Building up efficient and fair tax systems – lessons based on administrative tax data

The Uganda Revenue Authority firm panel

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Abstract: This technical note describes the Uganda Revenue Authority (URA) firm panel, which is constructed from administrative corporate income tax (CIT) returns and firm registration data for the financial years 2013/14–2019/20. The panel dataset contains over 300 variables, which allow the user to study, for example, firms' balance sheets, debt structure, capital investments, and tax liabilities. This represents the richest data source available for studying the behaviour of Ugandan firms. It is structured so as to follow the order of the URA's Non-Individual Income Tax Return form, and this note allows the user to trace variables to their location in the form. This note describes the variable content of the data, the process of constructing the dataset and documents how various challenges were tackled, including the anonymization and cleaning process. We present some summary statistics of firms captured within the dataset.

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1   Introduction

The Uganda Revenue Authority (URA) firm panel is a panel dataset consisting of the Corporate Income Tax (CIT) returns of all Ugandan (incorporated) firms over the years 2013/14 to 2019/20.[1] The dataset is a part of an ongoing collaboration between UNU-WIDER and URA, which was initiated in late 2018 and has since included both research and capacity-building activities.[2] The aim of the collaboration is to jointly conduct policy-relevant research based on empirical analysis of the URA's administrative tax data. The research outputs are shared to relevant stakeholders including policy makers to support policy dialogue in the country. So far, the research has covered topics such as profit shifting of multinational enterprises, tax compliance of small businesses and behavioural responses to personal income tax reform — see Koivisto et al. (2021), Jouste et al. (2021a, 2021b) respectively. The creation of the panel dataset is part of a mission to establish a secure research lab at URA to support better research-informed policy-making. It was created by merging firms' CIT returns (by definition, the returns represent only those incorporated firms that file returns) with taxpayer register data, which contains information on key firm characteristics. This report explains the process of assembling the data as well as the contents of the panel and description of key components of the data.

The URA firm panel is intended to facilitate an improvement in the nature, and quality, of analysis undertaken on firms' behaviour in Uganda. Whilst a number of studies have previously been undertaken using CIT returns from the URA (see, e.g., Koivisto et al. 2021), the data has not previously been made available to a wider research audience. By using unique, anonymized identifier variables, it is possible to link the CIT returns to other datasets, such as firm-level pay-as-you-earn (PAYE) returns, value-added Tax (VAT) or customs returns. It is envisaged that this will form the basis of a 'secure research lab' at the URA, where users (including both URA staff, policy makers and external researchers) can access numerous datasets in order to carry out research and analysis on the Ugandan tax system.

The use of administrative tax records by government officials and academics to research taxpayer behaviour is commonplace in developed countries (such as Finland, Germany, Sweden, New Zealand), but is relatively less common in low-, or middle-income countries, although it is increasing in popularity. Whilst taxpayer-level data is used internally in revenue authorities or finance ministries in a growing number of jurisdictions, Uganda would be one of only a handful of developing countries to make this data available to a wider audience. In sub-Saharan Africa, to the best of our knowledge, only the South African Revenue Service — National Treasury Panel is comparable in its scope to the present project (see Pieterse et al. 2018).

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[1] The fiscal/financial year in Uganda runs from 1st July to 30th June. The terms financial and fiscal year are used interchangeably in this paper.

[2] Further details on the collaboration are available on UNU-WIDER's website.

Corporate income tax in Uganda is levied at a rate of 30 per cent of taxpayers' chargeable income. Both individuals and non-individuals can file CIT returns.[3] These returns are submitted electronically within six months after the financial year end. All incorporated firms must file CIT returns, although smaller firms — with an annual turnover of UGX150 million (Ugandan shillings) — can pay a presumptive tax, based on their turnover.[4] The present project is concerned with 'non-individual' CIT returns, hereafter 'firms'. Whilst a statutory rate of 30 per cent is high by today's standards in OECD countries (where the average is 23.9 per cent), it does not stand out as being particularly high when compared to a group of regional peers, where the average is 28.3 per cent; Figure 1 illustrates.

Figure 1: Top marginal CIT rates in sub-Saharan Africa 2018
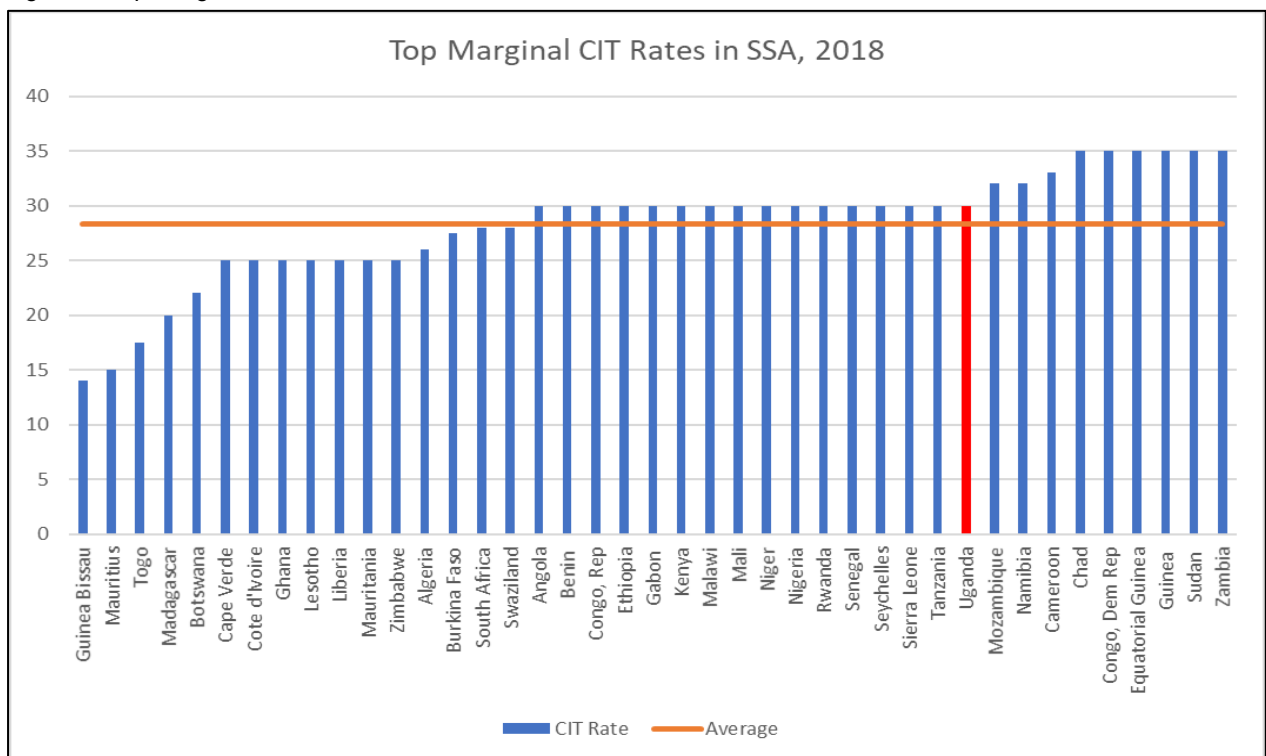
Source: various.

However, Uganda does stand out — compared to its peers — as collecting relatively little revenue from the CIT. Data shows that Uganda collects the lowest amount of CIT (amongst countries for which there is comparable data), as a percentage of GDP, in the region (see Figure 2).

Uganda's medium-term revenue strategy, the Domestic Revenue Mobilisation Strategy, launched in early 2020, calls for marked enhancements in the performance of the corporate income tax as part of a drive to increase tax revenues by a further 0.5 per cent of GDP per year over a 5-year

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[3] Individuals can alternatively choose to file a personal income tax return, if they earn self-employment income.

[4] The rates of presumptive tax range from 0% (annual turnover <UGX10million) to [0.7%*Turnover + UGX360,000] (annual turnover > 80 million shillings, but less than 150 million shillings). Different rates are charged for those firms that do not keep business records.

period.[5] There is, thus, a pressing need to better understand the drivers of the performance of the Ugandan CIT, along with, generally, an improved understanding of firms' tax-paying behaviour. It is hoped that the dataset introduced herein will play an important role in this regard.

Figure 2: CIT (% of GDP) in 30 sub-Saharan countries
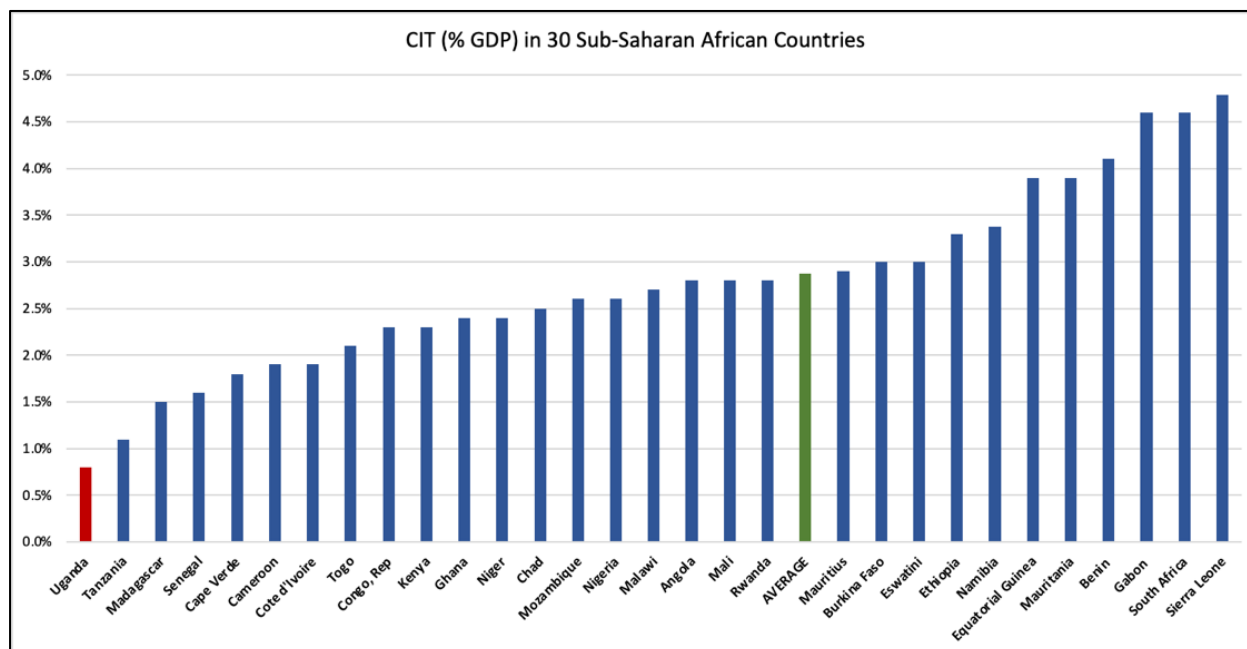
Note: 2016 or 2017 figures shown.

Source: UNU-WIDER (2019) and OECD (2019).

This technical note proceeds as follows. In section 2 we provide an overview of the panel, including details of the construction process and some known limitations. In section 3, we present the variables in the dataset, grouped according to the particular section or schedule of the CIT return from which they are drawn. In section 4 we present some brief summary statistics of firms appearing in the panel.

2   Key elements of the panel

The URA firm panel is constructed from the CIT returns of formal firms in Uganda. It contains 329 variables, and runs from FY2013/14 to FY2019/20. The number of firms per year ranges from around 30,000 to roughly 54,000. The data thus gives a summary of the firms income position within a given year. It includes information on firm characteristics (such as sector, location etc.), in addition to complete information from their tax returns including from the balance sheet and profit and loss accounts, as well as all of the necessary variables to calculate a firms' tax liability. Furthermore, detailed information is included pertaining to firms' capital allowances. The variables are defined and discussed in Section 3 below.

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[5] https://www.finance.go.ug/sites/default/files/Publications/NEW%20DOMESTIC%20REVENUE%20MOBILI SATION%20STRATEGY_FEB%202020_0.pdf

2.1 Construction of the panel

The raw data for the CIT returns were extracted from URA's eHub system and downloaded in CSV format. They were then imported into Stata and merged with information from the taxpayer register, at the anonymized unique identifier / year level. Approximately 62% of firms were matched up with registration information. It was not expected that all firms' returns can be matched with their registration information, as the latter is frequently cleaned, so any firms that might, for example, appear in the CIT returns for earlier years, but have since de-registered or gone out of business, would not appear in the current taxpayer register as extracted in 2021.[6] We investigate this further, below, in Section 4, Table 12.

Anonymization

We created a simple, numerical, anonymous firm identifier variable that is grouped according to the firm's taxpayer identification number (TIN). The key for un-anonymising the data, should it be required, is stored on secure terminals at URA. If, for example, the CIT panel were to be merged with data from PAYE or VAT returns, the key would allow for such to occur.

Assigning a Year variable

CIT returns are submitted annually by all entities resident in Uganda for tax purposes. These entities might constitute privately owned companies, NGOs, public-sector bodies, trusts or others. All returns must normally be submitted online within six months from the end of a financial year which, in Uganda, runs from 1 July to 30 June. This is referred to as the 'normal' year of income; for firms whose financial year is not from 1st July to 30th June, they follow a 'substituted' year of income. One of the key challenges when constructing a panel with data of this nature is the manner in which firms are allocated to a certain 'calendar year'. Many entities — often multinationals — keep their accounts according to the calendar year and, in fact, across the population of Ugandan firms, many keep more 'irregular' accounting years, such as from April to March, October to September, etc. In such cases, we classify the returns to a particular year as follows:

Two variables were identified in the dataset to determine a firm's financial year, namely c_*returnfromdate* and c_*returntodate*, that were utilized for this purpose. These capture the first and last dates to which the return pertains. Firms have six months after the end of their accounting year to file and pay CIT. Thus, we add six months to *c_returntodate*, and allocate the year variable to whichever calendar year this falls in. For example, a firm with *c_returntodate* of 30 June 2017 would be allocated to 2017, as 30th June 2017 + 6 months still falls in the calendar year 2017 (31 December). However, a firm with *c_returntodate* of 30^{h} September 2017 would be allocated to 2018, as six months post would lie in the calendar year 2018. Whilst this approach is imperfect, we feel it represents the best possible manner in which data of this nature can be presented in a panel format. For reference, the variables *c_returnfromdate* and *c_returntodate* are all present in the panel; users can, thus, identify the original accounting dates by each firm. Given that the majority of firms file CIT returns according to the financial year, the *year* variable in the dataset most often pertains

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[6] Historical records of the taxpayer register were not available.

to the 'second half' of the financial year. (e.g. for such firms, if c_*year* is 2017, the FY is 2016/17). In the summary statistics provided below, we present both the year (as calculated) and the closest financial year.

Duplicate observations

The data initially contained both individual and non-individual income tax returns. A large number of 'individual' CIT returns, which were dropped, as the present dataset is concerned only with the non-individual returns (i.e., incorporated firms).

The raw data initially contained a large number of duplicate observations. There are a number of reasons why duplicates emerged. Most conspicuously, there were duplicate filings (two or more) for the same firm/year entry that contained exact duplicate information across all variables. These were simply dropped. There were also cases where firms had submitted two returns as revisions were required to the initial return. In such cases, the 'latest' return is signified (i.e. the most recent one submitted to URA for the accounting period under question) and thus the prior ones were dropped.

A further common case where duplicate observations occurred was where firms changed from one accounting year to another (often from calendar to financial year, but other variations were observed). As described above, in order to construct a panel, it was necessary to allocate each firms' accounting year to a particular calendar year. However, in cases where we observe firms **changing** their accounting year during the period of the CIT panel, often this resulted in duplicate observations at the firm — calendar-year level. For example:

If *Firm X* was initially filing returns on a calendar year basis (e.g., January–December 2015), we would, allocate the year 2016. However, if the firm wished to move to financial year accounting (e.g., July 2016–June 2017), it might, then, file a return covering the six-month period January–June 2016 before beginning to file regularly according to the financial year. This shorter, 6-month return would also, according to our criteria, be allocated to year 2016. In such cases, two options were available: either (i) we summed the prior 12-month period with the 6-month period, such that there are no gaps in coverage; or (ii) we drop the shorter period, inducing a gap in coverage. Neither solution is perfect — the former results in a tax return covering a period more than one tax year and the latter induces a short gap in coverage. Ultimately, we decided that the latter approach was favourable, as it allowed for a more complete 'panel' with each year of data corresponding to a 12-month period. Whilst the hypothetical example explained here considers the case of a firm switching from calendar to financial year, there were other cases where firms switched from more 'irregular' accounting periods to the financial year. The same criteria for dropping the duplicate observations were applied.

2.2 Limitations

A number of firms operating in Uganda benefit from statutory tax exemptions (such as those operating in 'free zones', or those exporting more than 80 per cent of their total sales) and as such might file a return with a positive chargeable income, but not remit any CIT. Others in receipt of exemptions may not be compelled to file CIT returns at all, and as such would not be present in the returns data.

A further limitation of the data is that, whilst it runs until 2020 (corresponding to FY2019/20), the 2020 data is incomplete for a large number of firms. This particularly pertains to the 'Sections' of the income tax return (i.e., the balance sheet, profit and loss accounts, etc.), and not the 'Schedules' where the tax computations are carried out. To illustrate: in 2020, there are 50,917 firms observed; 49,502 of these have data that allows for computing tax liability from the schedules, whilst just 3,677 have data from the 'sections' of the IT return. Thus, any work that seeks to understand better firms' debt to equity structures, balance sheets or accounting profit will have six years of complete data to draw upon. [7]

3   Variable descriptions

In total, there are 329 variables in the panel, drawn from the CIT return and registration data. These are organized to follow the logic of the IT return form and allow the user to calculate a firms' chargeable income using each of the component parts. It is recommended that users should use this dataset alongside the IT return form, in order to best understand the breakdown of variables. All of the variables — save for metadata and firm characteristics — are denoted in Ugandan shillings.

In this section, we describe each of the variables in the CIT panel, according to the section which they are found in the non-individual CIT return form or taxpayer registration form. The first set of variables, suffixed by 'c_', pertain to firm characteristics and are listed in Table 1. These include the anonymized firm identifier, dates (including the calculated c_year variable and initial data variables), sector and location variables.

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[7] This discrepancy in coverage emanates from the time at which various data extractions were made from the URA's data warehouse. There was a long delay between initial and subsequent extractions due do disruptions caused by the Covid-19 pandemic. Ultimately, it was deemed more useful to include the 'incomplete' 2020 data as this allows for studying firms' tax computations, capital allowances etc., than to restrict the data up to 2019.

Table 1: Firm characteristic variables

Variable Name	Label / Description	Non-Individual Income Tax Return Section
c_firm_id	Anonymised Firm ID	N/A
c_year	Year	Calculated — see description above.
c_currentsectormainactivity	Current Sector Main Activity	From Registration
c_businessactivtydesc	Business Activity Description	From Registration
c_taxpayertype	Taxpayer Type (Individual / Non-Individual)	From Registration
c_groupdescription	Group Description	From Registration
c_classdescription	Class Description	From Registration
c_sectordescription	Sector Description	From Registration
c_accountingdate	Accounting Date	From Registration
c_businessdistrict	Business District	From Registration
c_businesscountry	Business County	From Registration
c_businesssubcountry	Business Sub County	From Registration
c_currentsectorclass	Current Sector Class	From Registration
c_currentstationname	Current Station Name	From Registration
c_returnfromdate	Return From Date	From Registration
c_returntodate	Return To Date	From Registration

Source: see text.

The next set of variables, suffixed by 'bs_' and listed in table 2, pertain to those variables found in Section E of the income tax return which includes information on firms' balance sheets. These variables break down firms' equity and liabilities and allow for the study of, for example, debt to equity ratios.

Table 2: Balance sheet variables

Variable Name	Label / Description	Non Individual Income Tax Return Section
bs_landandbuilding	Land And Building	Sec E) 1) a
bs_plantandmachinery	Plant And Machinery	Sec E) 1) b
bs_motorvehicles	Motor Vehicles	Sec E) 1) c
bs_furnitureandfixtures	Furniture And Fixtures	Sec E) 1) d
bs_otherassets	Other Assets	Sec E) 1) e
bs_intagibleassets	Intangible Assets	Sec E) 1) f
bs_accumulateddepreciation	Accumulated Depreciation	Sec E) 1) h
bs_netbookvalue	Net Book Value Of Fixed Assets	Sec E) 1) i
bs_totalfixedassets	Total Fixed Assets	Sec E) 1) g
bs_investshares	Invest.Shares	Sec E) 2) a
bs_investdebentures	Invest-Debentures	Sec E) 2) b
bs_investfixeddeposits	Invest-Fixed Deposits	Sec E) 2) c
bs_investgovernmentscurities	Invest-Government Scurities	Sec E) 2) d
bs_otherinvestments	Other Investments	Sec E) 2) e
bs_totalinvestments	Total Investments	Sec E) 2) f
bs_cnsmpckinventory	Stores/Consumable Including Packing Materials	Sec E) 3) a) i) a
bs_rawmaterials	Raw Materials	Sec E) 3) a) i) b
bs_workinprogress	Work In Progress	Sec E) 3) a) i) c
bs_finishedgoodstradegoods	Finished Goods Or Trade Goods	Sec E) 3) a) i) d
bs_totinventory	Total Inventory	Sec E) 3) a) i) e
bs_traderecievablesdebtors	Trade Recievables Debtors	Sec E) 3) a) ii) a

bs_prepayments	Prepayments	Sec E) 3) a) ii) b
bs_otherrecievables	Other Recievables	Sec E) 3) a) ii) c
bs_totalrecievables	Total Recievables	Sec E) 3) a) ii) d
bs_bankbalance	Bank Balance	Sec E) 3) a) iii) a
bs_cashathand	Cash At Hand	Sec E) 3) a) iii) b
bs_totalbalanceavailable	Total Balance Available	Sec E) 3) a) iii) c
bs_othercurrentassets	Other Current Assets	Sec E) 3) a) iv
bs_totcurrentasset	Tot Current Asset	Sec E) 3) a) v
bs_loansrelatedparties	Loans Related Parties	Sec E) 3) b) i
bs_advancestostaff	Advances To Staff	Sec E) 3) b) ii
bs_deposits	Deposits	Sec E) 3) b) iii
bs_loansandadvances	Loans And Advances	Sec E) 3) b) iv
bs_balancewithura	Balance With Ura	Sec E) 3) b) v
bs_totalloansandadvances	Total Loans And Advances	Sec E) 3) b) vi
bs_totalcurrentassets	Total Current Assets	Sec E) 3) c
bs_sundrycreditors	Sundry Creditors	Sec E) 3) d) i) a
bs_liabilityforleasedassets	Liability For Leased Assets	Sec E) 3) d) i) b
bs_accruedinterest	Accrued Interest	Sec E) 3) d) i) c
bs_othercurrentliabilities	Other Current Liabilities	Sec E) 3) d) i) d
bs_unpaidmaturedebts	Unpaid Mature Debts	Sec E) 3) d) i) e
bs_totalcurrentliability	Total Current Liability	Sec E) 3) d) i) f
bs_provisionforincometax	Provision For Income Tax	Sec E) 3) d) ii) a
bs_provisionforbaddebts	Provision For Bad Debts	Sec E) 3) d) ii) b
bs_proposeddividend	Proposed Dividend	Sec E) 3) d) ii) c
bs_otherprovision	Other Provision	Sec E) 3) d) ii) d
bs_totalprovisions	Total Provisions	Sec E) 3) d) ii) e
bs_netcurrentasset	Net Current Asset	Sec E) 3) e
bs_deferredasset	Deferred Tax Assets	Sec E) 4
bs_totalinvetory	Total Invetory	Sec E) 5
bs_additionalissuedsharecapital	Additional Issued Share Capital	Sec E) 6) a) ii
bs_totalsharecapital	Total Share Capital	Sec E) 6) a) iii
bs_premiumamount	Premium Amount	Sec E) 6) b) i
bs_capitalreserve	Capital Reserve	Sec E) 6) b) ii
bs_capitalredemptreserve	Capital Redempt Reserve	Sec E) 6) b) iii
bs_statutoryreserve	Statutory Reserve	Sec E) 6) b) iv
bs_revaluationreserve	Revaluation Reserve	Sec E) 6) b) v
bs_otherreserve	Other Reserve	Sec E) 6) b) vii
bs_generalreserve	General Reserve	Sec E) 6) b) viii
bs_retainearningaccumprof	Retained Earnings / Accumulated Profit / Loss Or Surplus / Deficit	Sec E) 6) b) ix
bs_totalreserveandsurplus	Generated - But Missing Translation Reserve	Sec E) 6) b) x
bs_totalshareholdersfunds	Generated (Also Missing That One)	Sec E) 6) c
bs_secureloanbank	Loan From Financial Institutions	Sec E) 7) a) i
bs_secureloanother	Other Secure Loan	Sec E) 7) a) ii
bs_securedebtissued	Debt Securities Issued	Sec E) 7) a) iii
bs_secureloanparties	Due To Related Parties	Sec E) 7) a) iv
bs_securetotalloan	Total Secured Liabilities	Sec E) 7) a) v
bs_unsecureloanbank	Unsecure Loan From Financial Institutions	Sec E) 7) b) i
bs_unsecureloanother	Unsecure Loan Other	Sec E) 7) b) ii
bs_unsecurecreditorloan	Other Unsecure Loan	Sec E) 7) b) iii
bs_unsecureloanparties	Unsecure Loan Due To Related Parties	Sec E) 7) b) iv
bs_unsecuretotalloan	Total Unsecured Liabilities	Sec E) 7) b) v
bs_defertaxliability	Deferred Tax Liability	Sec E) 8
bs_totalloanfunds	Total Loan Funds : Generated	Sec E) 7) c
bs_issuedpaidcapital	Issued Paid Capital	Sec E) 6) a) i
bs_totalequitylongtermliab	Total Equity & Long Term Liabilities	Sec E) 9

Source: see text.

In Table 3, we show the variables that relate to a firms' profit and loss accounts. These variables are drawn from Section F of the IT return form. Those suffixed by 'pl_y_' pertain to income variables; those suffixed by 'pl_x_' pertain to expense variables; those suffixed by just 'pl_' pertain to variables used in the calculation of profit or loss (e.g. pl_grossprofit which is gross accounting profit).

Table 3: Profit and loss account variables

Variable Name	Label / Description	Non Individual Income Tax Return Section
pl_y_totalsales	Total Sales	Sec F) 1) a
pl_y_grossreceiptprofession	Gross Receipt of Profession	Sec F) 1) b
pl_y_openstocksales	Total Opening Stock	Sec F) 2 a) iv)
pl_y_incometaxturnover	Turnover	Sec F) 1) c
pl_y_localpurchase	Local Purchase	Sec F) 2) b) i
pl_y_importpurchase	Import Purchase	Sec F) 2) b) ii
pl_y_totalpurchaseimport	Total Purchase Import	Sec F) 2) b) iii
pl_y_closestocksales	Close Stock Sales	Sec F) 2) e
pl_y_costofsales	Cost Of Sales	Sec F) 2) f
pl_grossprofit	Gross Profit	Sec F) 2) 3
pl_y_interestinsideuganda	Interest Earned Inside Uganda	Sec F) 4) a
pl_y_interestoutsideuganda	Interest Earned Outside Uganda	Sec F) 4) b
pl_y_dividend	Dividend	Sec F) 4) c
pl_y_grossrentaly	Gross Rental Income Generated	Sec F) 4) d
pl_y_commission	Commission	Sec F) 4) e
pl_y_annuity	Annuity	Sec F) 4) g
pl_y_naturalresourcepay	Natural Resource Payments	Sec F) 4) h
pl_y_royalties	Royalties	Sec F) 4) i
pl_y_gift	Gift	Sec F) 4) j
pl_y_realizedexchange	Realized Exchange	Sec F) 4) l
pl_y_otherreceipt	Any other income	Sec F) 4) k
pl_y_unrealexchgain	Unrealised Exchange Gain	Sec F) 4) m
pl_y_disposaldepreciableasset	Disposal Depreciable Asset	Sec F) 4) n
pl_y_totalpropfund	Provision for Bad and Doubtful Debts	Sec F) 4) o
pl_y_othrnettradeincm	Othr Net Trade Incm	Sec F) 4) p
pl_x_commission	Commission	Sec F) 6) d
pl_x_gift	Gift	Sec F) 6) k
pl_x_advertisement	Advertisement	Sec F) 6) a
pl_x_auditexpense	Audit Expense	Sec F) 6) b
pl_x_storesparepart	Store Spare Part	Sec F) 6) f
pl_x_conveyanceexpense	Conveyance Expense	Sec F) 6) g
pl_x_entertainment	Entertainment	Sec F) 6) i
pl_x_freighttransport	Freight Transport	Sec F) 6) j
pl_x_hotelexpense	Hotel Expense	Sec F) 6) l
pl_x_legalexpense	Legal Expense	Sec F) 6) m
pl_x_powerfuel	Power & Fuel	Sec F) 6) n
pl_x_buildingrepair	Building Repair	Sec F) 6) r
pl_x_machinerepair	Machine Repair	Sec F) 6) s
pl_x_salespromotion	Sales Promotion	Sec F) 6) t
pl_x_staffwelfareexpense	Staff Welfare Expense	Sec F) 6) u
pl_x_subsistenceallowance	Subsistence Allowance	Sec F) 6) x
pl_x_telephoneexpense	Telephone Expense	Sec F) 6) y
pl_x_trainingexpenditure	Training Expenditure	Sec F) 6) z
pl_x_travelexpense	Travel Expense	Sec F) 6) aa
pl_x_conferenceexpense	Conference Expense	Sec F) 6) ab
pl_x_directwages	Direct Wages	Sec F) 2) c) i
pl_x_directexpint	Direct Exp Int	Sec F) 2) c) ii
pl_x_totothdirectcost	Tot Oth Direct Cost	Sec F) 2) c) iii
pl_x_factoryrentrates	Factory Rent Rates	Sec F) 2) d) i
pl_x_factoryrates	Factory Rates	Sec F) 2) d) ii
pl_x_factoryfuelpower	Factory Fuel Power	Sec F) 2) d) iii
pl_x_factoryindirectwages	Factory Indirect Wages	Sec F) 2) d) iv
pl_x_factoryconsumables	Factory Consumables	Sec F) 2) d) v
pl_x_factorydepreciation	Factory Depreciation	Sec F) 2) d) vi
pl_x_factoryothovh	Factory Oth Overheads	Sec F) 2) d) vii
pl_x_totfactoryovh	Tot Factory Overheads	Sec F) 2) d) viii
pl_x_clsrawmaterial	Closing Stock Raw Material	Sec F) 2) e) i
pl_x_clswip	Closing Stock Work in Progress	Sec F) 2) e) ii
pl_x_clstrdmftgoods	Closing Stock Trading / Manufactured Goods	Sec F) 2) e) iii
pl_x_opntrdmftgoods	Opening Stock Trading / Manufactured Goods	Sec F) 2) a) iii

pl_x_baddebtwriteoff	Bad Debts Written Off	Sec F) 6) c
pl_x_computerexpenses	Computer Expenses	Sec F) 6) e
pl_x_donations	Donations	Sec F) 6) h
pl_x_rentrates	Rent	Sec F) 6) p
pl_x_operatingexpenserates	Rates	Sec F) 6) q
pl_x_preoperatingexpn	Startup Cost / Pre-Operating Expn	Sec F) 6) v
pl_x_totoperationexpense	Total Operation Expense	Sec F) 6) bb
pl_x_tototherexpense	Total Other Expense	Sec F) 7
pl_x_admndepreciation	Admin Depreciation	Sec F) 8) a
pl_x_depreciableassetloss	Depreciable Asset Loss	Sec F) 8) b
pl_x_mgmntfees	Management Fees	Sec F) 8) c
pl_x_researchexpense	Research Expense	Sec F) 8) d
pl_x_basicsalary	Basic Salary	Sec F) 8) e) i
pl_x_bonus	Bonus	Sec F) 8) e) ii
pl_x_reimbursemedicalexpense	Reimburse Medical Expense	Sec F) 8) e) iii
pl_x_leaveencashment	Leave Encashment	Sec F) 8) e) iv
pl_x_leavetravelbenefit	Leave Travel Benefit	Sec F) 8) e) v
pl_x_housingallowance	Housing Allowance	Sec F) 8) e) vi
pl_x_contributeretirefund	Contribute Retire Fund	Sec F) 8) e) vii
pl_x_contributeotherfund	Contribute Other Fund	Sec F) 8) e) viii
pl_x_othempbenefit	Oth Emp. Benefit	Sec F) 8) e) ix
pl_x_totempcompensation	Tot Emp Compensation	Sec F) 8) e) x
pl_x_totadminexpense	Tot Admin Expense	Sec F) 8) f
pl_x_interestexpense	Interest Expense	Sec F) 9) a
pl_x_bankcharge	Bank Charge	Sec F) 9) b
pl_x_commitmentfees	Commitment Fees	Sec F) 9) c
pl_x_insurance	Insurance	Sec F) 9) d
pl_x_real_exch_loss	Realized Exchange Loss	Sec F) 9) e
pl_x_unr_exch_loss	Generated	Sec F) 9) f
pl_x_totfinancialexpense	Tot Financial Expense	Sec F) 9) g
pl_x_totrentoprtgexpns	Tot Rent Operating Expns	Sec F) 11) a
pl_x_totrentadminiexpns	Tot Rent Admin Expns	Sec F) 11) b
pl_x_totrentfinancexpns	Tot Rent Financial Expns	Sec F) 11) c
pl_x_totrentincmexpns	Tot Rent Income Expns	Sec F) 11) d
pl_profitbeforetax	Profit Before Tax	Sec F) 12
pl_provisionincometax	Provision for Income Tax	Sec F) 13
pl_profitaftertax	Profit After Tax	Sec F) 14
pl_profitafterdividend	Profit After Dividend	Sec F) 16
pl_balanceprevperiod	Balance Prev Period	Sec F) 17
pl_balancecarryforward	Balance Carry Forward	Sec F) 18
pl_y_rentalincome	Rental Income	Sec F) Part 1
pl_y_shortinsamt	Short Term Insurance Amt	Sec F) 5 e
pl_x_rentpaid	Rent Paid	Sec F) Part 2

Source: see text.

The variables displayed in Table 4 show those from Schedule 1 of the IT return. These variables allow the user to calculate chargeable (taxable) income, from the underlying information contained in the sections and schedules of the IT return. The calculation begins with sch1_profit_loss_before_tax (which draws from *pl_profitbeforetax* above) before adding in and deducting other components, many of which are drawn from other parts of the IT return. The variable *sch1_incm_bsns_actvty* is the final firms' chargeable income on which the statutory CIT rate is applied.

Table 4: Schedule 1 variables

Variable Name	Label / Description	Non Individual Income Tax Return Section
sch1_profit_loss_before_tax	Profit / Loss Before Tax	Sch1 1)
sch1_add_depreciation	Add Depreciation	Sch1 2) a
sch1_entertain_expense	Add Entertainment Expenses	Sch1 2) b
sch1_exmpt_incm_expense	Add Expenses Related to Exempt Income	Sch1 2) c
sch1_loss_depreciate_asset	Add Loss on Disposal of Assets	Sch1 2) d
sch1_balancing_chrg	Add Balancing Charge	Sch1 2) e
sch1_donation	Add Donations	Sch1 2) f
sch1_prov_bad_debts_add	Add Provision for Bad & Doubtful Debts	Sch1 2) g
sch1_add_strt_up_cost	Add Start Up Costs / Pre-Operating Expenses	Sch1 2) h
sch1_unreal_forex_add	Add Unrealised Foreign Exchange Loss	Sch1 2) i
sch1_insurance_expense	Add Expenses Related to Short Term Insurance Business	Sch1 2) j
sch1_mining_expense	Add Cost of Sales Attributable to Mining Business	Sch1 2) k
sch1_apr_operating_expns	Add Apportioned Operating Expenses	Sch1 2) m) i
sch1_apr_admin_expns	Add Apportioned Admin Expenses	Sch1 2) m) ii
sch1_apr_othr_expns	Add Apportioned Other Expenses	Sch1 2) m) iii
sch1_apr_financial_expns	Add Apportioned Financial Expenses	Sch1 2) m) iv
sch1_apr_total_expns	Add Total Apportioned Expenses	Sch1 2) m) v
sch1_description	Description of Other Non Allowable Expense	
sch1_amount	Amount of Other Non Allowable Expense	
sch1_othr_non_allow_deduct	Total Disallowable Expenses	Sch1 2) m
sch1_tot_amt_added	Total Amt To Be Added Back	Sch1 2) n
sch1_exmpt_incm_less	Less Exempt Income	Sch1 3) a
sch1_insurance_incm	Less Gross Receipt from Short Term Insurance	Sch1 3) b
sch1_mining_incm	Less Income Directly Attributable to Mining	Sch1 3) c
sch1_profit_depreciate_asset	Less Profit on Disposal of Assets	Sch1 3) d
sch1_capital_deduct	Less Capital Deductions	Sch1 3) e
sch1_research_expense	Less Scientific Research Expenditure	Sch1 3) f
sch1_unreal_forex_less	Less Unrealised Foreign Exchange Gain	Sch1 3) g
sch1_prov_bad_debts_less	Less Provision for Bad or Doubtful Debts if Credited	Sch1 3) h
sch1_interest_witheld_incm	Less Interest Income	Sch1 3) i) i
sch1_othr_witheld_incm	Less Other Income	Sch1 3) i) ii
sch1_total_witheld_incm	Total Income on Which Withholding Tax is Final	Sch1 3) i) iii
sch1_description_1	Description of Other Allowable Deduction	Sch1 3) j
sch1_amount_1	Amount of Other Allowable Deduction	Sch1 3) j
sch1_total_othr_allow_ded	Total Other Allowable Deduction	Sch1 3) j
sch1_tot_deduct	Total Deduction	Sch1 3) k
sch1_adj_depreciate_capitl	Profit / Loss After Adjustment for Depreciation & Capital Allowance	Sch1) 4
sch1_incm_capital_gain	Income from Capital Gains	Sch1) 5
sch1_capital_losses	Capital Losses	Sch1) 6
sch1_chrg_inc_profit_bsns	Chargeable Income from Profit & Gains from Business Activity	Sch1) 7
sch1_loss_prvs_year	Loss Previous Year	Sch1) 8
sch1_incm_bsns_actvty	Chargeable Income Business Activity	Sch1) 9
sch1_loss_crdt_frwd	Loss To Carry Forward	Sch1) 10

Source: see text.

In Table 5, the variables from Schedule 2 of the income tax return are summarized. These pertain to initial capital allowances and information on depreciable assets.

Table 5: Schedule 2 variables

Variable Name	Label / Description	Non Individual Income Tax Return Section
sch2_depreciation_allow	Depreciation Allowance	Sch 2) 2
sch2_init_allow_build	Initial Allowance Building	Sch 2) 4
sch2_startup_cost	Startup Cost	Sch 2) 5
sch2_intangible_asset	Intangible Assets	Sch 2) 6
sch2_deduction_acquisition	Acquisition Deduction	Sch 2) 7
sch2_total_allowance	Total Allowance	Sch 2) 8
sch2_wdv_beg_year_class_40	Wdv At Beginning Of Year Class I[8]	Sch2 Part 3 1) B
sch2_wdv_beg_year_class_35	Wdv At Beginning Of Year Class II	Sch2 Part 3 1) C
sch2_wdv_beg_year_class_30	Wdv At Beginning Of Year Class III	Sch2 Part 3 1) D
sch2_wdv_beg_year_class_20	Wdv At Beginning Of Year Class IV	Sch2 Part 3 1) E
sch2_wdv_beg_year_total	Wdv At Beginning Of Year Total	Sch2 Part 3 1) F
sch2_addinit_during_year_class_40	Addition During Year Net Of Initial Allowance Class I	Sch2 Part 3 2) B
sch2_addinit_during_year_class_35	Addition During Year Net Of Initial Allowance Class II	Sch2 Part 3 2) C
sch2_addinit_during_year_class_30	Addition During Year Net Of Initial Allowance Class III	Sch2 Part 3 2) D
sch2_addinit_during_year_class_20	Addition During Year Net Of Initial Allowance Class IV	Sch2 Part 3 2) E
sch2_addinit_during_year_total	Addition During Year Net Of Initial Allowance Total	Sch2 Part 3 2) F
sch2_dispsl_class_40	Disposal During The Year Class I	Sch2 Part 3 3) B
sch2_dispsl_class_35	Disposal During The Year Class II	Sch2 Part 3 3) C
sch2_dispsl_class_30	Disposal During The Year Class III	Sch2 Part 3 3) D
sch2_dispsl_class_20	Disposal During The Year Class IV	Sch2 Part 3 3) E
sch2_dispsl_total	Disposal During The Year Total	Sch2 Part 3 3) F
sch2_netamt_class_40	Net Amt On Which Full Depreciation Rate Applied I	Sch2 Part 3 4) B
sch2_netamt_class_35	Net Amt On Which Full Depreciation Rate Applied II	Sch2 Part 3 4) C
sch2_netamt_class_30	Net Amt On Which Full Depreciation Rate Applied III	Sch2 Part 3 4) D
sch2_netamt_class_20	Net Amt On Which Full Depreciation Rate Applied IV	Sch2 Part 3 4) E
sch2_netamt_total	Net Amt On Which Full Depreciation Rate Applied Total	Sch2 Part 3 4) F
sch2_depr_class_40	Depreciation For The Year Of Income Class I	Sch2 Part 3 5) B
sch2_depr_class_35	Depreciation For The Year Of Income Class II	Sch2 Part 3 5) C
sch2_depr_class_30	Depreciation For The Year Of Income Class III	Sch2 Part 3 5) D
sch2_depr_class_20	Depreciation For The Year Of Income Class IV	Sch2 Part 3 5) E
sch2_depr_total	Depreciation For The Year Of Income Total	Sch2 Part 3 5) F
sch2_wdvend_year_class_40	Wdv At End Of Year Class I	Sch2 Part 3 6) B
sch2_wdvend_year_class_35	Wdv At End Of Year Class II	Sch2 Part 3 6) C
sch2_wdvend_year_class_30	Wdv At End Of Year Class III	Sch2 Part 3 6) D
sch2_wdvend_year_class_20	Wdv At End Of Year Class IV	Sch2 Part 3 6) E
sch2_wdvend_year_total	Wdv At End Of Year Total	Sch2 Part 3 6) F
sch2_init_allow_plant	Initial Allowance Plant & Machinery	Sch 2) 1
sch2_ib_deduct	Initial Building Deduction	Sch 2) 3
sch2_sch_wthd_gross_tax	Gross withholding tax deducted at source from income 1 to 10	

Source: see text.

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[8] WDV is written down value which shows the asset value at a specific period of time. Assets are depreciated according to the declining balance method. Classes I, II,III and IV allow for depreciation at 40%, 35%, 30% and 20%. The assets in each class are summarized in Part 1 of the Sixth Schedule of the Income Tax Act. As of July 2021, this schedule was amended to include just three asset classes, allowing for depreciation at 40%, 30% and 20%.

In Table 6 we summarize the variables from schedules 4 and 5 in the IT return; these are relevant only for firms involved in mining and long-term contracts.

Table 6: Schedule 4 and 5 variables

Variable Name	Label / Description	Non Individual Income Tax Return Section
sch4_sch_cntrt_gross_incm	Gross Income from Long Term Contracts	Sch 4) E
sch4_sch_cntrt_gross_loss	Gross Loss from Long Term Contracts	Sch 4) F
sch5_gross_process_mining	Gross Proceeds from Mining	Sch 5) 1
sch5_tot_mining_deduct	Cost of Sales Attributable to Mining Operations	Sch 5) 2
sch5_apportioned_captl_allowance	Allowable Apportioned Capital Allowance	Sch 5) 3) a
sch5_opr_expns	Operating Expense	Sch 5) 3) b
sch5_admn_expns	Admin Expense	Sch 5) 3) c
sch5_tot_oth_exp	Other Expense	Sch 5) 3) d
sch5_fin_exp	Financial Expense	Sch 5) 3) e
sch5_tot_min_expns	Total Mining Expenses	Sch 5) 3) f
sch5_prft_loss_min_bsns	Profit / Loss Mining Business	Sch 5) 4
sch5_non_allowable_expns	Non Allowable Expenses	Sch 5) 5
sch5_allowable_expns	Allowable Expenses	Sch 5) 6
sch5_adj_inc_loss	Adjusted Mining Operation Income / Loss	Sch 5) 7
sch5_brght_fwd_loss_prev_year	Brought Forward Loss from Mining Prev. Year	Sch 5) 8
sch5_net_charge_income	Net Chargeable Income	Sch 5) 9
sch5_calc_factor	Calculation Factor	Sch 5) 10
sch5_applied_tax_rate	Applied Tax Rate	Sch 5) 11
sch5_rate_tax_value	Tax Rate Value	Sch 5) 12

Source: see text.

Table 7 summarizes the variables from Schedule 6 and 7 in the IT return form. These pertain to short-term insurance businesses and repatriated branch profits (RBP).

Table 7: Schedule 6 and 7

Variable Name	Label / Description	Non Individual Income Tax Return Section
sch6_gross_premium_rcvd	Gross Receipt Received from Short Term Insurance Business	Sch 6) 1
sch6_tot_expns_ins_inc	Total Expenses Attributable to Short Term Insurance Income	Sch 6) 2
sch6_tot_ins_expns	Total Short Term Insurance Expenses	Sch 6) 3) f
sch6_gross_inc_short_bsns	Profit Loss from Short Term Insurance Business	Sch 6) 4
sch6_non_allow_expns	Add: Non - Allowable Expenses	Sch 6) 5
sch6_allowed_expns	Less: Allowable Expenses	Sch 6) 6
sch6_inc_loss_short_bsns	Adjusted Short Term Insurace Business Income / Loss	Sch 6) 7
sch6_fwd_short_bsns_prev_yr	Brought Forward Assessed Loss from Short Term Insurance Business from prev. year	Sch 6) 8
sch6_net_inc_short_bsns	Chargeable Income from Short Term Insurance Business	Sch 6) 9
sch6_loss_fwd_next_yr	Loss to be carried forward to the next year for offset against short term insurance business income	Sch 6) 10
sch7_non_currnt_asst_opening_bal	Repatriated Branch Profit (RBP) Non-Current Assets Opening Balance	Sch 7) 1) b
sch7_non_crrunt_asst_closing_bal	RBP Non-Current Assets Closing Balance	Sch 7) 1) c
sch7_trd_invst_opening_bal	RBP Trade Investments Opening Balance	Sch 7) 2) b
sch7_trd_invst_closing_bal	RBP Trade Investments Closing Balance	Sch 7) 2) c
sch7_current_asst_opening_bal	RBP Current Assets Opening Balance	Sch 7) 3) b
sch7_current_asst_closing_bal	RBP Current Assets Closing Balance	Sch 7) 3) c
sch7_tot_asst_opening_bal	RBP Total Assets Opening Balance	Sch 7) 4) b

sch7_tot_asst_closing_bal	RBP Total Assets Closing Balance	Sch 7) 4) c
sch7_long_trm_liability_opening_bal	RBP Long Term Liabilities Opening Balance	Sch 7) 5) b
sch7_long_trm_liability_closing_bal	RBP Long Term Liabilities Closing Balance	Sch 7) 5) c
sch7_current_liability_opening_bal	RBP Current Liabilities Opening Balance	Sch 7) 6) b
sch7_current_liability_closing_bal	RBP Current Liabilities Closing Balance	Sch 7) 6) c
sch7_tot_liability_opening_bal	RBP Total Liabilities Opening Balance	Sch 7) 7) b
sch7_tot_liability_closing_bal	RBP Total Liabilities Closing Balance	Sch 7) 7) c
sch7_net_asst_opening_bal	RBP Net Assets Opening Balance	Sch 7) 8) b
sch7_net_asst_closing_bal	RBP Net Assets Closing Balance	Sch 7) 8) c
sch7_chrgable_incm	RBP Net Profit	Sch 7) 9
sch7_tax_liability	RBP Tax Liability	Sch 7) 10
sch7_repatriated_profit_calc_amt	RBP Profit	Sch 7) 11
sch7_brnch_profit_amt	RBP Profit Tax Amt	Sch 7) 12

Source: see text.

4 Data characteristics

The data spans seven years, namely 2014–20 (see discussion above for how this pertains to financial years — in short, *c_year* equal to 2014 is equivalent to the 2013/14 financial year for most firms). In total there are 311,004 unique firm / year observations. When broken down by year, the number of observations grows year-on-year, from 30,113 in 2014 to 50,917 in 2020. This is summarized in Table 8.

There are 96,798 unique firms observed over the period. Of these observations, 11,701 firms file returns for all seven years of the panel, 7,662 do so for six years, and so on as summarized in Table 9.

Table 8: Number of observations, by year

FY	c_year	# firms
2013/14	2014	30,113
2014/15	2015	35,961
2015/16	2016	44,227
2016/17	2017	45,853
2017/18	2018	49,888
2018/19	2019	54,045
2019/20	2020	50,917

Source: URA firm panel.

Table 9: Number of returns filed, per firm

# of years present	# firms
1	28,599
2	18,109
3	12,865
4	9,597
5	8,265
6	7,662
7	11,701

Source: URA firm panel.

A large number of firms (28,599) appear only for one year.

In Table 10, we display the number of firms according to which sector they are registered in. We see that the largest sectors are Wholesale and Retail Trade (24.1 per cent) and Construction (13 per cent), followed by Other Service Activities (8.9 per cent) and financial and insurance activities (5.7 per cent). One limitation of this breakdown is that this information is present for just 51,838 firms, or 54 per cent of the total observed in the CIT panel. We have no reason to believe that the likelihood of being registered in any one sector is correlated with the likelihood of this information being present.

Table 10: Sectoral breakdown

Sector Description	# Firms	% of Firms
A - AGRICULTURE, FORESTRY AND FISHING	2,950	4.9%
B - MINING AND QUARRYING	309	0.5%
C - MANUFACTURING	2,771	4.6%
D - ELECTRICITY, GAS, STEAM AND AIR COND.	518	0.9%
E - WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT	214	0.4%
F - CONSTRUCTION	7,764	13.0%
G - WHOLESALE AND RETAIL TRADE	14,408	24.1%
H - TRANSPORTATION AND STORAGE	2,312	3.9%
I - ACCOMMODATION AND FOOD SERVICE AC..	2,337	3.9%
J - INFORMATION AND COMMUNICATION	2,479	4.1%
K - FINANCIAL AND INSURANCE ACTIVITIES	3,415	5.7%
L - REAL ESTATE ACTIVITIES	1,888	3.2%
M - PROFESSIONAL, SCIENTIFIC AND TECHNICAL	3,888	6.5%
N - ADMINISTRATIVE AND SUPPORT SERVICES	2,440	4.1%
O - PUBLIC ADMINISTRATION AND DEFENCE	160	0.3%
P - EDUCATION	2,785	4.7%
Q - HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	2,867	4.8%
R - ARTS, ENTERTAINMENT AND RECREATION	739	1.2%
S - OTHER SERVICE ACTIVITIES	5,309	8.9%
T - ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS	145	0.2%

U - ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS	116	0.2%
UNKNOWN	17	0.0%
Total	59,831	100.0%

Source: see text.

In Table 11, we show the breakdown of firms according to location (as captured by the variable *c_currentstationname*). Again, this information is missing for a large number of firms (as the registration data could not be matched) however, again, we have no reason to believe that the likelihood of this information being present is systematically correlated with being in any particular station. Some 30 per cent of firms are located in Kampala Metro area (including Kampala East, North and South), which accounts for some 58 per cent of all firms in Uganda.

Table 11: Firms' location

Location	# firms	%
ARUA	474	0.85
BUSHENYI	429	0.77
BUSIA	268	0.48
ENTEBBE	1,020	1.83
FORT PORTAL	593	1.06
GULU	842	1.51
HOIMA	472	0.85
IBANDA LIAISON OFFICE	216	0.39
IGANGA	602	1.08
JINJA	1,544	2.77
KABALE	509	0.91
KAMPALA EAST	7,129	12.79
KAMPALA METRO	16,718	30.00
KAMPALA NORTH	2,567	4.60
KAMPALA SOUTH	5,883	10.55
KASESE	432	0.77
KITGUM	251	0.45
KOBOKO	140	0.25
KYALIWAJALA LIAISON OFFICE	1,893	3.40
KYOTERA LIAISON OFFICE	200	0.36
LARGE TAXPAYERS OFFICE	866	1.55
LIRA	1,470	2.64
MASAKA	581	1.04
MASINDI	310	0.56
MBALE	1,467	2.63
MBARARA	1,354	2.43
MEDIUM TAXPAYERS OFFICE	1,622	2.91
MITYANA	498	0.89
MOROTO	319	0.57
MOYO	128	0.23

MUKONO	1,385	2.48
NANSANA LIAISON OFFICE	1,065	1.91
NATETE LIAISON OFFICE	938	1.68
NEBBI	129	0.23
OIL AND GAS OFFICE	62	0.11
PSO	22	0.04
RUKUNGIRI	246	0.44
SOROTI	685	1.23
TORORO	424	0.76
Total	55,753	100

Source: see text.

Note that in both Tables 10 and 11, the number of observations is significantly lower than the total number of firms (96,798). This is due to the fact that we were unable to match the registration data — which contains metadata, or firm characteristics — to the tax return data for all firms. One possible reason for missing firm registration data is that the firm register is frequently cleaned and thus it might be that deregistered firms, which appear in our panel as having filed returns in prior years, would not appear in the registration data. We test for this by examining the share of missing registration data, by year. Table 12 summarizes.

Table 12: Share of firms with matched registration and returns data.

FY	c_year	Matched, %	Missing, %
2013/14	2014	60.2	39.8
2014/15	2015	60.8	39.3
2015/16	2016	62.0	38.0
2016/17	2017	65.3	34.7
2017/18	2018	67.0	33.0
2018/19	2019	68.5	31.5
2019/20	2020	61.9	38.1

Source: authors' computations from CIT panel.

We see some evidence that the share of matched firms is lesser in early years and increasing, rising from 60.2 per cent in 2014 (FY2013/14) to 68.5 per cent in 2019 (FY2018/19). However, this drops again to 61.9 per cent in 2020 (FY2019/20). The reason for the drop in the most recent year of data is likely that the registration data was extracted at URA alongside the initial extraction of CIT returns, which was before the vast majority of firms had filed for the 2019/20 tax year had got onto the tax register. Thus, any firm that filed their first return in FY2019/20 may not have been in the register at the time of extraction of the register The other reason that could explain the drop is the merging of TINs as a result of a data-cleaning exercise, to eliminate duplicate TINs

4.1 Comparison of data to other sources:

When total tax paid from the panel is summed across all firms, by year, the aggregate amounts of CIT collected are as shown in Table 13, which also compares this figure with the total collections reported by URA for each year. The data in the panel is, on average, 3 per cent lower than that reported by the URA, though this figure ranges from -11 per cent to +7 per cent, depending on the year in question.

Table 13: Cumulative collections from CIT returns versus URA collections data

Year	FY	Cumulative collections from CIT Returns (UGX, bn.)	URA CIT Collections (UGX, bn.)	CIT Returns / URA Collections, %
2014	2013/14	519.0	486.6	107
2015	2014/15	679.1	714.8	95
2016	2015/16	742.1	732.2	101
2017	2016/17	753.2	764.3	99
2018	2017/18	864.8	884.8	98
2019	2018/19	1,057.8	1,167.8	91
2020	2019/20	1,157.9	1,302.3	89
			AVERAGE:	97

Source: authors' computations from CIT panel and URA databases.

It is not expected that these figures should match exactly, however it is encouraging that they match closely in many years. We have calculated the cumulative collections from CIT returns by multiplying the variable *sch1_incm_bsns_actvty* by 30 per cent (i.e., chargeable income * statutory CIT rate). A firms' tax liability from their CIT return may not match exactly with the amount collected for a number of reasons, for example:

- Firms may not have made payments equal to the exact amount from the return (they may be paying arrears from the previous year, or be owed a refund from URA for over-payment).
- Often firms are required to resubmit a return following (e.g.) audit.
- The 'accuracy' of the returns data is noticeably lower in the most recent two financial years. This may be because some firms have not yet filed returns for those periods, but have (e.g., due to constraints following COVID-19).

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