



Working paper

Informal and religious taxes and transfers in Pakistan

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Key messages

Informal transfers are ubiquitous in Pakistan, where 94% of households either receive or pay transfers between households, and 55% of households do both. Only 10% just receive and a further 25% solely donate such transfers. This compares to 14% of households who receive public formal transfers. The informal (non-state) sector extends to religious taxes and transfers, where 26% of households receive and 82% make payments on an informal basis, while formalised religious taxes and transfers are miniscule – just 0.1% of households receive formal religious taxes while 0.5% report paying them.

International cash remittances have greater value but remain the minority on incidence of informal transfers: just 7.2% of households receive them but they represent 54% of all informal cash transfer income. The vast majority of informal transfers are within Pakistan but are lower value and are more often in-kind food gifts or other gifts for consumption.

While informality is overestimated in the absence of data on formal income tax and social security contributions, it is clear that informal transfers are regressive in general: the richest quintile receives 7.4 times the value of informal transfers compared to the poorest, and this represents 15.4% of incomes in the richest quintile compared to 11.7% in the poorest. Informal expenditures on transfers are progressive but not sufficient to offset the overall regressive net impact of informal transfers and their payment. Formal taxes are much smaller by comparison: they represent 5% of the income of the richest households and 1.7% of the poorest, but the formal public tax burden appears to be progressive.

The incidence and effects of religious taxes and transfers depends on informal transfers and expenditures. The formal systems of state-regulated *zakat* funds and their local implementation have very low incidence, low transfer values and small impacts on redistribution.

There is a strong need to improve survey data to better identify both formal taxes and religious taxes and transfers. In an Islamic country like Pakistan, with a strong policy commitment to reducing poverty and inequality, it is crucial to be able to attribute public, market and informal sources of income. Improved data will help the Ministry of Finance and others to plan and report the impacts of policies in economic analyses.

The purpose of this paper is to demonstrate an approach to analysis that can be replicated and expanded by analysts and researchers in the future. Planning the future of social policy in Pakistan will require a clear understanding of the roles of public, informal and religious spheres in its funding and programme design and delivery.



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Acronyms/Glossary

BISP	Benazir Income Support Programme
CEQ	Commitment to Equity Institute
EOBI	Employees' Old-Age Benefits Institution
HIES	Household Integrated Economic Survey
MoF	Ministry of Finance
PKR	Pakistan rupees
PSLM	Pakistan Social and Living Standard Measurement Survey

Introduction

This paper focuses on religious taxes and transfers and assesses their role in a broad consideration of state-based and informal mechanisms of taxes and transfers to private households. The research is part of a wider appreciation of the roles of informal and formal taxes and transfers in overall fiscal policy and their impact on inequality and the distribution of household incomes. Informal forms of taxation have risen in research prominence since Olken and Singhal (2011), defined them as ‘a system of local public goods finance coordinated by public officials but enforced socially rather than through the formal legal system’. Those authors did not consider religious taxation, but subsequent research is assessing the role of Islamic taxation in developing countries (Van den Boogard, Gallen and Javed; Gallen, van den Boogard, Javed and Remmal – both forthcoming). We know that Islamic taxation is often large in scale in many countries and that it has both formal and informal characteristics: sometimes it is aligned with formal state taxation, and sometimes it is not. However, aggregate data on revenues where available is not accompanied by data on the incidence and progressivity of such taxation. Similarly, studies have observed transfers from Islamic funds being received by households (e.g., Khan and Arif, 2016), but the relationship between tax and transfer incidence has not been considered alongside. We thus know very little about how the combination of tax and transfers work under Islamic principles and practices to produce progressive or regressive outcomes. The final knowledge gap concerns how Islamic taxes and transfers work alongside formal state and informal non-religious counterparts. A previous paper formal and informal taxes and transfers without considering religious (Islamic) counterparts (Evans, Harkness and Salomon, 2020). This paper follows up on that study to specifically add the issue of Islamic taxes and transfers to a fiscal incidence analysis that addresses this knowledge gap through a country case study.

We base the analysis on Pakistan as an illustrative rather than a representative case study country. It provides a good example of a country in which there is state-funded social assistance, formal income taxes and contributory social assistance. It also has a formal *zakat* fund and state-run *zakat* collection and distribution alongside informal Islamic charitable giving. In this regard, Pakistan has all the policy elements that can contribute to a comprehensive assessment of formality and informality and that can attribute religious (Islamic) mechanisms of taxes and transfers across that approach. In this way, we take up questions of religious taxation that were left unanswered in the analysis of formal and informal taxes and transfers in Rwanda in our previous paper (Evans, Harkness and Salomon, 2020).

Our methodology follows the Commitment to Equity (CEQ) Institute approach to fiscal incidence analysis (Lustig, 2018) as adapted to illustrate the distinct contributions of informal taxes and transfers (Evans, Harkness and Salomon, 2020), which is shown in full in Figure 1. This allows us to place religious fiscal instruments alongside public programmes of direct taxes and social protection as well as informal transfers paid and received across households in Pakistan. Our primary questions are based first on ‘incidence’ – who pays and who receives these formal and

informal taxes and transfers? Second, we consider the ‘redistributive effect’ – are these taxes and transfers progressive or regressive, in part and together? And how much do they change inequality, and for better or worse? We use household survey microdata from the Pakistan Social and Living Standard Measurement survey/Household Integrated Economic Survey (PSLM/HIES) of 2018-19 (PBS, 2019) – chosen because it itemises a comprehensive set of Islamic taxes and transfers. We do not have access to tax administration records and are unable to include an assessment of formal income tax in our estimates of fiscal incidence since income tax payments or liabilities are not recorded in the survey. Our analysis is primarily a ‘proof of concept’ paper to demonstrate how to include religious taxes and transfers in a comprehensive fiscal incidence analysis across formal and informal sectors. A definitive fiscal incidence analysis based on a fuller set of administrative and survey data is left to further research.

The paper proceeds as follows. We first discuss Islamic religious taxes and transfers in general, with a focus on practices, and how these fit into current thinking on informal tax and transfers. We then consider the elements of Islamic taxation and charitable giving and assess how they can be formally placed within the CEQ approach to fiscal incidence analysis to allow separately identifiable profiles for religious and secular, as well as formal and informal, taxes and transfers. With those definitions and approaches set, next we lay out what we observe in the survey data: how many households pay transfers of what type, and how many receive transfers of what type. We reconcile these data in the survey with national accounts and fiscal reports as far as possible. We also assess how many households both pay and receive and how many are net payers or net receivers of informal taxes and transfers. The final section of the paper reports the resulting distributional impacts and the impacts on inequality using an approach that contrasts informal and formal sectors, and then considers how religious payments and transfers cut across those sectors. Faced with data uncertainty from the survey designation of some elements, we undertake a sensitivity analysis to assess how far our categorisation could bias our findings.

1 Religious taxes and transfers

Religious taxation

Church taxes have long historical precedence in many European countries. Such taxes were imposed to provide churches with financial support for the salaries of its clergy and the operating costs of the church. In the 19th and early 20th centuries, a wave of secularisation separating religious and secular authority gave rise to distinct ‘church taxes’. Today, the state is a partner in collecting religious taxes in many countries that continue to levy church taxes, for instance in Austria, Denmark, Finland, Germany, Iceland, Italy and Sweden. Constitutionally, states have different and sometimes ambivalent approaches to religious taxation (Pew Research Centre, 2019). Tax laws in these countries follow principles on the separation of religious and secular government authority and thus can both support and prohibit direct taxes to churches or promote favourable treatment by the government as well as acting as the revenue collection service for church tax.

Islamic taxation has been a part of Quranic teachings and Islamic state practices since the 7th century. As in European church taxes, the applied implementation of these principles has differed over time and between states, caliphates, sultanates and the schools of Islam. Sunni rulers are associated with high levels of government involvement in the collection of Islamic taxes, while the opposite is the case with Shia rulers.

It is thus not possible to treat Islamic taxation as uniformly formal or informal. But it is clear that it should be counted in a fiscal analysis of the incidence of taxes and transfers in any Islamic country as the principles of Islamic taxes and transfers are explicitly redistributive – to support the poor and needy and finance essential services such as hospitals and schools (madrassas). Elements of Islamic taxation where the state is not involved in its collection clearly meet the definition of informal taxation (Evans et al., 2020). The role of the state in *zakat* varies greatly across countries, as Powell (2009: 58) explains: ‘Modern civil codes of predominantly Muslim nations take a wide variety of approaches to *zakat*. The most common approach is to ignore it altogether. Another approach is to establish entities to collect and distribute voluntary *zakat* contributions, typically in the interest of transparency and accountability. The third approach is to collect *zakat* as if it were a tax and to distribute it as an analogue of welfare’.

The theoretical position of Islamic principles of *zakat* and welfare economics is contested – both by Islamic scholars who view secular taxation and religious obligations for *zakat* as irreconcilable (Siddiqui, 2006, for example) and in the discussions of economic theories of redistribution and reciprocity. We follow the examples of empirical applied policy studies of *zakat*, and particularly those in Pakistan (Christian, 2013, for example), and the inclusion of *zakat* as social protection in the Pakistan MoF’s annual economic survey (MoF, 2018: 254).

When it comes to other forms of Islamic religious informal taxes, the main definitional question is whether they should be treated as a ‘tax’ or as ‘charitable giving’. There is no problem in this regard when they are made as informal payments between households as they then fit perfectly into the remit of ‘informal transfers’, but informal ‘charitable’ payments to organisations or services may well straddle strict definitional boundaries. Our approach is pragmatic. We classify the payments reported in the Pakistan household survey data as ‘religious’ taxes and transfers when they meet the classification outlined below; as *sadaqah* or *qurbani*, for example. We consider who pays and who receives those transfers and expenditures. If they are paid by or received by state organisations, they are ‘formal’; if not, they are ‘informal’.

Islamic taxes and transfers in Pakistan

Zakat

Zakat is one of the five obligations of Muslim faith and practice. Every adult Muslim, male and female, must pay to support specific categories of people if their assets are assessed above a certain level (the threshold is called the *nisab* – see below). The beneficiaries of *zakat* are the poor and the needy but it can also be used to free captives and debtors, for outreach and evangelical work, and for helping travellers.

Zakat is a tax on assets and capital (held for more than a lunar year), not on income. Assets do not include the primary residence, but asset values cannot be discounted by mortgages or loans secured on them. The obligation to pay *zakat* also extends to businesses, who pay on profits and stock. *Zakat* is obligatory only for people with assets valued higher or equal to the *nisab*. Both those liable for *zakat* and those who do not have obligatory contributions can pay charitable contributions in other ways (see *sadaqah* discussion below).

Nisab is the threshold on wealth and assets for liability to pay *zakat*. The calculation of the *nisab* level is traditionally set by values based on either pure gold or pure silver, approximately equivalent to 87.48 grammes of pure gold or 612.36 grammes of pure silver. If someone possesses gold as the only asset, then it is advisable to use the *nisab* measure for gold. If, on the other hand, someone possesses a mixture of assets, then it is deemed important to use the *nisab* level for silver. However, some scholars maintain that the use of silver as a *nisab* threshold is safer for the payers and more favourable for the recipients of *zakat* (Muslim Aid, 2020). Other assets and precious metals can be valued as equivalent to the standard measures of pure gold or pure silver. In practice, this means that *nisab* is the current market price of either 87.48 grammes of gold or 612.36 grammes of silver on the day that *zakat* is paid. In Pakistan, the government announces the *nisab* of *zakat* each year, before the holy month of Ramadan. An amount of PKR 80,933 was announced by the government of Pakistan as the *nisab* in 2021, calculated according to the value of 612.32 grammes of silver. Accordingly, anyone with a PKR 80,933 balance amount in savings or profit on the first day of Ramadan was liable to pay 2.5% *zakat* on the total.

Zakat is liable at 2.5% of all assets and capital if the asset threshold is reached. The 2.5% is paid on all the assets, not on the margin above the *nisab*. It is usual for every Muslim to calculate their own *zakat* individually. But Pakistan tax policy dictates the automatic collection of *zakat* on investment bank accounts and similar financial assets held formally in banks.

Ushr

Ushr in Pakistan is a land tax and levy on agricultural production based on 5% of the produce from each landowner, leaseholder or grant holder unless the production value for the year is less than a threshold (*sahib-e-nisab*) set at a value of 849 kilogrammes of wheat or its equivalent. Farmers who produce less than this are not liable to pay *ushr*. *Ushr* was formalised in Pakistan in the 1980s under the the government of General Muhammad Zia-ul-Haq to replace provincial land taxes under the Islamic reform of taxes and finances. Under those changes, both Shia and non-Muslims were exempted from *ushr* obligations but continued to be liable for the secular provincial land tax.

In other historical and contemporary Islamic governments, *ushr* expanded from its origins as a levy on agriculture to be a trade tax imposed on non-Muslim traders only – both within and across national boundaries. Payment of *ushr* allowed non-Muslim subjects and travellers to be protected by Islamic law and also to be called up for military service.

Sadaqah

A crude distinction would be that *sadaqah* is a voluntary charitable payment promoted by Islamic teachings as a virtuous deed, while *zakat* is a religious obligation. In fact, this distinction is clouded by the fact that paying *sadaqah* is a reflection on a Muslim's faith (*eeman*). The greater the charitable acts of *sadaqah*, the more that faith is substantiated and recognised. *Sadaqah* can be monetary, in-kind, or even charitable actions for the public good, such as cleaning or clearing public spaces, roads and paths.

When considering the distributional effects of Islamic taxes and charity, it is important to note that *sadaqah* has no minimum threshold (*nisab*). All Muslims, even those whose wealth or income is too low for *zakat* or *ushr*, can give *sadaqah* and are encouraged to do so. There is an onus on keeping acts and payments of *sadaqah* private and not advertising or disclosing them (thus potentially affecting the reporting of incidence and values in the household survey responses).

Most *sadaqah* is made in payments to charities or to dependents and extended family, but there is no obligation on payees to reciprocate, and the act of giving should have no expectation of reciprocation. *Sadaqah* is not just given between individuals and households, but can also support Islamic projects such as the building of mosques, Islamic schools and libraries, orphanages and da'wah centres.

Fitrana (or zakat ul fitr)

Fitrana is charity given to the poor at the end of Ramadan. The purpose of this is to ensure that poor families can break the fast, and the giving of *fitrana* is an obligation on every Muslim with the means to do so. *Fitrana* is thus a form of *zakat* to bolster community solidarity. The richer members of a community are obliged to relate to those who are poor, and the poorer with the extremely poor. In this way, the whole community can celebrate the festival of breaking the fast (*`Eid ul Fitr*) and no-one is excluded from doing so. The payment of *fitrana* is obligatory at the end of Ramadan as a recognition that obligatory fast has been completed. *Fitrana* payments are fixed to contemporary Ramadan and if missed without good reason are a breach of Islamic obligation and cannot be paid in arrears later.

Fitrana is traditionally set as a minimum of one *sa'* (four double handfuls) of food, grain or dried fruit for each member of the recipient family. *Fitrana* is only given to people, not to institutions or buildings.

Fidyah

This is an obligatory donation that must be made to feed the poor. It is paid when someone cannot fast during Ramadan (due to ill health, travelling or menstruation, for example). If the person cannot complete the missed fasts in time (due to old age or chronic illness that is unlikely to improve) they should pay *fidyah* for someone else to be fed. The amount is similar to *fitrana*.

Qurbani

Every year, Muslims around the world slaughter an animal – a goat, sheep, cow or a camel – to reflect Prophet Ibrahim's willingness to sacrifice his son Ismail for the sake of God. Muslims pay *qurbani* to help poor families and communities receive their share of the meat of sacrificed animals or an equivalent food. *Qurbani* payments must be given at *Eid ul-Adha*. Adults who have assets over the threshold of 52.5 tolas of silver are obliged to give *qurbani*. *Qurbani* sacrifices must be made in three shares based on the weight of meat – one for the host, one for their family and/or friends, and one for an impoverished family. *Qurbani* schemes that allocate food from food banks or other sources operate using similar principles as those in jurisdictions or countries where sacrificial meat is not sourced for charitable food allocation.

Islamic taxes and transfers and fiscal incidence analysis

The short descriptions above give an indication of some of the definitional problems that underlie the inclusion of Islamic taxes and transfers in an analysis of fiscal incidence.

First, are *zakat* taxes formal or informal? In Pakistan, there appear to be both formal and informal mechanisms in play to redistribute income.

Formal systems for *zakat* were put in place in 1980 with the laws passed by the Zia government as part of reforms to introduce an 'Islamic' basis for the economy. A 2.5% annual deduction from 'investment and savings' bank accounts was introduced on the first day of Ramadan together with the formal and compulsory collection and distribution of *zakat* and *ushr* revenue to be used for poverty relief. The federal Ministry of Religious Affairs operates a Central Zakat Fund; it disburses funds to Provincial Zakat Councils, which in turn transfer them to District Zakat Committees.

Zakat councils can be found at federal, provincial and district levels in Pakistan (*ushr* is also paid to *zakat* councils). Provincial-level autonomy in the distribution of *zakat* funds leads to differences in the forms and beneficiaries for such formalised *zakat*. For example, Punjab province funds educational stipends (Guzara Allowances, Educational Stipend to the Students of Educational Institutions and Religious Schools [Deeni Madaris] and to Musthaiq Students of Technical Institutions) as well as programmes relating to healthcare, rehabilitation, and support for the marriage of Musthaiq girls.

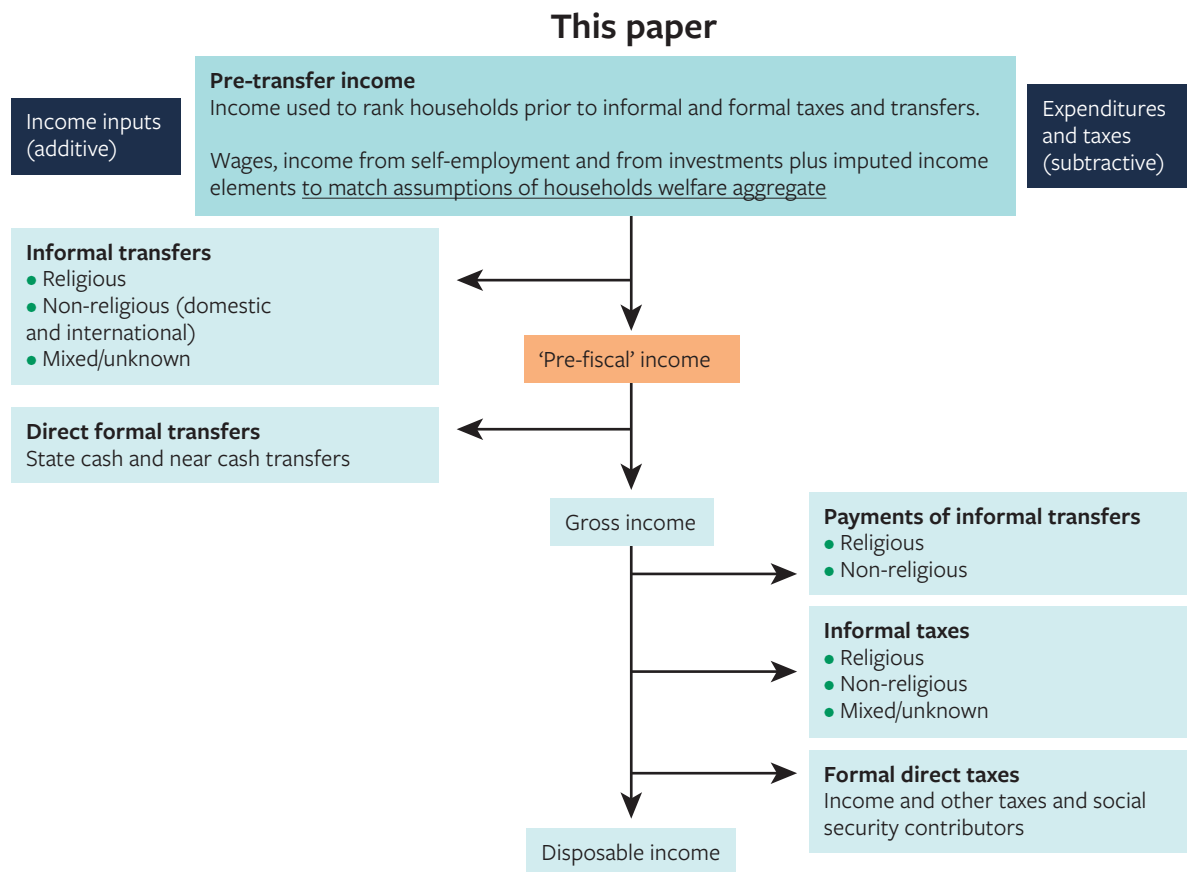
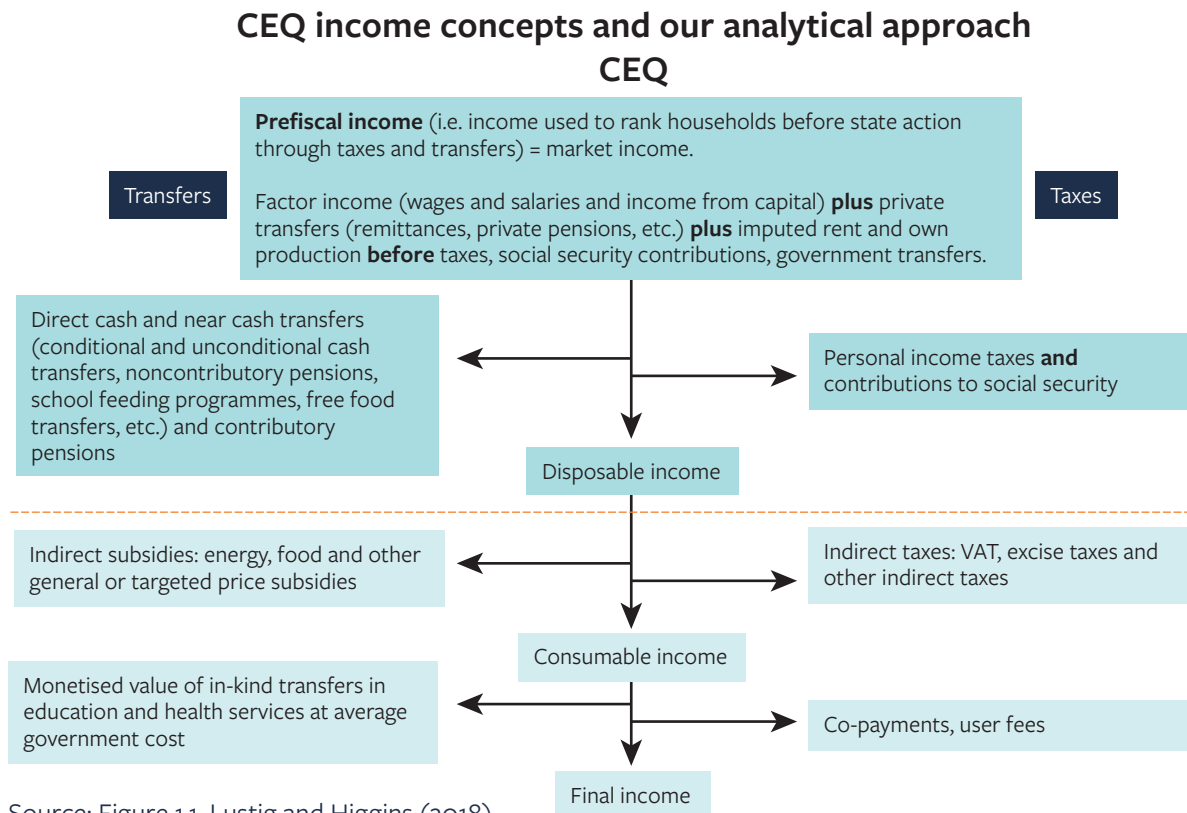
Second, informal forms of *zakat* operate in the transfer of cash and in-kind gifts between individuals and households outside of the formal *zakat* operations. These informal payments of *sadaqah*, *fitrana*, *qurbani* and *zakat* are also classifiable as 'inter-household transfers' rather than as 'taxes', making their accounting and attribution in fiscal incidence analysis clearer.

Third, payments that are made directly to institutions rather than to other individuals or households are 'informal taxes' if they are not made through formal revenue collection agencies or instruments. This means that payments of *zakat* and *sadaqah* in this form can be classified as 'informal tax'.

In summary, a consistent classification into religious taxes and transfers and into formal and informal status is possible if the form of the payment is identified (it is classed as a transfer if paid to another household as a 'tax' if paid to an institution). These can also be distinguished between formal and informal payments depending on whether the state or the analogous provincial authorities are collecting and distributing the money. In addition, there will be 'non-religious' informal transfers in the form of familial transfers of remittances or similar payments. Formal taxes such as land tax (not *ushr*), income tax and social security contributions will also be classifiable as such.

In our previous paper, we used the CEQ analytical accounting approach as our reference. Figure 1 allows us to customise that approach to consider Pakistan's religious taxes and transfers.

Figure 1 CEQ and analytical approach



Our approach continues to distinguish between ‘original’ income as well as between market income and informal transfers. Unlike CEQ, we divide informal transfers into a separate identified contribution to gross income (defined as original income plus informal and formal transfers). For Pakistan and an analysis of religious transfers, we sub-divide these informal transfers into two main types: religious and non-religious. Unfortunately, survey data definitions are not precise enough to apply all informal transfers to these two categories, which means we have to include a third: ‘mixed and uncertain status’ transfers. In a similar way, we divide tax and transfer payments into religious and non-religious categories in the computation from gross to disposable income. Again, survey data limitations necessitate a third ‘mixed and uncertain’ category. The new areas of classification and analysis are shown in green in Figure 1.

We only undertake fiscal incidence analysis to the point of calculating how taxes and transfers produce ‘disposable income’ from ‘original income’, as in our earlier paper (Evans et al., 2020).

2 Incidence of taxes and transfers in Pakistan

Data

We base our profiling of fiscal incidence and Islamic taxes and transfers on the secondary analysis of microdata from the Pakistan Social and Living Standard Measurement Survey/Household Integrated Economic Survey 2018 (PSLM 2018-19). PSLM surveys are regular household surveys and alternative PSLM surveys also include income and expenditure modules. The 2018-19 survey is one such survey. For ease of reference, we use the acronym PSLM 2018-19 to refer to both the main and HIES components.

We have additionally considered data from the 2010-11 Pakistan Household Panel Survey, but as this survey does not have population weight, we use that analysis as a background robustness check on the level and type of coverage of taxes and transfers.

The PSLM 2018-19 was carried out between August 2018 and June 2019. It has a sample of 24,809 households (159,949 individuals) and provides detailed outcome indicators on income and expenditure, alongside a range of other policy and Sustainable Development Goal indicators. The survey is based on two questionnaires given separately to cover men and women. Data on transfers received and paid out and tax expenditures are spread across both questionnaires but concentrated in a specific ‘Transfers Received and Paid Out’ module in the male questionnaire.

Taxes and transfers 2018-19

Table 1 shows the transfers, taxes and expenditures from PSLM 2018-19 used to profile formal, informal and religious taxes and transfers, as outlined in the earlier discussion.

Table 1 Taxes and transfers in PSLM 2018-19

Transfers received
Non-religious
Informal
Remittance received from within Pakistan (in cash)
Remittance received from outside Pakistan (in cash)
Gifts, assistance etc. received in kind (even if subsequently sold for cash)
Household members’ in-kind consumption from assistance, gift, dowry, inheritance or other source
Receipts from committees

Formal

- Annual income from Benazir Income Support Programme (BISP)
- Annual assistance from government or other resources
- Any pension or other benefits during the last year

Religious**Informal**

- Income in cash from *zakat/ushr* from private households or organisations (individuals, NGOs)
- *Qurbani* received as assistance

Formal

- Income in cash from *zakat/ushr* from public sector

Mixed or uncertain status

- Other remittances, assistance of gifts, alimony, *sadaqah* etc.

Transfers paid out**Non-religious****Informal**

- Remittance paid within Pakistan (in cash or in kind)
- Remittance paid outside Pakistan (in cash or in kind)
- Amount paid for committees

Religious**Informal**

- Amount paid in *zakat/ushr* (in cash or in kind) to private households or organisations (relatives/non-relatives, NGOs/trusts etc.)
- Expenditure on *qurbani*

Mixed or uncertain status

- Other remittances, assistance of gifts, alimony, *sadaqah* etc.

Formal taxes**Religious**

- Amount paid in *zakat/ushr* (in cash or in kind) to public sector (federal/provincial/district/semi-government)

Non-religious

- House and property tax
- Fines, birth/marriage taxes, pet-keeping taxes, passport/visa fee, and other taxes
- Excise duty, sales/income/property tax, licence/registration fee, and other taxes
- Registration/tax/insurance/driving licence fees for vehicles (car, motorcycle, scooter, etc.)
- Weapon and ammunition licence fee

There are several areas of inclusion and omission in this list that readers should understand will lead to caveats in our analysis:

- The religious payments of *fitrana* and *fidyah* are not separately identified and may or may not fall under the headings of *zakat*. *Sadaqah* is also included in a mixed category of payments that includes religious and non-religious elements.
- There is no identification of payments of formal income tax nor of contributory social security through the Employees' Old-Age Benefits Institution (EOBI – pensions, survivors and invalidity benefits) and the Workers Welfare Fund.
- Payments for other taxes include elements that can be defined as 'user fees' or licence charges and thus have ambiguous status as formal taxes.
- We have excluded any private market-based insurance payments and claims.
- We have excluded large 'one-off' payments of inheritance and dowry and similar items as these are seen as a transfer of capital rather than of income.

These caveats and uncertainties are recognised and should be taken into account. We only report Itemised taxes and transfers in our first profiles to show their coverage of the population and value. These itemised components of taxes and transfers are then aggregated in all later profiles to show the overall incidence and levels of taxes and transfers by their status as informal or religious.

Taxes and transfers 2018-19

Table 2 shows the results for transfers received by households in Pakistan, by each itemised transfer previously shown in Table 1. The most common forms of transfer are informal, of which in-kind food and other consumption gifts dominate. These are mostly conducted between households. Approximately half of the population (50.3%) live in households that receive these transfers, and a further 11.5% live in households that receive cash transfers (remittances) from households within Pakistan. About 7.2% of the population live in households that receive international cash remittances from outside Pakistan. Cash remittances have the highest value of all the informal non-religious transfers, with international remittances the higher – 180% of the value of domestic transfers. The local non-formal savings and loans committees make payments to households containing 2.2% of the population. Turning to consider 'formal' transfers from state social protection programmes, the largest coverage is from BISP – 7.7% of the population live in households where BISP is reported as received. Formal social insurance pension and other benefits are received in households in which 6.2% of the population reside. These transfers have a much higher value than BISP (14 times the value).

Table 2 Transfers received by households in Pakistan

	Percentage of population	Average nominal value for beneficiaries (per month)
Non-religious		
Informal		
Remittance received from within Pakistan (in cash)	11.5%	15,452
Remittance received from outside Pakistan (in cash)	7.2%	28,538
Gifts, assistance, etc. received in kind	4.3%	638
In-kind consumption from assistance, gift, dowry, inheritance or other source	50.3%	2,142
Receipts from committees	2.2%	6,970
Formal		
BISP	7.7%	1430
Assistance from government or other resources	0.3%	7,361
Pension or other benefits	6.2%	20,095
Religious		
Informal		
Income in cash from <i>zakat/ushr</i> from private households or organisations (individuals, NGOs)	0.6%	1,397
<i>Qurbani</i> received as assistance	0.2%	1,933
Formal		
Income in cash from <i>zakat/ushr</i> from public sector	0.1%	17,477
Mixed or uncertain status		
Informal		
Other remittances, assistance of gifts, alimony, <i>sadaqah</i> etc.	25.9%	869

Source: Authors' calculations using data from PBS (2019)

Religious transfers cover much smaller proportions of the population – just 0.6% from informal/private *zakat* or *ushr*, another 0.1% from formal public sector-provided *zakat* or *ushr* and 0.2% from *qurbani*. However, *sadaqah* payments are included in a larger aggregate category that also comprises alimony and other remittances and cannot be identified separately. Overall, nearly 26% of households receive these payments of a mixed religious and non-religious nature.

Overall, Table 2 clearly suggests that informal transfers have a much larger coverage than formal equivalents and that *explicit* religious transfers are much smaller than non-religious transfers.

Table 3 Taxes and transfers paid out by households in Pakistan

	Percentage of population	Nominal amount per payee (per month)
Non-religious		
Informal		
Remittance paid within Pakistan (in cash or in kind)	1.2%	22,127
Remittance paid outside Pakistan (in cash or in kind)	0.06%	37,902
Amount paid for committees	4.6%	3,482
Formal		
House and property tax	6.7%	749
Excise duty, sales/income/property tax, licence/registration fee, and other taxes	17.9%	709
Fines, birth/marriage taxes, pet-keeping taxes, passport/visa fee, and other taxes	3.9%	1,100
Registration/tax/insurance/driving licence fees for vehicles (car, motorcycle, scooter, etc.)	3.1%	218
Weapon and ammunition licence fee	0.7%	174
Religious		
Informal		
Amount paid in <i>zakat/ushr</i> (in cash or in kind) to private households or organisations (relatives/non-relatives, NGOs/trusts, etc.)	7.1%	1,155
Expenditure on <i>qurbani</i>	43.1%	550
Formal		
Amount paid in <i>zakat/ushr</i> (in cash or in kind) to public sector (federal/provincial/district/semi-government)	0.5%	1,612
Mixed or uncertain status		
Informal		
Other remittances, assistance of gifts, alimony, <i>sadaqah</i> , etc.	71.3%	371

Source: Authors' calculations using data from PBS (2019)

We face problems of evidence. The survey places payments of *sadaqah* into a combined response that also reports alimony and other remittances and gifts – 71.3% of the population live in households reporting these payments. There is no way of distinguishing religious charity from other forms of payment. But religious payments are represented in large proportions of the population (Khan and Arif, 2016; Pakistan Centre for Philanthropy, 2021). A further 43.1% of the population can be found in households that report paying *qurbani* and 7.1% in households

that pay informal *zakat/ushr* to private households or community organisations. Just 0.5% of the population live in households reporting payment of formal *zakat*. This strongly suggests that religious informal payments are dominant in the explicit financing of charitable and other contributions. On the other hand, formal tax payments have low coverage: just 4.6% of payments into the local savings and loans ‘committees’, and as little as 6.7% for property tax. Charges for licences and excise duties have a combined higher incidence at over 17.9% of all households, while fees for certificates of marriage and birth and other civil registrations affect 3.9% of households. Licence charges for transportation (cars, motorcycles, etc.) are also seen to impact around 3.1% of households. It is important to remind readers that we do not observe payment of income tax or contributions to social and health insurance, a point we return to later in the paper.

Tables 2 and 3 give the most granular profile of incidence based on every reported transaction. Table 4 gives summary data by these types of transfers for those who receive or make payment for *any* particular transfer, tax or payment.

Table 4 Taxes and transfers: aggregate coverage by formality and religious status

Transfers received		
	Percentage of population	Average nominal value per month
Non-religious		
Informal		
Those households that receive any informal non-religious transfer	60.2%	8,530
Formal		
Those households that receive any formal non-religious transfer	13.9%	9,901
Religious		
Informal		
Those households that receive any informal religious transfer	26.4%	898
Formal		
Those households that receive any formal religious transfer	0.1%	17,477

Taxes and transfers paid out		
	Percentage of population	Nominal amount per payee (per month)
Non-religious		
Informal		
Those households that pay any informal non-religious transfer	5.8%	7,942
Formal		
Those households that pay any formal non-religious tax	10.2%	720
Religious		
Informal		
Those households that pay any informal religious transfer	81.8%	713
Formal		
Those households that pay any formal religious tax	0.5%	1,612

Source: Authors' calculations using data from PBS (2019)

Table 4 shows that informal taxes and transfers far outweigh their formal counterparts. Informal 'non-religious' transfers are received by over 60% of the population and a further 26% receive informal religious transfers. On the other hand, formal transfers are received by just 14% and 0.1% from non-religious and religious origins respectively. When it comes to taxes and spending on transfers, there is a clear majority for religious informal payments (82% of the population) but just under 6% for informal non-religious transfers. There is clear evidence that reporting the status of informal transfers and expenditures lacks consistency in the attribution of their religious status – far more people report paying than receiving. The coverage of 60% of the population by 'non-religious' informal transfers as against the 82% who say that they pay them needs further explanation. It is probable that the PSLM survey records payment and receipt inconsistently across male and female questionnaire instruments and across transfer payments and consumption-related transfers. We have already outlined that religious and non-religious forms of payment are partly aggregated, and the overall problem of distinctly and accurately accounting for 'religious' status of payments is greater than a distinction between formal (state-run or mediated) and informal.

When it comes to formal taxation, Table 4 shows that 10.2% of the population live in households that pay formal taxes, while just 0.5% pay formal religious taxes. The comparison of beneficiaries to taxpayers for formal taxes and transfers is thus 10:2.

The problem of interpretation and the strong uncertainty around the balance of financial flows between households lead us to try to verify and reconcile the survey's findings against national accounts and financial and budget data, before considering their distributional incidence and redistributive effects.

Verification and reconciliation

The data from population-weighted, representative household surveys should, in principle, match what is seen in national-level accounts of taxes and transfers. However, this depends on aggregate national financial data that can be matched to the household population. There are several underlying reasons as to why an exact match on expenditures and revenues will not occur. We discuss these below as we consider the verification and reconciliation of the various types of taxes and transfers.

Formal transfers

Formal transfers from the BISP can be reconciled with programme-level data (MoF, 2020: Table 15.3), suggesting that the PSLM 2018-19 underreports receipt of BISP, both in the size of the programme caseload (2.49 million against 5.78 million in official data) and in the overall level of spending (just PKR 42.7 billion against PKR 108.6 billion).¹ Formal transfers from the EOBI of old age and survivors' pensions, invalidity pensions and old age grants are captured alongside pensions and benefits from other schemes, including government pensions and private employers' pensions. The EOBI schemes only cover those on low wages (around the minimum wage). This means that any reconciliation of survey and national-level data on pensions is impossible. For example, we see more than two million recipients of pension benefits from the survey compared to just 402,000 recipients in official EOBI data (MoF, 2020: Table 15.8) and a total spend that is over 10 times that recorded by EOBI (*ibid*). The survey is obviously capturing the government and private pensions alongside the formal EOBI scheme.

Formal taxes and transfers through *zakat* in the survey are not reconcilable with official data. There is no distinction between payments to households and payments to institutions from *zakat* funds in available official data and no distinction between individual and corporate or institutional payments into those funds (MoF, 2020).

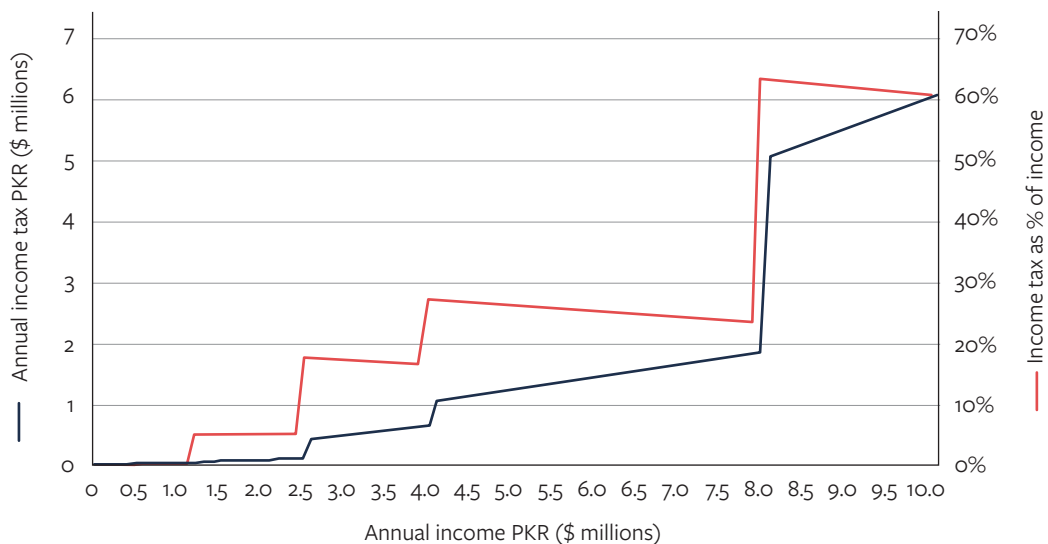
Formal taxes

One of the main constraints on a full fiscal incidence analysis for Pakistan using the PSLM 2018-19 is the absence of any data on payments made for income tax and EOBI contributions. This will

1 There are multiple reasons underlying differences between weighted survey totals and programme-based summary data. First, areas of Pakistan such as Azad Jammu, Kashmir and Gilgit Baltistan are not part of the PSLM survey, whereas BISP does cover these areas. Second, BISP is a rural-dominated programme and coverage reflects the National Socio-Economic Registry 2010-2011 data, whereas PSLM is based on the contemporary 2018-19 population. Therefore, population dynamics, particularly rural-to-urban migration, will have changed over this period, making true representation or matching impossible.

affect the calculation of overall fiscal incidence, especially in the comparison of formal versus informal taxation, and in the assessment of the impact on redistribution. We can assess the scale of these missing fiscal revenues from national accounts. Individual income tax revenue for 2018-19 is difficult to ascertain from the published Federal Bureau of Revenue statistics, but income tax on individual salaries totalled PKR 133.4 billion (MoF, 2020). The overall income tax regime is reasonably progressive in design, with those earning less than PKR 400,000 per year paying no tax, and then steepening tax rates for earnings over this level. Figure 2 shows the design of the income tax bands and tax rates and gives the overall effective tax rates. But to assess actual tax incidence and discuss what we do not observe in the survey, it is also important to consider structural weaknesses in tax structure and administration: ‘Pakistan’s tax structure is characterized by the narrow tax base, massive tax evasion, a large number of concessions and exemptions, regressive tax regime, reliance on indirect taxes and tax administration challenges’ (MoF, 2020, p.73). We do not attempt to model tax incidence without data on the tax base and evasion.

Figure 2 Income tax



EOBI employee contributions are paid at a flat rate of 1% of the minimum wage (PKR 130 per month), but we are unable to identify payees as, like income tax, these contributions are taken from wages at source and earnings are thus reported net of contributions and income tax in the survey.

Informal transfers

There is no identification of informal transfers within Pakistan in either the national accounts or in other formal financial records. Only one source is formally reported: the inflows of international remittances (informal transfers from outside Pakistan) by the State Bank of Pakistan. These data on international remittance flows can be matched to the timing of the survey (August 2018 to June 2019) with a total of \$18.4 billion recorded by the State Bank of Pakistan for remittances made through Exchange Records, Exchange Companies and Post Offices (SBoP, 2021). There will be remittance flows through other agencies, in particular Hawala, that will not form part of these

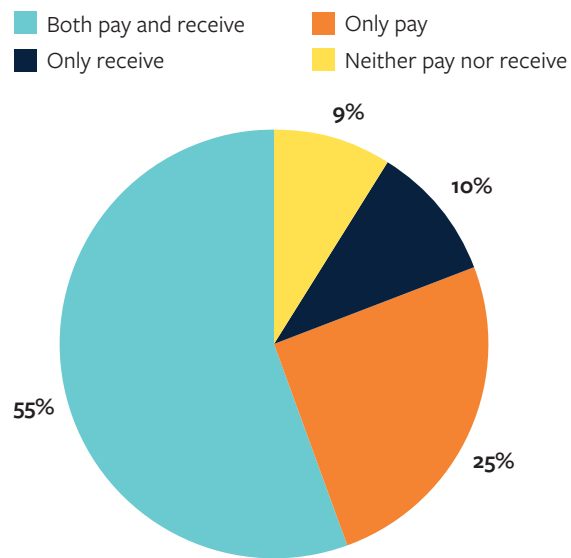
totals. The population-weighted total seen in PSLM 2018-19 is equal to \$4.6 billion² – a large under-representation. Hawala transfers outside of formal bank-based transfers may be one reason for the differences, but may also be part of a much wider non-response bias and under-reporting by higher income households. An additional reason is that these remittances may be paid to people who do not live in households – the basis for the PSLM survey. Payments may be received by institutions or charities, or to those living in dwellings not covered by the survey, such as the armed forces living in military barracks and populations living in informal settlements and refugee camps. The 2017 census found that 1.8% of the Pakistani population lived outside of households (of whom just 0.2%, or 38,415 people, were homeless).³

While we are unable to verify the extent of, and totals for, informal inter-household transfers within Pakistan to any national accounts, we can total up what is paid and what is received by households in the survey and compare the overall totals. We see a far higher total of inter-household transfers received (PKR 68.1 million) than reported paid out (PKR 30.5 million). Just 27% of what is reported as received is paid out as inter-household transfers. This may result from response error accentuated by the fact that transfers identified as direct to household consumption are in the women's questionnaire, while cash and other transfers received and paid are identified in the men's questionnaire. Otherwise, differences will arise due to the nature of the household and non-household populations in Pakistan: many payees of informal transfers may not live in households (the members of the armed forces living in barracks, etc. may be highly represented) and therefore may not be represented in the survey.

Figure 3 gives a clearer picture on the status of inter-household transfers that are observed in the PSLM survey by showing the percentage of all households that pay and receive transfers and by identifying those that both pay and receive. Inter-household transfers are ubiquitous: 91% of all households either pay or receive or do both. Indeed, the majority of households (55%) both pay and receive, while 25% only pay out and just 10% receive without paying out.

2 An average daily exchange rate over the period was PKR 137 to \$1. https://www.exchangerates.org.uk/USD-PKR-30_06_2019-exchange-rate-history.html

3 https://www.pbs.gov.pk/sites/default/files//population_census/census_2017_tables/pakistan/Table27n.pdf

Figure 3 Donor and receiving households for inter-household transfers in Pakistan

Source: Authors' using data from PBS (2019)

The fact that the majority of households both pay and receive inter-household transfers raises the issue of how far these households are net donors or recipients. Of the 55% of households that participate in inter-household transfers, the majority (70%) are net recipients (they receive more in transfers than they pay out). The remaining 30% pay out more (29%) or the same as what they receive.

3 Distributional incidence of taxes and transfers

Income definitions

We use income as the primary measure of household monetary welfare for incidence of taxes and transfers. This allows a clear arithmetic approach to summing the components of income from original sources before transfers are included, then adding the amounts for transfers and deducting amounts for taxes and expenditures. We do not have to make any assumptions about how income elasticities relate to consequent consumption. This is important as taxes and expenditures on transfers are not consumption-related expenditures in most definitions of household consumption (Deaton and Zaidi, 2001). This approach also allows us to clearly establish the definitions of income outlined in Figure 1:

- Original income (before transfers – both formal and informal)
- Gross income (after transfers – both informal and informal)
- Net disposable income (after taxes and expenditures on transfers are deducted from gross income)

However, income is a very noisy variable with under-reporting at the bottom and upper tails (Ravallion, 2016). We also make adjustments to business and agricultural sources of income that are reported as negative and set them to zero as a minimum value. We sum all individual-level incomes in each household to a total household income and then make it equivalent to household size using a simple per capita approach. Note that values reported earlier in Tables 2, 3 and 4 were unadjusted nominal values and not adjusted for household size. We also find outliers, especially when computing net disposable income, as there are high values that carry across from taxes and transfers that probably represent one-off capital transfers rather than normal income flows. To remove these large values and to remedy the effect of outliers in distributional and inequality analysis, we trim the dataset to remove the top and bottom 1% of observations for net disposable income.

Table 5 shows the resulting per capita income values for each of the three definitions of household income.

Table 5 Summary per capita income per month (PKR)

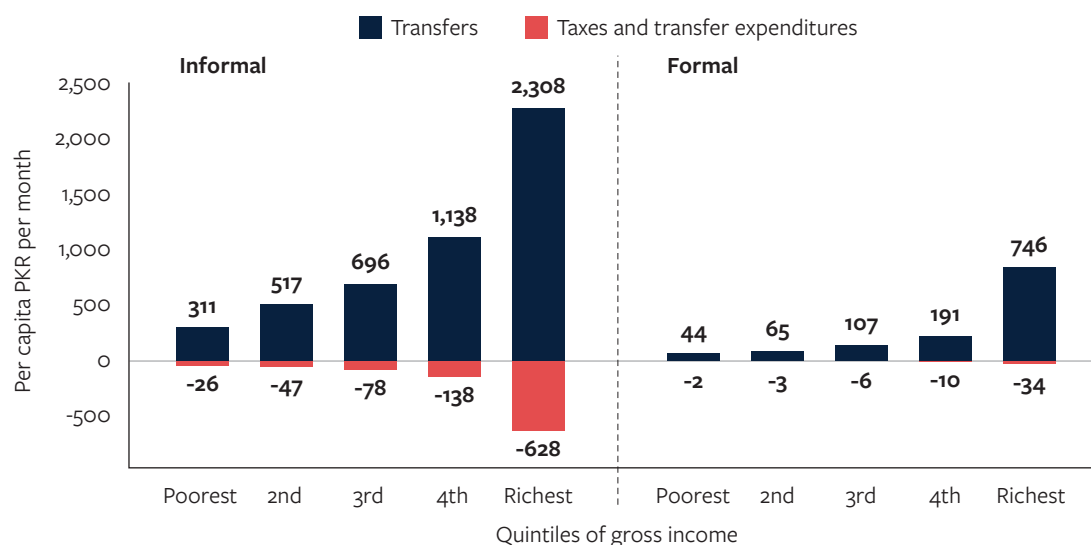
(n= 24,313)	Mean	Median	Std deviation
Original income	5,875.3	4,583.3	4,928.17
Gross income	7,172.5	5,547.9	5,396.34
Net disposable income	6,962.0	5,455.3	5,044.17

Source: Authors' using data from PBS (2019)

Formal and informal taxes and transfers

How do informal forms of transfers, together with informal taxes and spending on informal transfers, compare to their formal counterparts? When we consider the national totals for what is paid in formal and informal transfers, we see that 75.6% is informal. Similarly, for taxes and spending on transfers, 94.8% is informal. The share for the formal sector is thus very low in both absolute and relative terms: just 24% of transfers and 6% of taxes and spending on transfers. The very different scale of informal versus formal sectors is apparent in Figure 4, which shows the nominal mean values of transfers and of taxes and transfer expenditures separately by quintile for informal (left-hand graph) and formal (right-hand graph) sectors. The per capita value of informal transfers rises from PKR 311 per month for the poorest quintile to PKR 2,308 for the richest quintile, while spending on informal taxes and transfers rises from PKR 26 to PKR 628 per month for the poorest and richest quintiles respectively. The mean values for formal transfers are far lower by comparison. The per capita value of PKR 44 per month for the poorest rises to PKR 746 for the richest, while formal taxes are just PKR 2 for the poorest compared to PKR 34 for the richest. It must be noted that income tax is not being captured for the higher-income households as it is unobserved in the survey. EOB contributions for low-waged workers are also not observed.

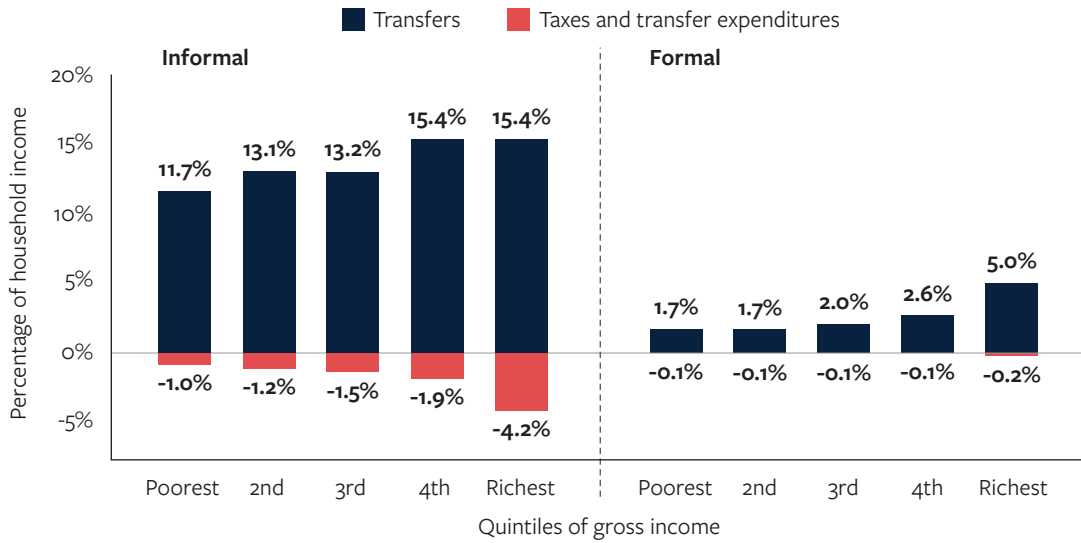
Figure 4 Quintile incidence of informal and formal taxes and transfers



Source: Authors' using data from PBS (2019)

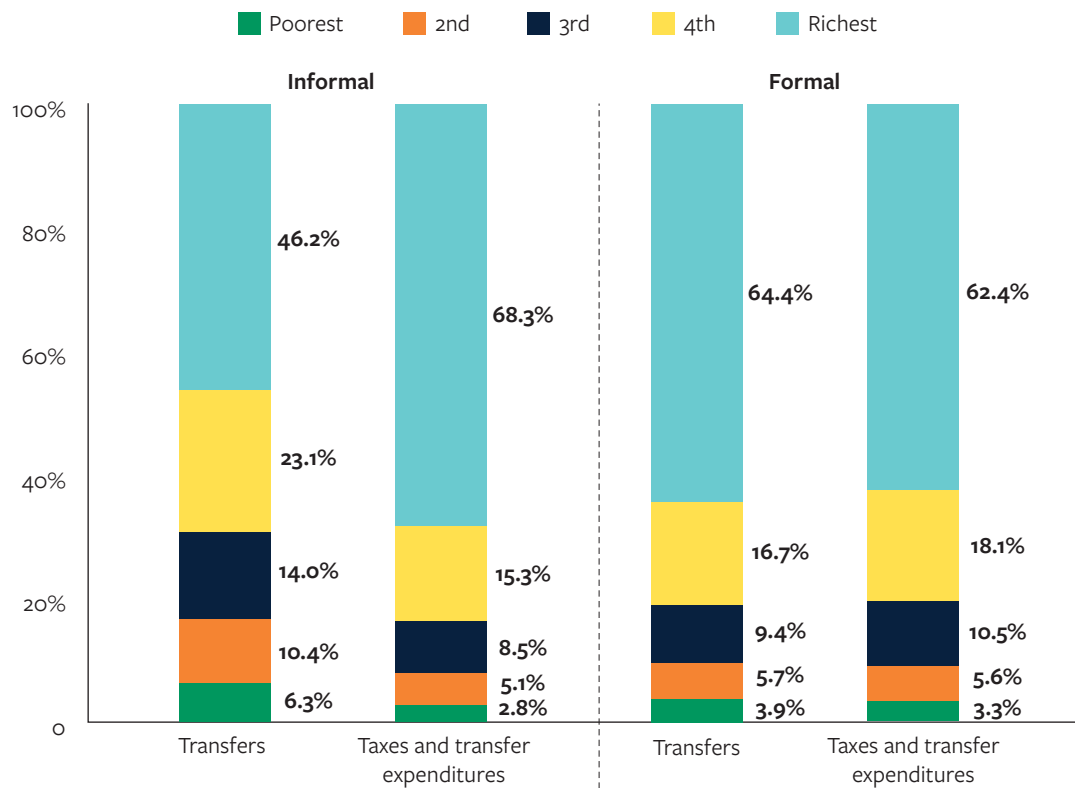
Figure 5 shows the same profiles from Figure 4 as proportions of gross household income. These show that informal transfers range on average from 11.7% of income for the poorest to 15.4% for the richest households, and that informal taxes and spending on transfers range from 1% for the poorest to 4.2% for households in the richest quintile. Formal transfers are much lower – just 1.7% on average for the poorest quintile and 5% for the richest – while formal taxes are very small indeed as proportions of income – between 0.1% and 0.2% across the distribution.

Figure 5 Formal and informal taxes and transfers as a percentage of gross household income



Source: Authors' cusing data from PBS (2019)

In Figure 6, we consider the shares of total taxes and transfers across these very different scales of values for informal and formal sectors. The informal sector shows that transfers are regressive, with 46.2% of total informal transfers being received by the richest income quintile. This share monotonically decreases as quintiles become poorer, with the poorest quintile receiving just 6.3% of total informal transfers. Informal expenditure on taxes and transfers is progressive overall, with 68.3% of total expenditure being made by the richest quintile. This share decreases monotonically over the distribution with the poorest quintile paying just 2.8% of the total expenditure on informal taxes and transfers. The formal sector has similar overall patterns on incidence: transfers are regressive – more so than informal transfers – with 64.4% going to the richest quintile and just 3.9% to the poorest. Meanwhile, taxes are progressive, but less progressive than informal taxes and expenditures: 62.4% are paid by the richest and 3.3% by the poorest quintile.

Figure 6 Tax and transfer incidence by formal or informal status

Source: Authors' using data from PBS (2019)

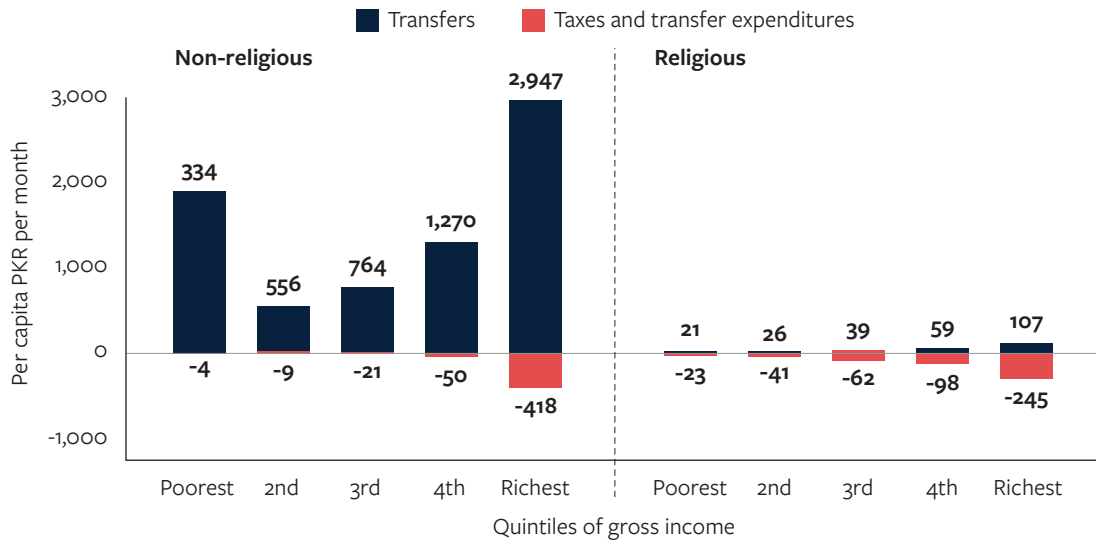
Religious taxes and transfers

We repeat the analysis shown in Figures 4 to 6 but distinguish between religious and non-religious taxes and transfers. We repeat the caveats made earlier: we are unable to perfectly distinguish informal expenditures on transfers on the basis of their religious status as the survey conflates *sadaqah* expenditures with payments of alimony. To reflect the higher incidence of *sadaqah*, we have included these 'mixed' expenditures as religious (Khan and Arif, 2016), but this will overstate their religious nature by an unknown level. Similarly, we believe that the survey may well collect transfers in kind in the form of food and other gifts and transfers to household consumption but not give a religious attribution to them – thus potentially undervaluing religious transfers overall.

With those caveats in mind, we see an overall difference in scale between religious and 'secular' sectors. Religious transfers total under 4% of all transfers, but 36.9% of all taxes and transfer expenditure. Figure 7 shows this difference in scale in the nominal per capita average transfers, taxes and transfer expenditures by quintiles of household gross income. Non-religious transfers are on average PKR 334 per capita per month for the poorest quintile, monotonically in value to PKR 2,947 per month for the richest households. Non-religious taxes and expenditures rise from PKR 4 per capita per month for the poorest, rising to PKR 418 per month for the richest quintile. Religious transfers are far lower in value but rise across the distribution as income rises:

PKR 21 per capita per month for the poorest rising to PKR 107 for the richest. Religious taxes and expenditures on transfers are higher than transfer values for all quintiles, ranging from PKR 23 per capita per month for the poorest quintile to PKR 245 for the richest.

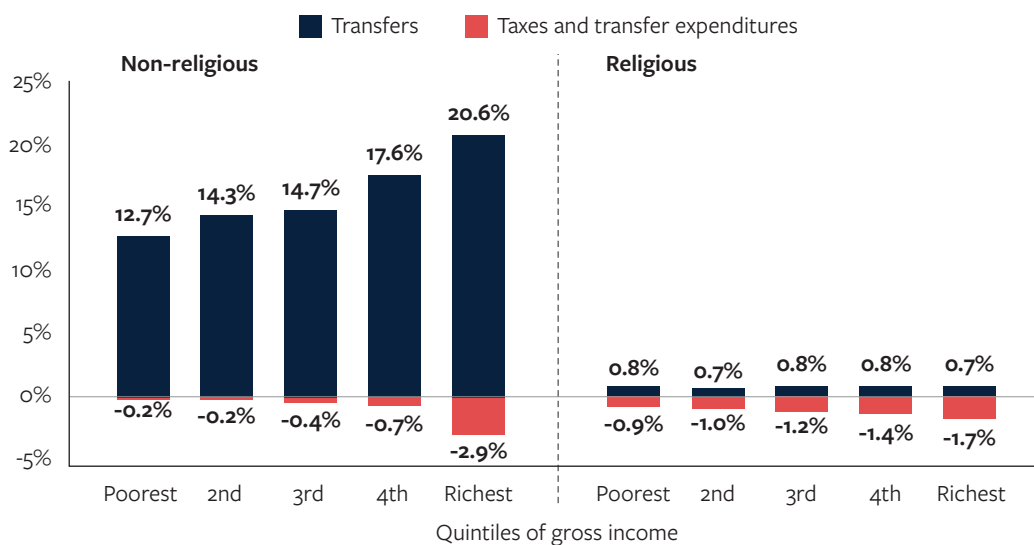
Figure 7 Per capita value of religious and non-religious taxes and transfers by quintile



Source: Authors' using data from PBS (2019)

Figure 8 shows the data from Figure 7 expressed as a proportion of household gross income and confirms that non-religious transfers represent much higher proportions of income across the distribution as income rises: they are 12.7% of gross income for the poorest quintile, rising to 20.6% for the richest. Non-religious taxes and expenditure on transfers rise from 0.2% of income for the poorest to 2.9% for richest quintiles. Religious transfers are much flatter overall and constitute a lower proportion of income (between 0.7% and 0.8% of income across quintiles), while religious taxes and expenditures on transfer remain higher proportions of income than transfers and rise as income grows, from an average of 0.9% of the poorest quintile to 1.7% of the richest quintile's income.

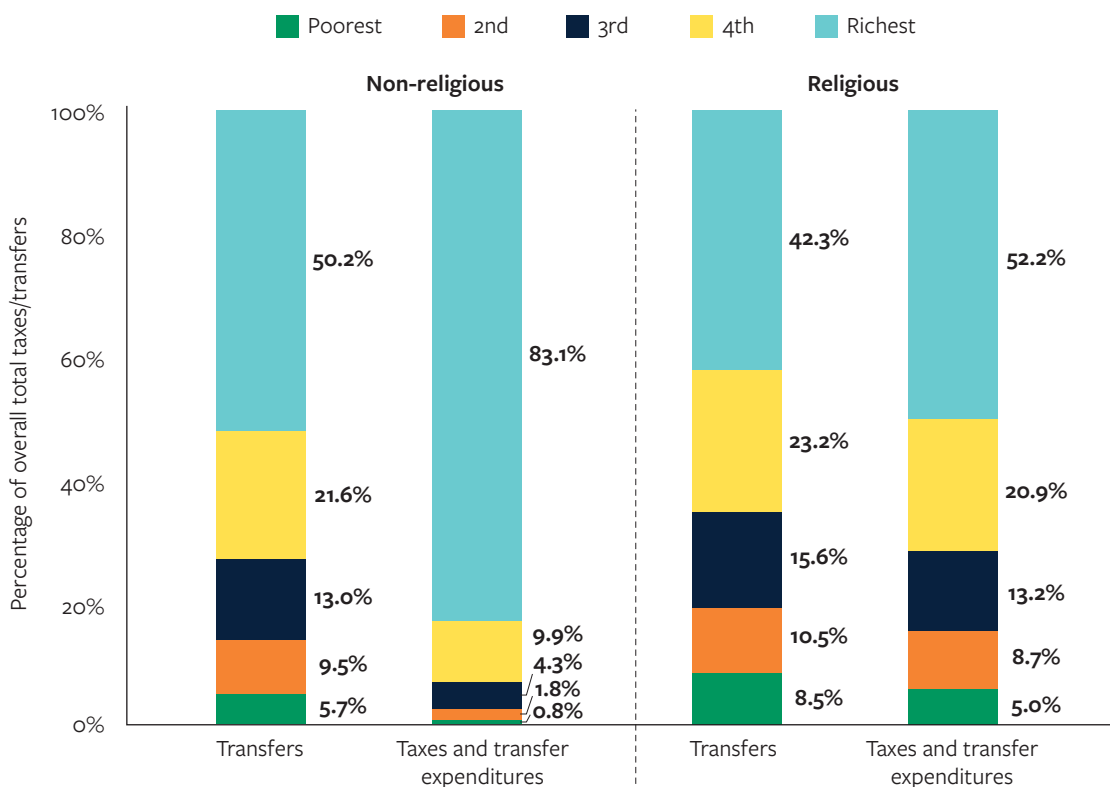
Figure 8 Percentage of household income for religious and non-religious taxes and transfers by quintile



Source: Authors' using data from PBS (2019)

Figure 9 shows the benefit and tax/expenditure incidence: the shares of total transfers and expenditures by quintile according to their religious status. Non-religious transfers are regressive, with 50.2% of all transfer spending going to the richest quintile, while the proportion decreases monotonically as income falls so that just 5.7% of all non-religious transfer spending goes to the poorest quintile. Non-religious tax and transfer expenditure is progressive: over 80% of all payments are seen to be made by the richest quintile and under 1% by the poorest. Religious transfers are also regressive, but less so than non-religious transfers, with 42.3% received by the richest quintile and the proportion falling monotonically to 8.5% among the poorest. However, religious taxes and transfer expenditure is less progressive than non-religious counterparts, with 52.2% of total spending being paid by the richest quintile. This falls monotonically across the distribution – income is just 5% of spending among the poorest quintile.

Figure 9 Tax and transfer incidence by religious status

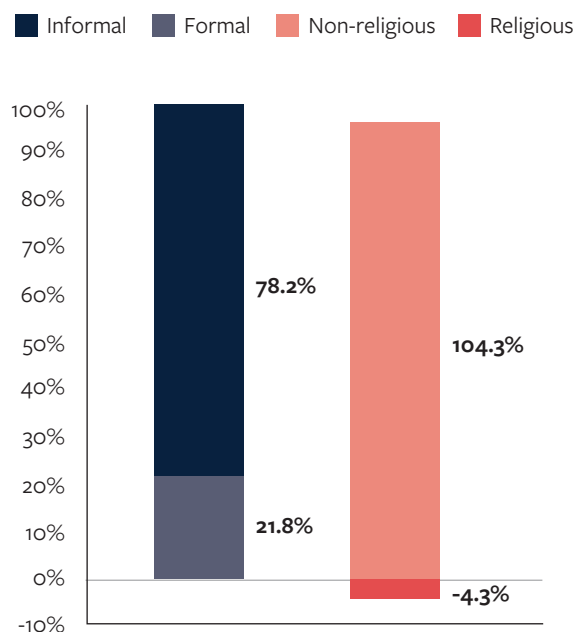


Source: Authors' using data from PBS (2019)

Our earlier discussion on uncertainties in the definition and attribution of religious status to income and expenditures from the survey shows that there is little clarity around how some undefined and group-defined transfers and expenditures fit into a religious analysis. To understand the sensitivity of our assumptions, we conducted a further analysis that split fiscal incidence into three rather than two forms: religious, non-religious and 'uncertain'. This sensitivity analysis is shown in Appendix 1, but its findings do not alter the basic underlying patterns that we see in Figures 7 to 9.

Redistribution

What are the redistributive impacts of taxes and transfers? The overall redistributive impact of taxes and transfers is the difference between disposable and original income: an overall combined and positive *net transfer* that is 18.4% of the average original income. Figure 10 shows how the composition of that 18.4% net transfer is broken down by formal and informal and by religious and non-religious status. Over three-quarters of redistribution from taxes and transfers is conducted through informal mechanisms. Non-religious sources are composed of -4.3% religious taxes, while the remainder (104% to sum to 100%) comes from non-religious sources.

Figure 10 Aggregate net income redistribution by status

Source: Authors' using data from PBS (2019)

Table 6 confirms the net effect on income position that these taxes and transfers produce. There is considerable redistribution when considered as changes across quintile positions between original and net disposable incomes. Static, unchanging quintile positions are shown in dark blue cells across the diagonal of the table: 54% of those in the original poorest quintile, 45% of those in the second poorest, 48% in the third quintile, 58% in the fourth quintile and 79% in the richest quintile remain unchanged. The impact of taxes and transfers on the poorest quintile is to lift over 14% into the second poorest, 12% into the third, 11% into the fourth and 9% into the richest quintile. An interpretation of these changes must be done with care as pensions may well have an effect on elderly populations who have very low original incomes and rely heavily on pensions. This is an outcome of considering redistribution from a purely cross-sectional rather than a lifetime perspective. This poorest quintile of original income can only remain or rise, while the impact of 'moving down' as well as rising in quintile position is clearer from the second to fourth quintiles: the overall net change is that 39% from the second and third quintiles and 34% from the fourth quintile move down to the quintile position below (shown in the pink cells). This change represents the largest proportion of change in position for these quintiles of original income. Finally, when we consider the richest original income quintile, we see that 20.5% fall into the fourth quintile.

These comparisons are all of relative position. That we see large changes at the margins of quintile position reflects the fact that the absolute changes in income may be quite small. Quintiles will be compressed as the overall distribution will be skewed with a long tail of high incomes. Resulting changes between quintile position may be within small ranges of absolute income values for those in the middle and poorest quintiles (and those at the bottom of the richest quintile).

Table 6 Change in quintile positions between original and disposable income

Quintiles of net disposable income							
	%	Poorest	Second	Third	Fourth	Richest	Total original income
Quintiles of original income	Poorest	53.6	14.3	12.2	11.4	8.5	100
	Second	39.4	45.2	7.6	4.6	3.2	100
	Third	0.2	39.3	47.7	8.4	4.5	100
	Fourth	0.03	0.2	34.0	57.5	8.3	100
	Richest	0.02	0	0.11	20.5	79.3	100

Source: Authors' using data from PBS (2019)

Our earlier profiling of incidence by quintile gives a strong indication of how these net effects are driven by differences in quintile incidence of transfers and the overall share of taxes and transfers that are attributable to quintiles of household income.

The overall effects on income inequality are shown in Table 7 by underlying income definitions. We use the Gini Coefficient and the Kakwani Index as our primary inequality measures. Results using Theil and other indices do not alter the interpretation of how inequality changes by income definition. Original income is the most unequal (Gini score of 0.395) while the addition of transfers reduces inequality in the resulting gross income (Gini score declines to 0.353). Net disposable income, from the effect of taxes and the expenditure on transfers to other households, further reduces inequality (Gini score of 0.346). The Kakwani Index shows the same three sequential inequality impacts from original to gross to net disposable income.

Table 7 Income inequality by income definition

	Original income	Gross income	Net disposable income
Gini Coefficient	0.395	0.353	0.346
Kakwani Index	0.137	0.110	0.105

Source: Authors' using data from PBS (2019)

Inequality

How much of this resulting inequality in net disposable income is attributable to the two forms of taxes and transfers that drive our analysis? We use the Shorrocks approach to decompose inequality by income factor (Shorrocks, 1982; Cowell and Jenkins, 1995) and to identify the proportionate contribution of informal and religious taxes and transfers.

Table 8 clearly shows that informal taxes and transfers account for 22% of inequality, while their formal counterparts play a much lower role (8%). The residual inequality from original income remains the largest source of inequality. The same residual level of inequality will obviously be seen when we decompose by religious and non-religious taxes and transfers, but the apportionment is more clearly skewed towards non-religious taxes and transfers (32%) as opposed to a small negative effect of inequality reduction from net levels of religious taxation at 0.6% overall.

Table 8 Decomposition of income inequality by form of taxes and transfers

Informal and formal taxes and transfers		Religious and non-religious taxes and transfers	
Residual	69.71	Residual	69.71
Formal	8.04	Religious	-0.62
Informal	22.26	Non-religious	30.91
All	100	All	100

Source: Authors' using data from PBS (2019)

Discussion and conclusions

Like other lower-middle-income countries (Evans, 2022), Pakistan has a large incidence of informal transfers – mostly between private households but also made to informal organisations such as ‘committee’-based savings and loans. This paper demonstrates how to include these transfers in a fiscal incidence analysis and how to consider the religious basis for informal and formal taxes and transfers from *zakat* and other Islamic obligations.

We base our profiling of fiscal incidence and Islamic taxes and transfers on a secondary analysis of microdata from the PSLM/HIES 2018-19 (PBS, 2019). This leads to our second reflection on survey and data issues. The data required to profile the relevant transfers, taxes and expenditures that are needed for a fiscal incidence analysis make considerable demands on survey design and implementation. Common to many surveys in middle-income countries, we see that income from wages and earnings are recorded as ‘net’ – that is, net of deductions by payroll systems for income tax and social security contributions. The problem with this approach is that it makes the identification of ‘gross’ or pre-tax income difficult – especially in systems, like Pakistan, where tax avoidance and evasion are widespread. The recorded income of tax-paying and tax-avoiding earners are indistinguishable in the first instance, which makes estimation of actual gross income very complex and dependent on a robust imputation of the actual tax-paying population from tax administrative data or other sources. Such an exercise was beyond our resources and our approach is clearly caveated to reflect the absence of ‘gross’ pre-tax earned income. We also see that survey coverage does not match that of formal transfer registers, making any estimation of ‘grossed up’ spending from the survey liable to significant error. The recording of informal transfers and their payments is also problematic. Some transfers are treated as income transfers and are covered in the male questionnaire, while other transfers that are treated as in-kind consumption ‘gifts’ are covered in the female questionnaire – making a consistent classification of transfers very difficult. This is particularly true for religious transfers where specific and itemised types of transfers are only asked of men. One further data issue meant a precise allocation of transfers based on religious practices was not possible, namely, the survey’s use of a variable that captured transfers and expenditures that mixed religious and non-religious practices (covering both *sadaqah* and alimony, for example). Following earlier precedents (Khan and Arif, 2016) we assumed that these payments were dominated by *sadaqah*. We undertook a verification and sensitivity analysis to consider these data and attribution issues, and incorporate our resulting caveats into our discussion and conclusions.

The findings and conclusions on informal taxes and transfers are clear: they form a clear majority of taxes and transfers compared with public, formal systems. The majority of households in Pakistan receive informal transfers: 60% receive non-religious informal transfers compared to just 14% who receive public formal transfers. Only 6% of households pay out informal non-religious transfers, yet 10% pay formal public taxes of some kind. Informal practice extends to religious taxes and transfers, where a further of households 26% of households receive and 82% make

payments on an informal basis. Just 0.1% report receiving formal religious transfers through state-regulated *zakat* or other funds, and 0.5% report paying formal religious taxes to state-regulated *zakat* funds.

International cash remittances play a large role in such informal transfers. They are received by fewer households than those receiving *cash* transfers from within Pakistan (7.2% compared to 11.5%). If we solely considered informal cash transfers, they would represent 54% of all informal cash transfer income nationally. However, informal in-kind transfers that are made solely within Pakistan go to much higher proportions of households (over 50%), but are lower in value than cash transfers. Consequently, when we total all forms of transfers, international remittances are a substantial minority of total informal transfer income in Pakistan (39%).

Informal remittances *within Pakistan* do not just constitute the majority of all informal transfers; they also represent a large-scale ‘pooling and sharing’ of resources across private households. In total, 94% of households either receive or pay such transfers between households, but 55% of households do both (receive and pay out). Only 10% of households are non-reciprocating transfer recipients and a further 25% pay transfers but do not receive. The finding that the majority of households both pay and receive informal inter-household transfers is important to understanding how such flows occur: are they smoothing over periods of need, smoothing surpluses in home production (for example, my apricot tree is fruiting now and I can give you my surplus for you to reciprocate with your plums from a tree that fruits later in the year) or represent other forms of reciprocation? Policy should recognise these informal risk-sharing and surplus-sharing approaches as important fundamental behaviours. Our findings for Pakistan also replicate what was found in Rwanda, where the majority of households both gave and received inter-household transfers. While these findings from two different countries are nowhere near representative, they do suggest that the literature on, and appreciation of, informal transfers need to be less unilateral in terms of assumptions about receiving households.

It is clear that informality is overestimated due to the absence of data on formal income tax and social security contributions. Since this taxation is levied on those who have formal jobs, it will affect the richer parts of the income distribution. With that caveat in mind, our analysis of the distribution of informal taxes and transfers clearly shows that informal transfers are regressive: the richest quintile receives 7.4 times the value of informal transfers compared to the poorest, representing 15.4% of incomes in the richest quintile compared to 11.7% in the poorest. Overall, 49.6% of total national informal transfer income goes to the richest quintile, while just 5.8% goes to the poorest. Informal expenditures on transfers are progressive but are not sufficient to offset the overall regressive net impact of informal transfers and their payment. The richest quintile pays 4.2% of its income on transfers, while the poorest pays just 1%. This leads to greater progressivity in total national informal expenditures: 68% comes from the richest quintile while just 2.9% comes from the poorest. Formal taxes and taxes are much smaller by comparison – they represent 5%

of the income of richest households and 1.7% of the poorest – but the formal public tax burden is progressive (even without the inclusion of income tax and social security contributions): 62.4% is paid by the richest quintile and just 3.3% is paid by the poorest.

Informal taxes and transfers comprise over three-quarters of all redistribution (the difference between original and disposable incomes) and increase inequality overall. When we consider inequality in disposable incomes, we see that 69.7% is attributable to original pre-transfer and pre-tax income and that 22.3% of inequality results from informal taxes and transfers. Formal taxes and transfers also contribute to inequality but account for just 8%.

Our estimates for the incidence and effects of religious taxes and transfers suggest that much depends on informal transfers and expenditures. The formal systems of state-regulated *zakat* funds and their local implementation are reported as having very low incidence, low transfer values and small impacts on redistribution. Over a quarter of households receive informal transfers of a religious nature (26.4%) but a tiny proportion of 0.1% (statistically not different from zero) reports receiving formal religious transfers through official sources. On the other hand, over four-fifths of households report paying informal religious transfers (81.8%) but just 0.5% report paying ‘formal taxes or contributions’ into state-regulated *zakat* funds or similar official organisations. This means that religious taxes and transfers are dominated by informal payments and income transfers. Religious transfers are much lower in value and largely flat across the distribution (between 0.7% and 0.8% of all quintile incomes) while religious payments and taxes are low but progressive, falling from 1.7% of the incomes of the richest quintile to just 0.9% of the poorest. The differences in scale compared to non-religious taxes and transfers are considerable, but the progressivity of transfers of a religious nature is slightly greater than non-religious. We undertook a sensitivity analysis to ensure that these results were not unduly affected by the attribution of the religious status of ‘mixed or uncertain’ categories. This showed that separating these ‘uncertain religious status’ transfers did not fundamentally alter the overall pattern of incidence and distribution of those taxes and transfers that were unambiguously religious or secular in nature.

When it comes to the effect on redistribution, religious taxes and transfers had a net negative effect on redistribution – totalling -4% of the difference between original and disposable incomes. This was reflected in the inequality effects. Inequality in disposable income was 68% and attributed to inequality in original incomes, but 31% of inequality was attributable to non-religious taxes and transfers, with religious taxes and transfers reducing inequality by a small factor of 0.6%.

Our conclusions are tentative. We have strong recommendations for improving survey data to better identify formal taxes, and religious taxes and transfers especially. In an Islamic country like Pakistan, which has a strong policy commitment to reducing poverty and inequality, it is crucial to be able to attribute public, market and informal sources of income. Improved data will help the MoF and others to plan and report the impacts of policies in economic analyses.

We do, however, repeat our concern that our household-level analysis of income sources needs to be supplemented by a full fiscal analysis of education and health benefits and services to be able to comprehensively understand formal and fiscal redistribution and the effects on inequality in a Muslim country. Much of what is raised through religious payments and taxes may fund such services, and a full CEQ-type fiscal incidence analysis would help develop our preliminary findings into a more conclusive and certain understanding of informal and religious funds and service outputs. What is clear is that ‘informality’ in fiscal incidence dominates, and that the reason for this needs to be better understood. Is it from a distrust in public bodies to act rationally and responsibly due to issues of corruption and elite capture? Does it rely on poor administration and tax collection performance? Or is it a combination of the two?

Our final conclusion is to remind readers that the purpose of this paper is to demonstrate an approach to analysis that can be replicated and expanded by analysts and researchers in the future. Our future peers will hopefully have improved data and access to public expenditure and budget data that can be better used to fill in gaps from surveys. Planning the future of social policy in Pakistan will require a clear understanding of the roles of public, informal and religious spheres in its funding and programme design and delivery.

References

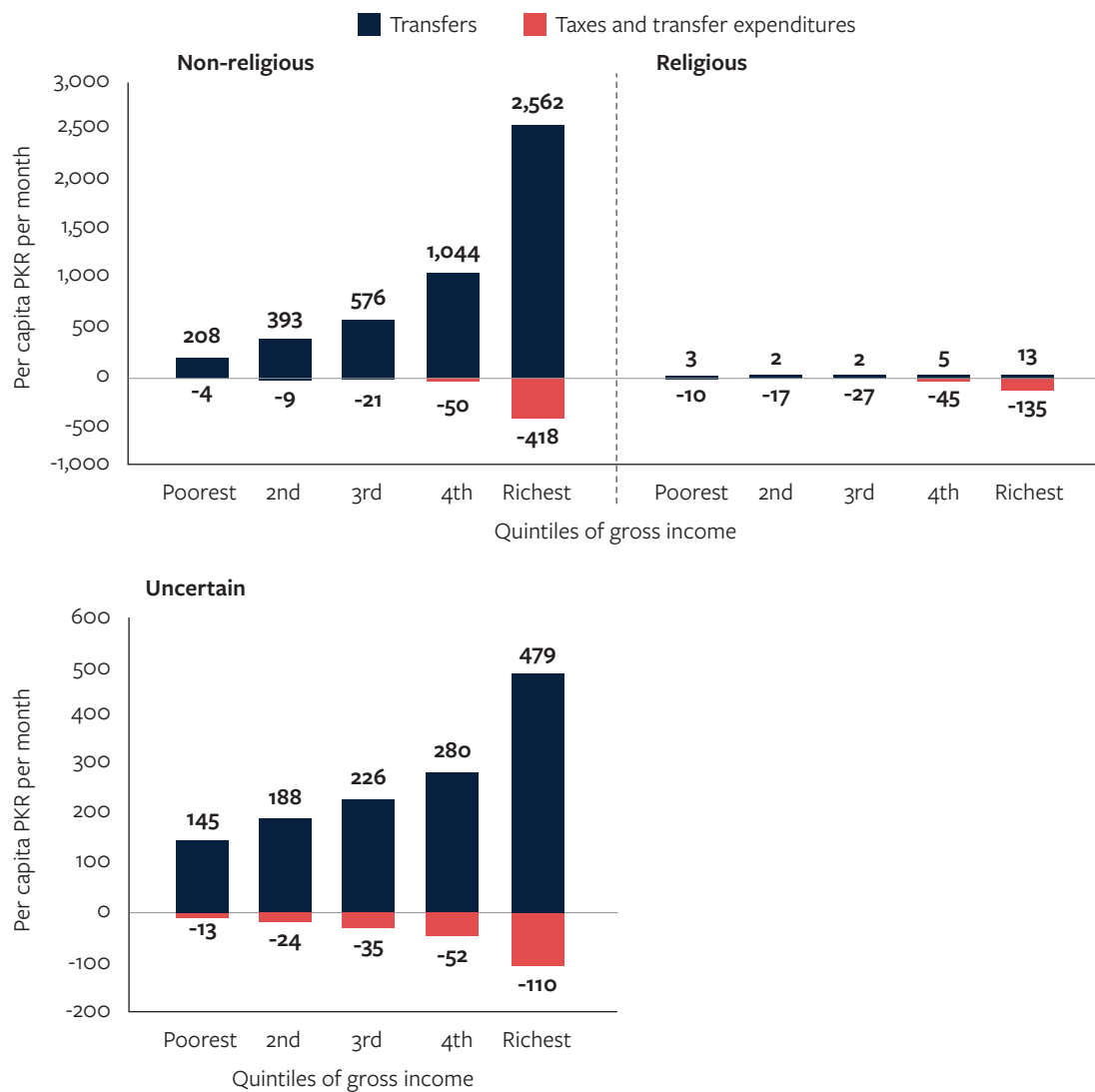
- Christian, L.** (2013) *Informal taxation systems – Zakat and Ushr in Pakistan as example for the relevance of parallel/semi-public dues*, Munich: Munich Personal RePEc Archive (<https://mpra.ub.uni-muenchen.de/51138>).
- Cowell, F. and Jenkins, S.** (1995) 'How much inequality can we explain? A methodology and an application to the USA' *The Economic Journal* 105(429): 421–430.
- Deaton, A. and Zaidi, S.** (2002) *Guidelines for constructing consumption aggregates for welfare analysis* (Vol. 135). World Bank Publications.
- Evans, M.** (2022) *Informal Transfers in Low and Middle-Income Countries*, London: ODI.
- Evans, M., Harkness, S. and Salomon, H.** (2020) *Informal taxes and transfers in sub-Saharan Africa: a review and analysis of incidence in Rwanda*, London: ODI.
- Gallen, M., van den Boogard, V., Javed, U. and Remmal, S.** (2022) *Zakat, tax and the state: Obligation and charity in times of Covid-19*. Brighton: ICTD/IDS, forthcoming.
- Khan, M.J., and Arif, G.** (2016). *Household charity in Pakistan: Magnitude, determinants and its importance for the well-being of society* (No. 2016: 141). Pakistan Institute of Development Economics.
- Lustig, N.** (ed) (2018) *Commitment to Equity Handbook: estimating the impact of fiscal policy on inequality and poverty*. Washington DC: Brookings Institution Press.
- Lustig, N. and Higgins, S.** (2018) <The CEQ assessment: measuring the impact of fiscal policy on inequality and poverty> in N. Lustig (ed.) *Commitment to Equity Handbook: estimating the impact of fiscal policy on inequality and poverty*. Washington DC: Brookings Institution Press.
- Ministry of Finance** (MOF) (2020) *Economic Survey 2020*, Islamabad: Ministry of Finance.
- Muslim Aid** (2020). Complete Guide to Zakat. Muslim Aid (MA) (<https://muslimaid.storage.googleapis.com/upload/www.muslimaid.org/what-we-do/religious-dues/ZakatGuide%20Muslim%20Aid%20Ramadan.pdf>).
- Olken, B.A. and Singhal, M.** (2011) 'Informal taxation' *American Economic Journal: Applied Economics* 3: 1–28 (<http://doi.org/10.1257/app.3.4.1>).
- Pakistan Centre for Philanthropy** (2021) *Socio-economic and Demographic Factors Affecting Individual Monetary Giving in Pakistan*: Islamabad: PCP.
- PBS – Pakistan Bureau of Statistics** (2019) *Pakistan Social & Living Standards Measurement Survey: PSLM/HIES 2018-19* (Islamabad: Government of Pakistan).
- Pew Research Centre** (2019) *In Western European Countries with Church Taxes, Support for the Tradition Remains Strong*, Washington DC: Pew Research Centre.
- Powell, R.** (2009) 'Zakat: Drawing Insights for Legal Theory and Economic Policy from Islamic Jurisprudence,' *University of Pittsburgh Tax Review* 7: 42–101.
- Ravallion, M.** (2016) *The Economics of Poverty: History, Measurement, and Policy*. Oxford: Oxford University Press.
- Shorrocks, A.** (1982) 'Inequality decomposition by factor components' *Econometrica* 50(1): 193–211.
- Siddiqui, S.R.** (2006) *The concept of limitation in Islamic Law: A comparative study. Zakat and tax with a conclusive study of Hadith*. Beirut: DKI.

State Bank of Pakistan (2021) International Remittances. Islamabad: SBoP.

Van den Boogard, V., Gallen, M. and Javed, U. (2022) *Between God, the people and the state: Situating zakat in modern Muslim-majority states*. Brighton: ICTD/IDS

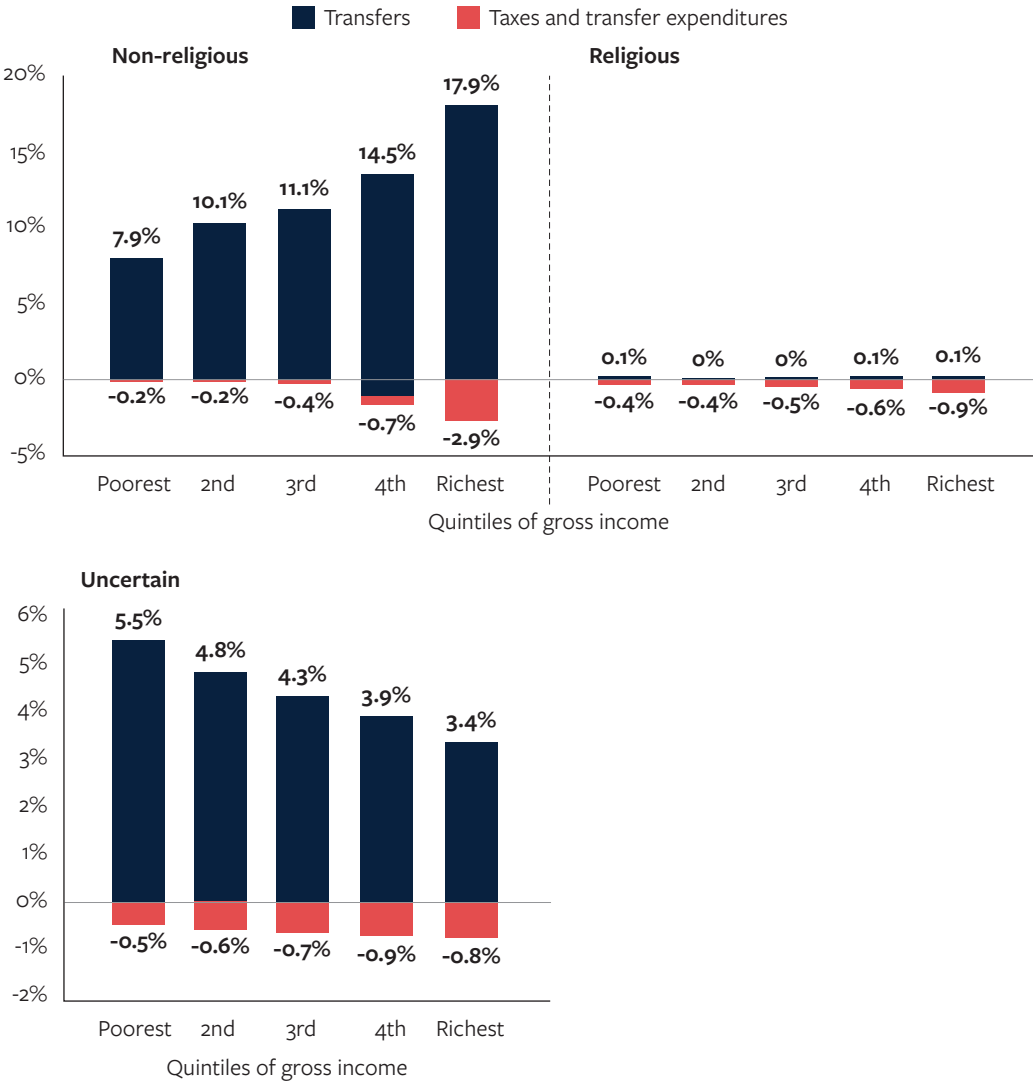
Appendix 1 Sensitivity analysis of ‘religious’ attribution of taxes and transfers

Figure 11 Per capita value of non-religious, religious and uncertain taxes and transfers by quintile



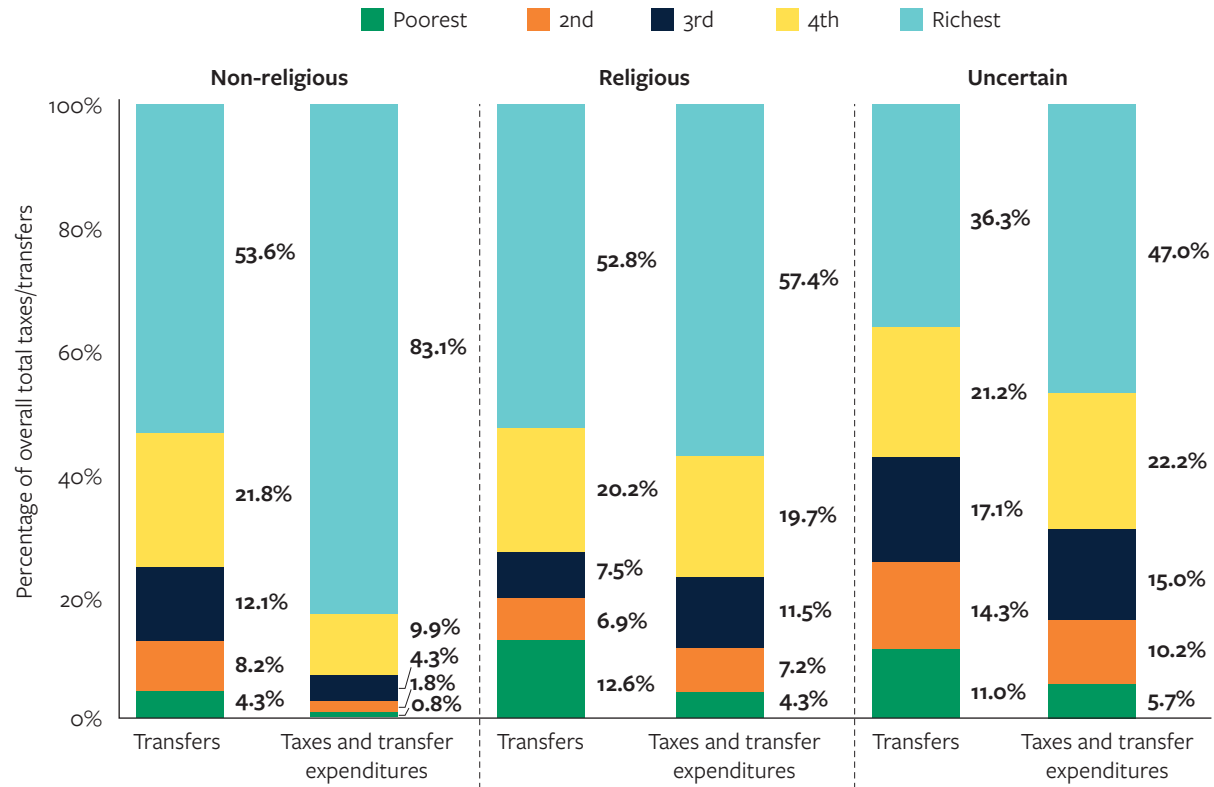
Source: Authors' using data from PBS (2019)

Figure 12 Percentage of household income for non-religious, religious and uncertain taxes and transfers by quintile



Source: Authors' using data from PBS (2019)

Figure 13 Tax and transfer incidence by religious and uncertain status



Source: Authors' using data from PBS (2019)