mexico show that experience with corruption among officials is negatively related to trust in fellow citizens and trust in public institutions.³⁵ Experiences with corruption also threaten the perceived legitimacy of state institutions.³⁶

In sum, a lack of knowledge about taxpayers' rights and widespread corruption challenge not only the perceived fairness and trustworthiness of tax collection but also the legitimacy that is a basic determinant of tax compliance.³⁷ Such factors can thus be expected to be important contributors to non-cooperation with the state in the form of not registering as a taxpayer and not paying taxes.³⁸ Conversely, measures of good governance and a more positive service orientation within the tax administration may increase the perceived competence, trustworthiness and legitimacy of tax authorities and consequently lead to increased tax ethics and taxpayer cooperation.

- ³³ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; A. DREHER and F. SCHNEIDER, 'Corruption and the Shadow Economy: An Empirical Analysis' (2010) 144 *Public Choice* 215–238; B. TORGLER and F. SCHNEIDER, 'The Impact of Tax Morale and Institutional Quality on the Shadow Economy' (2009) 30 *Journal of Economic Psychology* 228–245; B. TORGLER and F. SCHNEIDER, 'Shadow Economy, Tax Morale, Governance and Institutional Quality: A Panel Analysis' (January 2007) *IZA Discussion Paper No. 2563*, Institute for the Study of Labor (IZA).
- ³⁴ M. ALI, O.H. FJELDSTAD and I.H. SJURSEN, 'To Pay or Not to Pay? Citizens' Attitudes Towards Taxation in Kenya, Tanzania, Uganda, and South Africa' (2014) 64 *World Development* 828–842; R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; A. DREHER and F. SCHNEIDER, 'Corruption and the Shadow Economy: An Empirical Analysis' (2010) 144 *Public Choice* 215–238.
- ³⁵ S.D. MORRIS and J.L. KLESNER, 'Corruption and Trust: Theoretical Considerations and Evidence from Mexico' (2010) 43 *Comparative Political Studies* 1258–1285.
- ³⁶ M.A. SELIGSON, 'The Impact of Corruption on Regime Legitimacy: A Comparative Study of Four Latin American Countries' (2003) 64 *The Journal of Politics* 408–433.
- ³⁷ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447–457; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.
- ³⁸ K. ERIKSEN and L. FALLAN, 'Tax Knowledge and Attitudes Towards Taxation: A Report on a Quasi-experiment' (1996) 17 *Journal of Economic Psychology* 387–402; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.

3. SERVICE ORIENTATION AS A MEANS OF INCREASING COOPERATION

Being service oriented means that the tax administration educates and assists taxpayers through office-based, website and telephone services, simplifies tax laws and tax procedures and treats taxpayers with friendliness and respect.³⁹ Such services, by facilitating compliance with tax laws and engendering higher fulfilment of payment obligations,⁴⁰ directly impact tax compliance in developed countries.⁴¹ For example, laboratory experiments with students in the US, suggest that information services clarifying participants' true tax burdens enhance their willingness to file a tax return to a greater extent than a control condition of not being offered this service.⁴²

Nevertheless, in developing countries, such services may only reduce the time cost of compliance related to filing, not the monetary compliance cost of actually paying taxes. For example, Chattopadhyay and Das-Gupta,⁴³ proponents of several theories of tax filing in the developing world, argue that these services have no direct impact on non-filing in developing countries. This assumption is supported by empirical evidence from field experiments in Bangladesh, Brazil

- ³⁹ J. ALM and B. TORGLER, 'Do Ethics Matter? Tax Compliance and Morality' (2011) 101 *Journal of Business Ethics* 635–651; V. BRAITHWAITE, *Defiance in Taxation and Governance: Resisting and Dismissing Authority in a Democracy*, Edward Elgar, Cheltenham 2009; L.P. FELD and B.S. FREY, 'Trust Breeds Trust: How Taxpayers are Treated' (2002) 3 *Economics of Governance* 87–99; K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23.
- ⁴⁰ J. ALM, T. CHERRY, M. JONES and M. MCKEE, 'Taxpayer Information Assistance Services and Tax Compliance Behaviour' (2010) 31 *Journal of Economic Psychology* 577–586; J. ALM and B. TORGLER, 'Do Ethics Matter? Tax Compliance and Morality' (2011) 101 *Journal of Business Ethics* 635–651; V. BRAITHWAITE, 'A New Approach to Tax Compliance' in V. BRAITHWAITE (ed.), *Taxing Democracy: Understanding Tax Avoidance and Tax Evasion*, Ashgate, Aldershot 2003; B. ERARD and C.-C. HO, 'Searching for Ghosts: Who are the Nonfilers and How Much Tax do they Owe?' (2001) 81 *Journal of Public Economics* 25–50.
- ⁴¹ J. ALM, T. CHERRY, M. JONES and M. MCKEE, 'Taxpayer Information Assistance Services and Tax Compliance Behaviour' (2010) 31 *Journal of Economic Psychology* 577–586; V. BRAITHWAITE, 'A New Approach to Tax Compliance' in V. BRAITHWAITE (ed.), *Taxing Democracy: Understanding Tax Avoidance and Tax Evasion*, Ashgate, Aldershot 2003; K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23; A.H. PLUMLEY and E. STEUERLE, 'Ultimate Objectives for the IRS: Balancing Revenue and Service' in H.J. AARON and J. SLEMROD (eds.), *The Crisis of Tax Administration*, Brookings Institution Press, Washington, DC 2004, pp. 311–346.
- ⁴² J. ALM, T. CHERRY, M. JONES and M. MCKEE, 'Taxpayer Information Assistance Services and Tax Compliance Behaviour' (2010) 31 *Journal of Economic Psychology* 577–586.
- ⁴³ S. CHATTOPADHYAY, and A. DAS-GUPTA, *The Personal Income Tax in India: Compliance Costs and Compliance Behaviour of Taxpayers*, NIPFP, New Delhi 2002.

and Sri Lanka,⁴⁴ in which making information available on how to formally register a company, the costs and benefits of formally registering and the reimbursement of registration costs did not increase the number of formally registered firms.

According to the 'slippery slope' framework of tax compliance, the provision of services might increase tax compliance indirectly⁴⁵ by enhancing legitimacy and trust in tax authorities,⁴⁶ thereby fostering voluntary compliance with tax filing and payment obligations.⁴⁷ Within this framework, tax authorities engaging in service provision are likely to be perceived as competent and fair enough to enforce the rules and regulations in a targeted manner.⁴⁸ Tax authorities who provide professional assistance to their taxpayer clients on tax law compliance also promote good governance. In this way, service-oriented tax authorities foster perceptions of fairness and honesty in the tax system and give citizens' confidence that other taxpayers are also complying with the established rules.⁴⁹ The slippery slope framework thus postulates that a climate of service-based interaction between tax authorities and taxpayers leads to a positive perception

- ⁴⁴ G.H. DE ANDRADE, M. BRUHN and D. MCKENZIE, 'A Helping Hand or the Long Arm of the Law? Experimental Evidence on What Governments can do to Formalize Firms' (2014) *The World Bank Economic Review* 1–31; G. DE GIORGI and A. RAHMAN, 'SME's Registration: Evidence from an RCT in Bangladesh' (2013) 120 *Economics Letters* 573–578; S. DE MEL, D. MCKENZIE and C. WOODRUFF, 'The Demand for, and Consequences of, Formalization among Informal Firms in Sri Lanka' (2013) 5 *American Economic Journal: Applied Economics* 122–150.
- ⁴⁵ K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23; E. KIRCHLER, *The Economic Psychology of Tax Behaviour*, Cambridge University Press, Cambridge 2007; K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23.
- ⁴⁶ K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23.
- ⁴⁷ E. KIRCHLER, E. HOELZL and I. WAHL, 'Enforced Versus Voluntary Tax Compliance: The 'Slippery Slope' Framework' (2008) 29 *Journal of Economic Psychology* 210–225; I. WAHL, B. KASTLUNGER and E. KIRCHLER, 'Trust in Authorities and Power to Enforce Tax Compliance: An Empirical Analysis of the Slippery Slope Framework' (2010) 32 *Law & Policy* 383–406.
- ⁴⁸ K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.
- ⁴⁹ K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.

of these authorities as trustworthy and legitimate.⁵⁰ Such a synergistic climate is likely to make taxpayers more willing to cooperate voluntarily with the tax authorities by registering and paying taxes.⁵¹

This indirect effect of a service orientation⁵² is indeed supported by data showing an indirect relation between a perceived service orientation within the tax administration and tax compliance intentions, via perceived trustworthiness of the tax administration.⁵³ In fact, both experimental and survey data indicate that trust in tax authorities elicited by a service orientation increases voluntary tax cooperation.⁵⁴ In this chapter, therefore, we emphasise both a lack of legitimacy and trust in public institutions as a main cause of the high rates of tax evasion in developing countries⁵⁵ and the 'slippery slope'⁵⁶ prediction that a service orientation increases legitimacy and trust. Based on these assumptions, we test whether a service orientation within the tax administration may serve as an indirect countermeasure against the high rate of tax non-filing in developing countries.

- ⁵⁰ K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23.
- ⁵¹ E. KIRCHLER, E. HOELZL and I. WAHL, 'Enforced Versus Voluntary Tax Compliance: The 'Slippery Slope' Framework' (2008) 29 *Journal of Economic Psychology* 210–225.
- ⁵² K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23.
- ⁵³ K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23.
- ⁵⁴ C. KOGLER, L. BATRANCEA, A. NICHITA, J. PANTYA, A. BELIANIN and E. KIRCHLER, 'Trust and Power as Determinants of Tax Compliance: Testing the Assumptions of the Slippery Slope Framework in Austria, Hungary, Romania and Russia' (2013) 34 *Journal of Economic Psychology* 169–180; S. MUEHLBACHER, E. KIRCHLER and H. SCHWARZENBERGER, 'Voluntary Versus Enforced Tax Compliance: Empirical Evidence for the 'Slippery Slope' Framework' (2011) 32 *European Journal of Law and Economics* 89–97.
- ⁵⁵ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447–457; M.S. GRINDLE, 'Good Enough Governance: Poverty Reduction and Reform in Developing Countries' (2004) 17 *Governance: An International Journal of Policy, Administration, and Institutions* 525–548; M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.
- ⁵⁶ K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23.

4. METHOD

4.1. SAMPLE AND PROCEDURE

The main sample consists of 847 taxpayers in Pakistan of whom 97 (11.5%) are non-filers and 750 (88.5%) are filers. In line with Erard and Ho's⁵⁷ finding that non-filing is most widespread among self-employed taxpayers (who are more likely to hide it than employed taxpayers), our sub-sample of filers consists of registered self-employed taxpayers and our subsample of non-filers, of individuals with signs of wealth but no taxpayer registration. The majority of the main sample is male (97.4%), aged on average 40.85 years ($SD = 8.57$), with approximately 74.7% residing in large cities (Karachi, 27.5%; Islamabad, 20.2%; Faisalabad, 9.9%; Lahore, 8.5%; Peshawar, 8.6%) and around 25.3% in smaller cities. In terms of education, about 63.7% have an undergraduate (49.9%) or graduate degree (13.8%), 30.9% have a secondary school diploma and 5.3% have completed only primary school.

The data were collected in 2012 by student assistants trained and supervised by senior researchers from several universities in Pakistan. The sample of filers was randomly drawn by Pakistan's Federal Board of Revenue (FBR) from their database of self-employed business owners. The identification of non-filers follows the approach of Italian tax authorities, who detect tax evaders by auditing owners of expensive real estate, cars, boats and planes.⁵⁸ In our case, the wealthy non-filer sample was randomly drawn by the registration office (NADRA), which transferred the contact data to the FBR, mostly for citizens not registered as taxpayers who own real estate in wealthy city districts, take frequent foreign flights and/or pay tuition fees for private schools. These non-filers can be expected to have much higher incomes than other citizens and should thus be registered as taxpayers. The data for both filers and non-filers were then transferred to the University of Lahore from which they were disseminated to students of different universities in Pakistan. In rare cases, the assistants were also able to conduct a survey via email or telephone. In most instances, however, only the postal address was available, so participants were visited at their homes and the survey was administered as a household survey with the head of the household. During these interviews, the research assistants were aware of the participant's filing status but used the same procedure and questionnaires for each respondent.

⁵⁷ B. ERARD and C.-C. HO, 'Searching for Ghosts: Who are the Nonfilers and How Much Tax do they Owe?' (2001) 81 *Journal of Public Economics* 25–50.

⁵⁸ M.C. PIANCALDINI and E. PICERNO, 'Fiscal Control, an Essential Aspect for Increased Effectiveness in Fiscal Administration. Selection and Audit Activities of the Italian Revenue Agency: Organization and IT Tools' (2009) <http://www.itdweb.org/documents/Italian_Revenue_Agency.pdf> accessed 09.01.2014.

Interviews were successfully conducted with almost all the selected non-filers and filers, resulting in a response rate of about 99 per cent, a high survey response rate that is typical for Pakistan. The 2012–13 Pakistan Demographic and Health Survey,⁵⁹ for example, garnered a 96 per cent household response rate (12,943 out of 13,944 households). As in a field experiment, the survey respondents were neither informed about the study aims nor told that the survey was being conducted in collaboration with the FBR or any other official institution. They also received no post-interview debriefing. Nevertheless, neither filers nor non-filers faced any disadvantages from the tax administration because their identities were kept confidential.

4.2. IDENTIFICATION ASSUMPTION

Even though a multivariate analysis can control for differences, in a well-controlled research setting, both non-filers and filers should have comparable socio-demographic characteristics. In fact, as Table 1 shows, non-filers and filers do not differ in sex ($\chi^2(1) = 1.01, p = .32$), age ($t(845) = -1.27, p = .20$) or education ($\chi^2(3) = 5.48, p = .14$). Nor do socio-demographic survey data collected from the non-filers' neighbourhood show any differences in these aspects between non-filers and their neighbours ($N = 300$): sex ($\chi^2(1) = 2.00, p = .16$), age ($t(395) = 1.44, p = .15$) and education ($\chi^2(3) = 0.68, p = .89$). Thus, it can be assumed that observed differences in attitudes between filers and non-filers cannot be explained by different socio-demographics of filers and non-filers.

4.3. MATERIAL

The survey consists of 80 items addressing various tax-related issues. These items were screened by the authors, who used the items most relevant to the research question to formulate scales measuring taxpayer knowledge of rights and perceived increases in corruption or perceived service orientation within the tax administration. Questions not chosen for the scale, which preceded the questions selected, addressed attitudes towards paying different tax types (e.g. VAT, income tax).

Knowledge of taxpayer rights was assessed by four items: (a) 'I am aware of my rights against unlawful search and seizure by tax authorities'; (b) 'It is my right to claim tax refunds (if any) in time'; (c) 'It is my right to get to know the

⁵⁹ NATIONAL INSTITUTE OF POPULATION STUDIES (NIPS) and ICF INTERNATIONAL, *Pakistan Demographic and Health Survey 2012–13*, NIPS and ICF International, Islamabad, Pakistan, and Calverton (MD), USA 2013.

basis of the assessment of my tax liability'; and (d) 'I am aware that I have certain rights if I have a problem with the tax office'. All items were answered on a four-point scale (1 = strongly disagree, 2 = do not agree, 3 = agree, and 4 = strongly agree), with an additional option of 'do not know'. Internal consistency was acceptable at $\alpha = .67$. Non-filers indicated not knowing the answer to an item more often ($M = 7.5\%$, $max = 8.2\%$) than filers ($M = 2.4\%$, $max = 4.1\%$), with differences reaching significance for two items ($p < .001$).

Perceived corruption in the tax administration was assessed by one item encompassing higher, medium and lower levels of the tax administration: 'The level of corruption has changed in the last few years in the following areas of taxation: (a) higher level administration, (b) medium level administration, (c) lower level administration'. The responses were scored on a three-point scale: 1 = decreased, 2 = no change and 3 = increased. Internal consistency was $\alpha = .69$.

Perceived service orientation of the tax administration was assessed by seven items related to service provision and treatment by the FBR: (a) 'I am treated by FBR staff with respect and dignity'; (b) 'The FBR staff is fair in its dealings'; (c) 'The FBR staff is cooperative'; (d) 'The FBR staff treats me with respect and dignity'; (e) 'I am satisfied with the response time of the FBR to my queries or problems'; (f) 'The FBR takes appropriate measures to ensure access to and availability of tax officers' and (g) 'Tax officers are available in their offices from 9:00 am to 3:00 pm'. All items were answered on a four-point scale (1 = strongly disagree, 2 = do not agree, 3 = agree, and 4 = strongly agree), with an additional option of 'do not know'. Again, non-filers indicated not knowing ($M = 11.5\%$, $max = 14.4\%$) more often than filers ($M = 6.2\%$, $max = 13.6\%$), with differences reaching significance for five items ($p < .05$). Internal consistency was strong at $\alpha = .84$. The frequencies, means, standard deviations and inter-correlations of the measurements are reported in Table 1, with non-filers and filers listed separately.

Table 1: Frequencies, Means, Standard Deviations, and Inter-Correlations of the Measurements by Non-Filer and Filer Status

	Non-Filers N = 97					Filers N = 750						
	% / M (SD)	1	2	3	4	5	% / M (SD)	1	2	3	4	5
1. Male (male = 1, female = 2)	95.9%						97.6%					
2. Age	39.80 (6.89)	-.19					40.98 (8.75)	-.01				
3. Education		.12	-.02					.07*	-.01			
Primary School	8.2%						4.9%					
Secondary School	26.8%						31.5%					
Undergraduate	45.4%						50.5%					
Postgraduate	19.6%						13.1%					
4. Knowledge of Taxpayers' Rights	2.99 (0.65)	.15	.13	.21*			3.17 (0.44)	-.04	.06	.00		
5. Perceived Corruption in the Tax Administration	2.57 (0.52)	.11	.27**	.17	.22*		2.42 (0.58)	-.01	-.10**	-.03	-.13***	
6. Perceived Service Orientation	2.71 (0.67)	.04	-.14	.03	.37***	-.20***	2.72 (0.53)	.06	-.03	.03	.20***	-.08*

Note: %, M, SD, represent relative frequency, mean, and standard deviation, respectively. Correlations of sex and education are Spearman correlations; all other correlations are Pearson correlations. *, **, *** represent statistical significance at the 5 ($p < .05$), 1 ($p < .01$), 0.1 ($p < .001$) levels, respectively.

5. RESULTS

To test our first research assumption that taxpayer knowledge of rights and perceived tax administration corruption may predict filing behaviour, we use a logit regression (Table 2), whose specification (1) estimates the effects of the potential determinants of tax non-filing. These results indicate that tax filing is positively related to knowledge of tax rights but negatively related to perceived tax administration corruption. Specifically, moving one point up on the knowledge of taxpayers' rights answer scale increases the chances of being a filer by 112 per cent. Conversely, one additional point on the perceived corruption scale increases the chance of being a non-filer by 38 per cent. The results for specification (2), which adds in socio-demographic characteristics, also indicate that both knowledge of taxpayers' rights and perceived tax administration corruption are robustly related to filing behaviour. These results imply that tax knowledge and perceived corruption in the tax administration may be causes of tax non-filing, whereas socio-demographic characteristics are unrelated to filing behaviour.

Table 2: Knowledge of rights and perceived corruption in the tax administration as predictors of tax-filing behaviour

	(1)	(2)
Knowledge of Taxpayers' Rights	.75** <i>11.18</i> 2.12	.79** <i>11.67</i> 2.21
Perceived Corruption in the Tax Administration	-.48* <i>5.00</i> 0.62	-.48* <i>4.89</i> 0.62
Sex (male=0, female=1)		-.52 <i>0.82</i> 0.60
Age		.01 <i>0.78</i> 1.01
Education		-.21 <i>2.00</i> 0.81
Observations	841	841
R ²	.04	.05

Notes:

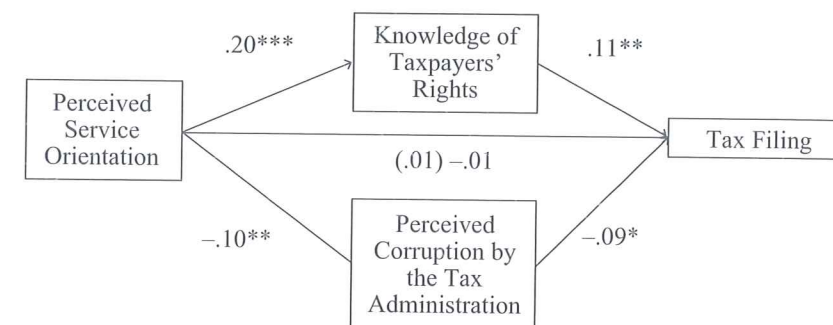
Tax non-filing = 0, tax filing = 1.

Wald values are given in *italics*, marginal effects in **bold**.

*, ** represent statistical significance at the 5 ($p < .05$) and 1 ($p < .01$) levels, respectively.

Next, to assess whether a perceived service orientation influences filing behaviour indirectly by increasing knowledge of taxpayers' rights and decreasing perceived tax administration corruption, we use Indirect software⁶⁰ to run a multiple mediator model based on a bootstrap sample of 1,000 participants taken from an original sample of 831. As expected, the results indicate no direct impact of perceived service orientation (95% CI [-0.07; 0.22]) on filing behaviour. However, as anticipated, they do show that the relation between perceived service orientation and filing behaviour is mediated through taxpayer knowledge of rights (95% CI [0.02; 0.26]) and perceived corruption (95% CI [0.01; 0.15]). These results remain robust to the inclusion of sex, age and education as co-variables (direct effect of perceived service orientation: 95% CI [-.08; 0.23], mediation through knowledge: (95% CI [0.01; 0.27]), mediation through corruption: (95% CI [0.01; 0.15]). The standardised regression co-efficients of all the relations are depicted in Figure 1, which shows that perceived service orientation both increases knowledge of taxpayers' rights and reduces the perception of tax administration corruption, both of which increase the probability of filing a tax return.

Figure 1: Knowledge of taxpayers' rights and perceived corruption as a mediators for the indirect effect of perceived service orientation on filing behaviour.



Notes:

Numbers indicate standardised regression co-efficients.

*, **, represent statistical significance at the 5 ($p < .05$), 1 ($p < .01$) levels, respectively.

Non-filing = 0, Filing = 1.

The number in brackets indicates the regression co-efficient for the direct effect, the number next to it indicates the regression co-efficient when knowledge of rights is included in the estimation.

⁶⁰ K.J. PREACHER and A.F. HAYES, 'Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models' (2008) 40 *Behavior Research Methods* 879-891.

6. DISCUSSION

Overall, the study results support the assumption that the absence of legitimacy in tax collection is a significant cause of tax non-filing.⁶¹ Compared to tax filers, non-filers have less knowledge of their rights as taxpayers and perceive widespread corruption in the tax administration. Whereas both factors can be assumed to undermine the perceived trust, fairness and legitimacy of the tax system, perceived corruption might also serve as a justification for non-compliant taxpayer behaviour and the payment of bribes instead.⁶² Nevertheless, knowledge seems to be more important for filing behaviour than corruption, despite the latter having gained more attention in the literature on tax ethics in developing countries. Indeed, the marginal effects reported here suggest that knowledge of taxpayer rights has an almost three times larger impact on tax filing than perceived corruption. This result is interesting from both a theoretical and a practical perspective.

Theoretically, it can be argued that knowledge of rights, more than perceived corruption, allows individuals to actively engage in the tax collection process.⁶³ Thus, personally experiencing opportunities for action – that is, participation and voice – might be more essential for perceiving tax collection as legitimate than passively watching others acting with propriety. In addition, knowledge of the rights that protect taxpayers from arbitrary search, assessment, seizure or exploitation by the tax authorities might serve as a countermeasure against corruption. Rights literacy in particular, by empowering citizens, might make them more willing to rely on the law and report corrupt officials.⁶⁴ Hence, the more taxpayers know about their rights and ways to assert them, the more

they can defend themselves against corruption, thereby contributing to the anti-corruption fight. Conversely, the more tax officials believe that taxpayers are aware of their rights, the less willing they may be to risk asking for bribe money. Hence, knowledge of rights increases perceived legitimacy overall because it promotes taxpayer involvement and may even prevent corruption. Thus, our results, rather than simply supporting previous assumptions about the importance of knowledge for tax compliance in developing countries,⁶⁵ suggest that it is the *knowledge of rights* (not knowledge in general) that is positively related to tax compliance.⁶⁶ If so, then involving taxpayers in the tax collection process through, for instance, taxpayer rights education could be a fruitful strategy for increasing perceived legitimacy and the number of registered taxpayers in developing countries.

The study results also provide evidence that a perceived service orientation of the tax administration is an effective countermeasure against a lack of legitimacy and thus tax non-filing.⁶⁷ That is, provision of the appropriate services can increase taxpayers' knowledge of their rights and decrease their perceptions of corruption, thereby enhancing the likelihood of their filing a tax return. In developed countries, in addition to their main function of helping filers overcome the perceived illegitimacy of tax collection, they may even directly reduce the time costs of filing-related compliance.⁶⁸ In our analysis of data from a developing country, in contrast, we identify only the indirect impact of service provision on tax compliance. That is, in line with the assumptions

⁶¹ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) 38 *Economic Analysis and Policy* 55–71; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447–457; A. DREHER and F. SCHNEIDER, 'Corruption and the Shadow Economy: An Empirical Analysis' (2010) 144 *Public Choice* 215–238.

⁶² M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.

⁶³ M. LEVI, A. SACKS and T.R. TYLER, 'Conceptualizing Legitimacy, Measuring Legitimizing Beliefs' (2009) 53 *American Behavioral Scientist* 354–375.

⁶⁴ D. BANIK, 'Legal Empowerment as a Conceptual and Operational Tool in Poverty Eradication' (2009) 1 *Hague Journal of the Rule of Law* 117–131; M.N. TRAUTNER, E. HATTON and K.E. SMITH, 'What Workers Want Depends: Legal Knowledge and the Desire for Workplace Change Among Day Labourers' (2013) 35 *Law & Policy* 319–340; N. SINGH, 'The Commission on Legal Empowerment of the Poor' in P. GALIZZI and L. HERKLOTZ (eds.), *The Role of the Environment in Poverty Alleviation*, Fordham University Press, New York 2008, pp. 305–328.

⁶⁵ S. DE MEL, D. MCKENZIE and C. WOODRUFF, 'The Demand for, and Consequences of, Formalization Among Informal Firms in Sri Lanka' (2013) 5 *American Economic Journal: Applied Economics* 122–150; D. MCKENZIE and Y.S. SAKHO, 'Does it Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability' (2010) 91 *Journal of Development Economics* 15–24.

⁶⁶ S. DE MEL, D. MCKENZIE and C. WOODRUFF, 'The Demand for, and Consequences of, Formalization among Informal Firms in Sri Lanka' (2013) 5 *American Economic Journal: Applied Economics* 122–150; D. MCKENZIE and Y.S. SAKHO, 'Does it Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability' (2010) 91 *Journal of Development Economics* 15–24.

⁶⁷ R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) 70 *Journal of Economic Behavior and Organization* 447–457; B. ERARD and C.-C. HO, 'Searching for Ghosts: Who are the Nonfilers and How Much Tax do they Owe?' (2001) 81 *Journal of Public Economics* 25–50; K. GANGL, E. HOFMANN and E. KIRCHLER, 'Tax Authorities' Interaction with Taxpayers: A Conception of Compliance in Social Dilemmas by Power and Trust' (2015) 37 *New Ideas in Psychology* 13–23.

⁶⁸ J. ALM, T. CHERRY, M. JONES and M. MCKEE, 'Taxpayer Information Assistance Services and Tax Compliance Behaviour' (2010) 31 *Journal of Economic Psychology* 577–586; S. EICHFELDER and C. KEGELS, 'Compliance Costs Caused by Agency Action? Empirical Evidence and Implications for Tax Compliance' (2014) 40 *Journal of Economic Psychology* 200–219.

of Chattopadhyay and Das-Gupta,⁶⁹ and as suggested by previous studies,⁷⁰ in developing countries, services for non-filers reduce neither the monetary nor the time costs of filing-related compliance because non-filers do not file in the first place. Hence, as expected, we identify no direct impact of service provision on tax compliance. Rather, in developing countries, the impact of service provision lies in its ability to overcome one of the main reasons for non-filing, feelings of detachment from the state and the perceived illegitimacy of tax collection.⁷¹ Our results thus imply that services which foster tax system legitimacy may prove a viable countermeasure against non-filing. Services that do not have this effect on perceived legitimacy, however, will increase neither tax ethics nor tax compliance.

These findings have important implications for tax research, not least that the results for filers cannot be generalised to non-filers. In particular, whereas previous studies on filers show that services directly impact tax compliance because of reduced time compliance costs,⁷² our results for non-filers indicate that services only impact filing behaviour indirectly by possibly increasing perceived legitimacy. Our analysis also reveals differences in the correlation patterns of non-filers versus filers (Table 1): whereas the former perceive more corruption the older they get, filers perceive less corruption with age. This observation suggests that non-filers are stuck in the informal sector, constantly confronted with violations of the law and bribeable officials, while filers have positive experiences with the tax administration.⁷³

⁶⁹ S. CHATTOPADHYAY and A. DAS-GUPTA, *The Personal Income Tax in India: Compliance Costs and Compliance Behaviour of Taxpayers*, NIPFP, New Delhi 2002.

⁷⁰ G.H. DE ANDRADE, M. BRUHN and D. MCKENZIE, 'A Helping Hand or the Long Arm of the Law? Experimental Evidence on What Governments Can do to Formalize Firms' (2014) *The World Bank Economic Review* 1–31; S. DE MEL, D. MCKENZIE and C. WOODRUFF, 'The Demand for, and Consequences of, Formalization among Informal Firms in Sri Lanka' (2013) *5 American Economic Journal: Applied Economics* 122–150.

⁷¹ R.M. BIRD, J. MARTINEZ-VAZQUEZ and T. TORGLER, 'Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability' (2008) *38 Economic Analysis and Policy* 55–71; R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) *70 Journal of Economic Behavior and Organization* 447–457.

⁷² S. EICHFELDER and C. KEGELS, 'Compliance Costs Caused by Agency Action? Empirical Evidence and Implications for Tax Compliance' (2014) *40 Journal of Economic Psychology* 200–219; K. GANGL, S. MUEHLBACHER, G. ANTONIDES, S. GOSLINGA, M. DE GROOT, E. HOFMANN, C. KOGLER and E. KIRCHLER, 'How Can I Help You? Perceived Service Orientation of Tax Authorities and Tax Compliance' (2013) *69 Public Finance Analysis* 487–510.

⁷³ R.G. CUMMINGS, J. MARTINEZ-VAZQUEZ, M. MCKEE and B. TORGLER, 'Tax Morale Affects Tax Compliance: Evidence from Survey and an Artefactual Field Experiment' (2009) *70 Journal of Economic Behavior and Organization* 447–457.

These observed differences are important because until now tax research has tended to be based on tax filers, with little attention paid to the challenge of non-filers in developing countries. Our results clearly suggest that simply generalising results for tax filers in developed countries to non-filers in developing nations is a sub-optimal approach to making policy recommendations. Rather, there is a definite need for more tax-filing research on both filers and non-filers in a variety of settings. That is not to say that our findings do not offer valuable guidance for policy-making. For example, they clearly show that services provided by the tax administration only foster tax compliance if they increase taxpayer perceptions of legitimacy by increasing their participation in the tax-collecting process via knowledge and by decreasing their perceptions of corruption. Services to educate taxpayers about their rights in order to increase empowerment also seem particularly important for tax compliance in developing countries. Tax authorities could, for instance, circulate information on taxpayers' rights via educational programmes, training for journalists, media campaigns or by cooperating with opinion leaders such as the chamber of commerce. This circulated information should not only build awareness of the importance of tax compliance but inform taxpayers of their right to obtain a transparent and comprehensible assessment of tax liability, ways to defend themselves against corrupt officials, and how to obtain refunds owed. In addition to positively influencing tax compliance, this information may also serve as a countermeasure against corruption,⁷⁴ in that knowledgeable taxpayers are less likely to accept or fear corrupt tax officers. Overall, therefore, our findings substantiate development projects aimed at improving good governance and thereby the service orientation of tax administrations in developing countries.

Admittedly, however, our study is subject to certain limitations. First, even though non-filing seems to be the norm in Pakistan – in part because most non-filers are too poor to actually pay taxes – accessing data on the small group of wealthy non-filers is extremely difficult. Nevertheless, our analysis clearly shows no socio-demographic differences between our sub-samples of non-filers and filers, which lends credibility to our identification assumption. The correctness of this assumption allows a valid comparison between both groups. The validity of participant responses is also increased by the inclusion of the 'do not know' option in recognition that non-filers, being less involved in tax issues, are likely not to know the answer more often than filers. Conversely, only in rare cases did this inclusion result in too few answers with which to build a scale, forcing exclusion of a participant in the respective analyses (knowledge: 4 non-filers

⁷⁴ D. BANIK, 'Legal Empowerment as a Conceptual and Operational Tool in Poverty Eradication' (2009) *1 Hague Journal of the Rule of Law* 117–131; M.N. TRAUTNER, E. HATTON and K.E. SMITH, 'What Workers Want Depends: Legal Knowledge and the Desire for Workplace Change Among Day Labourers' (2013) *35 Law & Policy* 319–340.

and 2 filers, service: 10 non-filers and 12 filers). The 'do not know' option is also likely to have increased data validity by reducing respondent tendencies to give socially desirable answers, especially given that participants were not informed of the study aims. It is also true that our cross-sectional data do not allow clear assumptions on causality. Nevertheless, it seems reasonable to assume that services lead to more knowledge of rights than vice versa.

In fact the limitations of this study are in most cases entangled with the difficulty of obtaining valid data from wealthy non-filers in a developing country, which restricts the amount of variance they can explain. Although, 97 non-filers represent a sufficiently large sample to draw meaningful conclusions,⁷⁵ far more research is needed on the non-filing phenomenon in both developed and developing countries to confirm and expand existing knowledge. Even so, this research makes a useful contribution to the rare literature on tax filing, which is thus far based on data on the informal economies in Sri Lanka, Bolivia and Mexico or on a large IRS data set that does not allow differentiation between non-filers, filers, late filers or those with too little income to file.⁷⁶ Specifically, our novel targeting of wealthy tax non-filers in a developing nation adds rare empirical data on non-filers to this knowledge pool, information that may allow the formulation of clear recommendations and even provide unique insights into how tax returns might be increased in developed countries. In particular, the study demonstrates the important roles in tax-filing behaviour of tax knowledge that empowers citizens and of a professional tax administration whose services, by increasing tax collection's perceived legitimacy and trustworthiness, may augment the proportion of citizens who voluntarily contribute their taxes to finance the state's public goods.

⁷⁵ e.g. J.E. BARTLETT, J.W. KOTRILIK and C.C. HIGGINS, 'Organizational Research: Determining Appropriate Sample Size in Survey Research' (1999) 19 *Information Technology, Learning, and Performance Journal* 43–50.

⁷⁶ G.H. DE ANDRADE, M. BRUHN and D. MCKENZIE, 'A Helping Hand or the Long Arm of the Law? Experimental Evidence on What Governments can do to Formalize Firms' (2014) *The World Bank Economic Review* 1–31; S. DE MEL, D. MCKENZIE and C. WOODRUFF, 'The Demand for, and Consequences of, Formalization among Informal Firms in Sri Lanka' (2013) 5 *American Economic Journal: Applied Economics* 122–150; B. ERARD and C.-C. HO, 'Searching for Ghosts: Who are the Nonfilers and How Much Tax do they Owe?' (2001) 81 *Journal of Public Economics* 25–50; D. MCKENZIE and Y.S. SAKHO, 'Does it Pay Firms to Register for Taxes? The Impact of Formality on Firm Profitability' (2010) 91 *Journal of Development Economics* 15–24.

BUILDING TRUST IN TAXATION

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PREFACE

Recent developments show that the contemporary tax-landscape is going through a legitimacy crisis in virtually all Western democracies and even beyond.

This open crisis seems to be triggered during the last decade by a few important macro-economic disturbances. The US real estate crisis in 2007 disturbed the financial sector, which in its turn led at the beginning of this decade to a fiscal crisis within many European countries (such as Greece, Spain, Portugal) and consequently – within the EU – to the so-called Euro crisis. In reaction national authorities were forced worldwide into greater fiscal orthodoxy. As a result they planned important cuts in government spending and focused on a more stringent monitoring of compliance by taxpayers. In this context the Stability and Growth Pact (SGP), as a set of rules designed to ensure that countries in the European Union pursue sound public finances and coordinate their fiscal policies, is exemplary.

At the same time revelations in the public media (such as Swissleaks, Luxleaks and the Panama papers) revealed that some multinational companies, still succeed in minimising the fiscal pressure on their globally acquired profits by pitting the fiscal regimes of countries in which they operate, against each other. The multiplicity of fiscal regimes and the inconsistencies between these regimes still offer numerous possibilities for fiscal optimisation. Also high net worth individuals are able to circumvent taxes on their income and/or assets through a variety of national and international tax schemes. There is even a high-tech industry that seeks to guide and assist clients with their tax dealings in order to have them pay as little tax as possible.

On the other hand, many countries (often smaller countries) – even in the European Union – use their tax sovereignty as a lever to compete with each other to attracting businesses and high net worth individuals with very attractive fiscal conditions by means of various techniques such as tax-friendly regimes (tax shelters), tax exemptions, tariff reductions and rulings. In the European Union the Commission tries to tackle these national tax regimes within the framework of the state aid rules and by recommending some policy rules against harmful tax competition.

Moreover, tax competition is not only harmful to government budgets, but also companies that do not operate (or operate less) cross-border have therefore fewer opportunities for such fiscal optimisations. It also generates unfair treatment between individual taxpayers. More than ordinary taxpayers, high net worth individuals have the opportunity to avoid taxes. In addition,