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Pathways Into the Tax Net: Better Ways to Register African Taxpayers

Edward Groening, Mick Moore, Denis Mukama and Ronald Waiswa

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Summary

Systems for registering taxpayers in sub-Saharan Africa are often poorly designed and managed. There are three characteristic problems: the process of registering new taxpayers is not sufficiently targeted on the people and businesses likely to be liable to pay tax; too many (nominal, unproductive) taxpayers are registered; and taxpayer identification (ID) details in the tax register are inaccurate. These problems interact perversely – each exacerbates the others. They will all to a large degree be solved, almost naturally, as a result of: (a) greater digitisation of tax administration generally, and (b) further interfacing between the digital systems of tax agencies and those of other (public sector) organisations, notably cross-government ID databases. But this takes time. There are significant shorter-term registration problems that need policy attention. In part they have not received it yet because these problems are rare in richer countries, which still exercise a huge influence on the tax reform agenda in Africa and other low-income regions. On the basis of recent experience in a range of African countries, we list some taxpayer registration practices that should be abandoned or used sparingly, and some that should be used more widely, to better target registration on those businesses and individuals who should be paying tax.

Keywords: taxpayer registration; tax register; digitalisation; tax identification number; third-party data; active taxpayers; inactive taxpayers.

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Acronyms

CIT	Corporate income tax
ID	Identification
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
PAYE	Pay As You Earn
PIT	Personal income tax
TADAT	Tax Administration Diagnostic Assessment Tool
TIN	Tax identification number
URA	Uganda Revenue Authority
VAT	Value added tax

1. Introduction

Most contemporary governments raise most of their tax revenue from three taxes: profit tax on corporations, income tax on individuals, and value added tax on transactions.[1] Their conventional acronyms are CIT (corporate income tax), PIT (personal income tax) and VAT (value added tax). These three taxes can be collected coherently and consistently only if the taxpaying entities – including individuals, companies, and partnerships – are registered with the tax agency. The taxpayer register (henceforth tax register, sometimes known as the taxpayer masterfile) is a basic tool of contemporary tax administration. So, too, are: (a) taxpayer identification numbers (TINs) – the unique identifiers for each company or individual on the tax register; and (b) tax returns (containing information about income, turnover, expenses, and profit) that taxpayers (individual or corporate) are required to send to the tax agency regularly (monthly, quarterly, or annually). The tax register has a quasi-permanent character – once individuals or companies are on it, they should remain on it until they are formally removed, normally because they are deceased or have ceased trading or earning. This permanent record is central to the ways in which liabilities for the main three taxes are assessed and collected.[2] Without it, tax agencies do not even have a coherent record of who should be filing tax returns.

A good tax register is central to good tax administration. But what is a good tax register? It is easy to agree that it should be comprehensive, accurate, up to date, easy to use, secure against hacking or misuse, and, above all, include all businesses and individuals that are liable to pay tax.[3] There is less agreement over the question of which individuals and small enterprises that are not tax liable should be on the register. This is not a very significant question in higher-income countries, in large part because more businesses and individuals are liable for tax, and already on the register. In lower-income countries, fewer businesses are

[1] These three taxes accounted for 62 per cent of total government revenue in sub-Saharan Africa in 2022 (UNU-WIDER 2024). Excise and trade taxes accounted for much of the remainder.

[2] There is a lot of variation in the extent to which other types of tax – including customs duty, withholding tax, inheritance tax, motor vehicle licences, capital gains tax, and stamp duty on property transfer – require a taxpayer register or TIN. To some extent these taxes may be collected in the absence of a tax register – when goods pass through a port, a change of property ownership is registered, or a motor vehicle is licensed. Registration may not be essential for collection of income tax or VAT where one tax-paying entity initially collects revenue from another, and remits it to the tax agency through a withholding arrangement.

[3] Apart from the obvious problems that it generates, inaccurate or unreliable registration data gives tax collectors a pretext to make arbitrary adjustments to tax returns, or to meet taxpayers face-to-face. These direct personal interactions, in turn, encourage collusion and corruption, at the expense of the public treasury. This is a foundational principle of modern tax administration. For recent supporting research evidence, see, e.g., Okunogbe and Pouliquen (2022).

normally registered,[4] and the registration of individuals is more the exception than the rule.[5] In sub-Saharan Africa, it is not unusual that only around 5 per cent of the adult population should be registered for tax. This is principally because most small businesses and individuals have earnings well below the tax threshold, and are not considered for tax registration. Evasion, and the inability of government agencies to access information on informal economic activities and employment relationships, also play a part. In poorer countries there are significant policy questions, without obvious answers, about how useful it is to put more businesses and individuals on the tax register.[6]

It seems obvious that any entity that has sufficient income or turnover to be potentially liable to pay tax should be included. But what about those entities that appear to be just below the various thresholds for actually paying CIT, PIT, or VAT?[7] A small vegetable shop owner seems unlikely to do enough business to be liable to pay any of these three taxes. Should they therefore be excluded from the tax register? The tax agency may not definitively know whether they are liable until they have registered and submitted a tax return.[8] So it is normal and sensible practice for tax agencies to mandate a threshold for registration (and receipt of a TIN and possibly an obligation to routinely file returns) that is lower than the threshold for paying tax. The businesses registered like this are unproductive in revenue terms, at least initially. But some are likely to grow, become liable for taxes, and thus produce revenue within the next few years. If they are registered now, and required to routinely to tax returns, they are kept on

[4] There are exceptions. e.g. in Ethiopia tax registration is effectively integrated with the issue of business licences, and coverage is very high.

[5] The only consistent and reliable data set comparing national rates of tax registration is in the regular Organisation for Economic Co-operation and Development (OECD) *Tax Administration* reports. It only covers PIT and mostly rich countries, but is adequate for our purposes. It illustrates the high correlation between income and the proportion of the population registered for tax. In 2023, 99 per cent of the adult population was registered for PIT in Austria and Finland. At the bottom end of the scale, the figures for (mostly middle-income) Colombia, Indonesia, Costa Rica, Argentina, and India were below 10 per cent (OECD 2023b: 38). We cannot do a similar exercise for CIT registration, because few countries have reliable comparable data on the number of companies in existence. The base number of potential VAT registrations in any country is very affected by the type of VAT in use, and the threshold for liability for VAT. This varies widely from country to country.

[6] There are variations between African countries in the extent to which income earned from small unincorporated businesses is regarded as profit or personal income for tax purposes.

[7] In many countries, the threshold for paying different taxes varies widely, so that, e.g., many companies that are required to be registered for CIT need not be registered for VAT. This is inefficient from the perspective of a tax administration.

[8] There is research evidence that taxpayers who do not file tax returns when initially liable to do so tend to continue as non-filers (Mascagni, Santoro and Mukama 2024). One alternative is to register them anyway, but then charge an annual presumptive tax on the basis of assessed likely business turnover or profit. Presumptive taxes have not generally proved very successful (Mas-Montserrat *et al.* 2023). They are not discussed further here.

the radar of the tax agency – and, it is claimed, become socialised into following the routines needed to make them good taxpayers in the future.[9]

A good tax register should at any moment include some unproductive taxpayers – individuals or companies who have no tax liability for the previous year or this, and may have none next year.[10] However, many national tax registers in sub-Saharan Africa and elsewhere contain a large proportion – and often large majority – of unproductive taxpayers. Most of the available evidence is summarised in Moore (2023):

> The only known attempts to carefully measure the incidence of unproductive taxpayers in sub-Saharan Africa have been made recently in eSwatini, Rwanda, and Uganda (separately for CIT and PIT)… The estimates of unproductive taxpayers as a proportion of all taxpayers range from 60%–90%, and average 73%... If the six countries cited above are representative of the region, then on average considerably more than half the taxpayers registered with national tax administrations are not paying taxes at all.[11]
>
> (Moore 2023: 4)

Some registered taxpayers are legitimately unproductive because they are not earning enough to be liable for tax. Others might be liable for tax in principle, but pay no tax because the tax agency either does not or cannot ensure that they actually submit (accurate) tax returns. Overall, there is an imbalance between: (a) the willingness – often eagerness – of tax agencies to register new taxpayers, and (b) their limited capacity to deal with already-registered taxpayers to make them productive in revenue terms. This behaviour has been termed the 'registration obsession' (Moore 2023).

The existence of so many unproductive taxpayers on tax registers clearly generates unnecessary costs. Taxpayers have to bear the cost of registering themselves, and possibly trying to de-register. De-registration is often a very time-consuming process (Mascagni *et al.* 2022). Tax agencies incur unnecessary costs

[9] There is a further technical reason for registering firms that appear to be below the threshold for actually paying taxes – to discourage larger firms from artificially dividing sets of economically integrated activities between legally separate firms that each fall below the tax threshold.

[10] The concept of unproductive taxpayers, in principle, excludes entities that: (a) normally have a taxable income but temporarily make a loss, cease trading, or have such low earnings that they are not liable for tax; or (b) are not liable for tax because they benefit from tax exemptions of various kinds, but are nevertheless required to file returns.

[11] The six countries are eSwatini, Ethiopia, Malawi, Nigeria, Rwanda, and Uganda. We find much the same in the records of the South African Revenue Service (SARS), which is widely considered to be the most effective tax agency in Africa. Over 3.5 million companies were registered for CIT in 2022. Only 29 per cent of them submitted a return and were assessed. Of those that were assessed, 79 per cent declared either zero taxable income or losses (SARS 2023: ch. 4). Overall, in 2022 only 6 per cent of companies registered for CIT were productive in revenue terms. The corresponding figures for PIT and VAT were similarly low. For similar information on Sri Lanka, see Moore and de Mel (2023).

in encouraging or forcing unproductive taxpayers to register, handling the tax returns that they submit, and sometimes trying to extract the tax returns that registrants are unwilling to submit. In the face of these costs, how can we explain the registration obsession? In particular, why do tax agencies that already have a large number of unproductive taxpayers on their books nevertheless undertake campaigns to further expand the register, when the likely outcome will be more of the same? We answer this question in Section 2.

Before this, we acknowledge that anyone who has read this far might be feeling a little confused about the term 'taxpayer'. Taken literally, it means someone who remits taxes due to the tax agency. If our small vegetable shop owner pays PIT, CIT, VAT, or some other tax in the 2024 financial year, they are without question a taxpayer. But, as explained above, many national tax registers contain a very large number of people or enterprises that remitted no tax in 2023 and will remit none in 2024, but are still called 'taxpayers' because they are registered. This ambiguous and confusing language is too deeply rooted to eradicate. This is one of the reasons why in this paper we use the terms productive and unproductive taxpayers where more clarity is needed. Productive taxpayers are actually remitting taxes in some current period. Unproductive taxpayers are registered, but not providing revenue.

2. Why are tax registers over-populated?

There are two aspects to this question. First, why do tax registers in sub-Saharan Africa often include a very large number of consistently unproductive taxpayers? Second, why do tax agencies sometimes push to expand registers that are already over-loaded with unproductive taxpayers? For present purposes the two can be treated as a single question. There are three parts to the answer:[12]

- First, in environments where personal ID is not easily verifiable, and other government agencies are not reliable sources of personal ID (see Section 4), tax agencies may be required to give tax registrations. These are sometimes followed by recurrent requests for tax clearance certificates (statements that tax obligations have been met) for non-tax reasons. Other organisations sometimes request evidence of registration (i.e. a TIN) or a tax clearance certificate as a condition for providing citizens or residents with, for example: a business licence; the right to bid for or receive a public sector contract; the issue or renewal of a passport; motor vehicle registration; or professional registration, as a licenced doctor, dentist, engineer, or accountant.[13]
- Second, the annual number of new taxpayer registrations has become a widely-used performance indicator for tax agencies – sometimes with encouragement from aid agencies funding revenue projects (Moore 2023: 6-7). There are several reasons for this. Superficially, new registrations seems to be a plausible performance indicator, and a way to recruit more productive taxpayers. It is a relatively soft performance target, easier to achieve than a significant increase in revenue. A larger number of registrations gives the managers of tax agencies and their political leaders something to boast about. They can also be a way of justifying additional remuneration for tax agency staff. Malawi Revenue Authority staff are given bonuses for registering new taxpayers, regardless of whether these registrants go on to file returns or pay taxes.[14] African tax agencies have often been criticised for an excessive focus on meeting revenue collection targets, at the expense of building

[12] These are in addition to the reasons given in Section 1, as to why all tax agencies typically register some taxpayers who are unlikely to earn enough to be immediately liable for tax.

[13] Tax agencies themselves, or ministries of finance, sometimes mandate these registration requirements in the belief that this will lead to greater tax collection. However, if tax registration for non-tax purposes is not validated by some other reliable form of ID, there is no guarantee that the personal details will be accurate. Some registrants will avoid giving accurate details if they can. An employee of the Malawi Revenue Authority reported in a survey conducted in 2023 that people with a tax registration sometimes allow others to use it temporarily for particular purposes, like applying for a government contract (Sulu pers. comm. 2023).

[14] Sulu pers. comm. 2023.

organisational capacity or encouraging voluntary taxpayer compliance. Targets for new registrations might appear to represent a welcome broadening of performance criteria.[15]

- Third, in Africa and elsewhere there is a deeply-embedded perception that there is enormous potential to raise additional revenue from the allegedly under-taxed or un-taxed 'informal sector', understood mainly as small- or micro-scale enterprises. This perception is misleading – people and enterprises in the informal sector often pay a considerable amount of tax, and the potential to raise more from the mass of poorer people is very limited (Bak and van den Boogaard 2023; Gallien, van den Boogaard and Moore 2021). It nevertheless justifies trying to register as many of them as possible.[16]

We broadly understand why tax agencies in sub-Saharan Africa often register many more taxpayers than they can actually tax. But the excessive number of registrations helps generate inaccuracies in the registration data through channels that are explored in Sections 3 and 4. We begin by looking at substantial accumulating evidence that the data in tax registers in sub-Saharan Africa is often of very poor quality.

[15] One way to increase the number of registered taxpayers very quickly is to declare a tax amnesty. This essentially involves the tax agency foregoing any claim on past taxes if the taxpayer registers and begins to file returns. The number of registered taxpayers in Nigeria increased by 37 per cent after the Federal Inland Revenue Service declared a tax amnesty in 2016 (ATAF 2019: 162).

[16] There is almost certainly a degree of self-interest underlying this perception. It probably reflects the resentment of tax-paying firms, which feel they suffer from market competition provided by tax-avoiding informal sector enterprises. Recent research in Addis Ababa provides direct evidence of this phenomenon (Yiman, Asmare and Moore 2023). Less directly, the narrative of the under-taxed small-scale informal sector helps divert attention from the tax evasion and avoidance practised by economic and political elites (Moore 2023).

3. Registration data quality

In 2018, a group of staff of the Uganda Revenue Authority (URA) undertook a thorough evaluation of the quality and accuracy of the information in their tax register. The URA had for some years placed a strong emphasis on increasing the number of registered taxpayers. In the preceding 8 years this had increased by a factor of 70. Nearly all the new registrants were individuals. There was little change in the number of companies or other organisations on the register. The size and speed of the increase in individual registrations helps explain the very high level of inaccuracies identified. In sum:

- 44 per cent of registered taxpayers had contact details (phone numbers, email addresses) identical to those of at least one other taxpayer on the register.
- 16,017 individual taxpayers recorded the same national identification number; 6,173 had the same passport number; 3,360 shared a single email address; and 1,742 gave the same phone number.
- At least 2.4 per cent of individual taxpayers – but very few companies – possessed more than one TIN.
- 16 per cent of TINs were out of date (Mayega *et al.* 2019: 9, 12 and 13).

The URA staff who examined the tax register 'found that three categories of people contribute to the errors found in the taxpayer register: taxpayers themselves, URA staff, and tax agents' (Mayega *et al.* 2019: 14). In particular, the many duplicate identities and contact details in the tax register reflected the fact that tax agents frequently took control of communications between 'their' taxpayers and the tax agency by registering themselves as the taxpayer.[17] Much the same picture of serious unreliability emerges from more recent investigations of URA data (Scarpini *et al*. forthcoming).[18]

Another group of researchers recently published a report on management of data in the Senegalese Revenue Authority, on the basis of information collected while undertaking several research projects with Authority staff over a five-year period. The summary of their report on the tax register shows:

> a central registry that is out of date (with 40 per cent of taxpayers listed never having submitted a tax declaration, and an additional 20 per cent not having declared in the last four years), and the use of several parallel non-

[17] We do not explore this issue further in this paper, although it seems to be widespread. A large proportion of taxpayers seem to use tax agents (Occhiali and Kalyango 2021: 21).

[18] In 2023, following further rapid expansion of the URA's tax register, Adrienne Lees organised a survey of 3,800 businesses registered for tax. About 30 per cent of the selected businesses had either closed or never started operations, and enumerators failed to trace another 30 per cent largely because of incomplete or incorrect contact information (Lees pers. comm. 2023).

> synchronised registries (plagued by issues such as duplicate entries) for day-to-day operations at the tax centres… Complementary information on taxpayers, such as sector of business and tax regimes is often inaccurate or incomplete…
>
> (Czajka *et al.* 2022: 7).

Similar data management problems were identified in Malawi (Ligomeka 2019: 14-16).

Another kind of evidence about the unreliability of data in tax registers comes from assessments of the quality of national tax administration conducted by the Tax Administration Diagnostic Assessment Tool (TADAT) Secretariat since 2012.[19] By March 2020, TADAT had completed assessments for 28 national tax administrations in sub-Saharan Africa, and kindly released the results to the ICTD for research purposes.[20] TADAT teams give a numerical score from 1 to 7 (highest) for assessed performance in relation to each of 28 main tax administration functions, which they call high-level indicators. One of the twenty-eight high-level indicators relates precisely to the quality of tax register data: *P1-1 Accurate and reliable taxpayer information* (https://www.tadat.org/home). The average score across the 28 countries for this indicator is very low – 1.6. By contrast, the average score for all 28 indicators across the 28 countries is 2.4.[21]

There is therefore strong evidence of problems with the quality of taxpayer registration data in sub-Saharan Africa. We now turn to the causes.

[19] The TADAT Secretariat is based in the International Monetary Fund (IMF).

[20] These 28 countries are broadly representative of sub-Saharan Africa: 14 are anglophone, 11 francophone and 3 lusophone.

[21] Only 3 of the 28 high-level indicators receive a lower score than the 1.6 allocated to *Accurate and reliable taxpayer information*. These are: *P4-10 Online filing rate*, *P7-20 Time taken to resolve disputes*, and *P8-24 Adequacy of tax refund processing.*

4. What explains the poor quality of tax registration data?

There are two broad dimensions to the answer. The first starts from observations in Section 2 – that African tax agencies often register as taxpayers businesses or people from whom they do not actually expect to collect revenue, through:

- The requirement to provide TINs (and possibly tax clearance certificates) that are (solely) used as a form of ID in some other bureaucratic context, such as issuing a passport or eligibility to tender for a government contract.
- The incentive to increase the number of registered taxpayers, because this is widely accepted as an indicator of good organisational performance.
- The political temptation to (simply) increase the number of registered taxpayers in response to the widespread (elite-level) perception that there is a large informal sector that is not paying tax, and should do so.

Motivated or pressured to register a large number of businesses and people that are unlikely to become productive taxpayers, tax agencies have little incentive to make the organisational and personal efforts needed to: (a) ensure that new ID registration details are correct, and (b) routinely update these details. Mayega and colleagues explain how, when the Uganda Revenue Authority was heavily focused on the very fast expansion of its tax register, registration procedures prioritised economy of effort over verification and accuracy (Mayega *et al.* 2019). The more straightforward deficiencies were:

- It was easy to bypass the mandatory requirement to give a phone number by just entering any string of digits on the registration form.
- While new registrants were required to give details of their business registration certificates, there was no check on the validity of these details.
- Newly-employed registrants were required to give their employer's TIN, but any issued TIN would be accepted without checking the actual owner. Some registrants falsely declared that the Revenue Authority was their employer.

In addition:

> the system sends a warning to the TIN-approving officer if someone tries to register for a TIN which is already in use. The officer has the power to reject or approve the duplicate TIN. Our research indicates that 49 per cent of the duplicate TINS failed the system duplicity check, but staff went ahead and approved them. This could be for two reasons. First, URA staff tend to view service management placements, such as in taxpayer registration and call centre management, as inferior and not commensurate with their educational qualifications and professional standing and, as such, they give

> it less care… Second, TIN-approving officers are appraised on the basis of the number of TINs approved, and not on the quality of their work. (Mayega *et al.* 2019: 14-15).[22]

The second dimension to the answer is that the relatively low level of digitalisation of tax administration processes in sub-Saharan Africa reduces the pressure to maintain accurate tax registers that can be observed in higher-income (and more digitised) environments. We can best explain this in four stages.

First, compared to tax agencies in high-income countries, those in sub-Saharan Africa make limited use of third-party data to identify businesses and individuals who are potentially liable for tax, or to cross-check the validity of tax returns (Scarpini *et al.* forthcoming). Tax agencies do not access on a large scale information from: electricity or water utilities; issuers of business licences, passports, property titles, or motor vehicle registrations; banks; public sector procurement contracts; company secretaries; professional registration or membership organisations (medical professions, engineers, accountants, etc.), and sometimes not even their own customs departments.[23]

Second, trying to find matches in large amounts of written data is virtually impossible. Digitisation is essential for accessing third-party information on a significant scale. But inaccurate digitised information not only makes attempts to match third-party data more difficult and less fruitful. It also exposes the originators of inaccurate data to potential embarrassment in the eyes of the other organisations with which they are sharing data. A virtuous circle binds digitisation, data accuracy, and the use of third-party data.

Third, a similar virtuous circle binds digitisation and data accuracy with data analytics internal to tax agencies. Although it is fast changing, African tax agencies currently tend to undertake little analysis of the data they collect when registering taxpayers and receiving tax returns. They typically do not cross-check data on individual taxpayers by matching data coming from different sources. Neither do they undertake statistical analysis to determine, for example, which individual taxpayers or taxpayer categories are most likely to evade tax (Czajka *et al.* 2022; Ligomeka 2019; Mayega *et al.* forthcoming). They are not under pressure from their own data analysis specialists to ensure accuracy of taxpayer

[22] An employee of the Malawi Revenue Authority reported in a survey conducted in 2023 that the staff responsible for new taxpayer registration tend to be new recruits who do not understand taxation, and register too many taxpayers without explaining the implications of registration (Sulu pers. comm. 2023).

[23] A recent thorough study of data management in the customs section of the Uganda Revenue Authority (Mayega, Waiswa and Nabuyondo forthcoming) examines all import and export declarations for year 2021-22. Only 66 per cent of import declarations and 10 per cent of export declarations included a tax identification number (TIN), which, if accurate, could make it possible to verify the identity of the trader easily.

ID data – or indeed other kinds of data – at the point of entry, or to update it regularly.

Fourth, and more tangibly, tax agencies in sub-Saharan Africa and other low-income regions typically create and maintain their own ID database, rather than use the cross-government ID databases that are the norm in high-income countries – to which multiple government agencies contribute information, and on which they rely for ID information.[24] Cross-government ID databases are intrinsically superior. One reason is that they are likely to be checked and updated more frequently – potentially each time a citizen is issued with, for example, a citizen ID, motor vehicle licence, social security number, property title, business licence, passport or import or export clearance from customs; and perhaps also a water or electricity connection, or share certificate. The second reason is that the shared nature of a database imposes discipline on the agencies that use it. They are under pressure to input reliable data, because they are otherwise likely to be exposed to the other agencies using the ID database, and risk attracting attention, queries, or blame.[25]

In sum, the data in African tax registers is likely to be relatively inaccurate for two interacting sets of reasons:

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[24] Of the 50 (almost entirely high-income) countries covered in the OECD's *2022 Tax Administration* report, 70 per cent had at least 1 cross-government ID database. In addition to tax registers, they were especially likely to connect business registers, population registers, motor vehicle registers, and property registers (OECD 2022: 47). The OECD's *Inventory of Tax Technology Initiatives* has information on 80 countries relating to 2022. Of these, 52 countries had digital personal ID systems for use in tax administrations. In the 30 European countries among that 52, the provision of a digital tax ID was rarely a matter for the tax agency alone. In 13 countries it was issued by another, non-tax, agency. In another 13 countries it could be issued either by the tax agency or by a non-tax agency. Only in four countries could the ID used in tax administration be issued solely by the tax agency. There is a marked contrast with the seven sub-Saharan African countries included in the survey. In six of them, the tax agency was solely responsible for issuing digital IDs for tax purposes. The exception was the Seychelles, where this task was shared with another government agency. Similarly, tax agencies were solely responsible for issuing tax-related digital IDs in almost every low-income Asian country in the list (OECD 2023a: Table DI1 Digital identity (DI) - Usage and Coverage: Individuals).

[25] This point is grounded in a set of ideas first articulated by Albert Hirschman (1967: ch. 3), and later developed by other scholars, notably Arturo Israel (1987: chapter 5): the incentives and disincentives for effective organisational performance that stem from the specific material and organisational features of particular tasks or missions. The essence is contained in Israel's explanation of why aircraft maintenance work tends to be done to a very high standard. Any slippage of standards is likely to produce an outcome – an air crash or something close – that is immediate, dramatic, costly, and easily traceable in terms of cause. In the language that Hirschman uses, there are very strong **disciplines** – well-grounded fears of accurate and immediate identification and sanctioning – that lead aircraft maintenance engineers, their supervisors, and their employers to ensure that maintenance is done very well. By contrast, a school careers adviser, for example, enjoys very wide **latitude** in their work. The quality of careers advice they give to students is only one of many factors that shape their career outcomes, and any effect it may have becomes evident only after many years. Their work cannot be evaluated on the basis of the outcomes that matter. Beyond observing whether they behave appropriately, their supervisors find it very hard to judge how well they are performing.

- First, tax agencies are required or motivated to make entries on the register that have little, if any, connection to the achievement of their revenue collection targets. They are not, in consequence, strongly motivated to ensure the accuracy of these entries, or to update them regularly.
- Second, they are not (strongly) subject to the pressure to maintain register accuracy that arises from operating in a highly digitised environment, and, more particularly, in interfacing their own software systems with those of other (public sector) agencies.

5. Why are registration problems overlooked?

There is an element of 'chicken and egg' about the arguments in the previous section. Tax agencies do not give priority to data accuracy because they are not more digitised; they are not more digitised because of the obstacles created by unreliable data. The various tax registration problems we have discussed – especially the problem of poor quality data in tax registers – will very likely be reduced, almost naturally, as the economies and tax administration systems of sub-Saharan Africa become more digitised. And particularly when tax agencies interface and cooperate more with other organisations to collect tax-related data and establish personal and business IDs. But that will take time. In the meanwhile, there are serious problems with registration processes and data that reduce the overall effectiveness and efficiency of revenue collection. These problems are clearly significant in sub-Saharan Africa and other low-income regions. But they are rarely raised in national and international professional and policy discussions. Very little has been written on them.[26] Why this neglect? There are probably two parts to the answer.

First, as is implicit in the information given earlier, the perverse interaction of excessive numbers of unproductive registered taxpayers with poor quality tax register data seems largely confined to lower-income countries. It does not represent a significant problem for most tax agencies in rich countries.

Second, most national tax agencies, in both rich and poor countries,[27] have in recent decades come to subscribe to a broad consensus about how they should organise to collect taxes.[28] But the national tax agencies of rich countries and the international organisations over which they have considerable influence, notably the IMF and OECD, but also the Inter-American Center of Tax Administrations (CIAT), Intra-European Organisation of Tax Administrations, and the World Bank,

[26] e.g. the relatively large and well-resourced African Tax Administration Forum has since 2016 published its annual *African Tax Outlook*. Based on repeated surveys of member tax administrations, it is similar to the OECD's near-annual *Tax Administration* report. The problems with tax registration discussed in this paper have not been addressed in *African Tax Outlook.*

[27] Including China (Cui 2022: 32-48).

[28] These include: VAT; arms-length pricing for cross-border transactions between related parties; a shift in focus from direct across-the-board enforcement to facilitating compliance on the part of the taxpayer, and placing more trust in the taxpayer through self-assessment; more emphasis on risk-based audit; eliminating direct interpersonal contact between taxpayer and tax collector; structuring tax agencies less by type of tax collected and more by size of taxpayer (segmentation); reducing the number of agencies each collecting different types of tax; and strengthening non-collection functions like performance analysis, treasury management, internal anti-corruption operations, human resources, information technology, and taxpayer education.

have played a major role in shaping this consensus (Fjeldstad and Moore 2009). They inevitably prioritise their own perspectives and concerns, which do not include issues around the accuracy and integrity of tax registers, and, more broadly, the registration obsession and prevalence in many tax registers of unproductive taxpayers.

A recent global-level initiative to collect better data on national tax administrations only touched lightly on registration issues, and in a way that generates nonsense data. We refer to the International Survey on Revenue Administration (ISORA). This is a regular questionnaire-based survey to generate comparable data on national tax administrations globally.[29] ISORA does include questions using the terms active and inactive taxpayers, which are broadly equivalent to our concepts of productive and unproductive taxpayers. However, it phrases these questions so loosely that the figures generated on numbers of active and inactive taxpayers are largely meaningless. In the report of the first ISORA survey, relating to 2016, there is a discussion about why so many national tax administrations reported identical numbers for active taxpayers and total taxpayers. The answer given refers to the use of what ISORA regards as the standard definition of active taxpayers: ‘a taxpayer from whom a return is expected’ (Crandall, Gavin and Masters 2019: 63). But that definition is highly ambiguous. Expected by whom? Under what circumstances? The number or proportion of active taxpayers is not a standard concept or statistic in tax administration.[30] It is not surprising that, if tax agencies respond to questions about the concept, they simply report the same number for active and total taxpayers.

If the issues around tax register accuracy and excessive numbers of unproductive (or inactive) registered taxpayers had been salient in higher-income parts of the world, they would probably have received earlier and more attention from global-level organisations, and then in lower-income countries.

[29] ISORA is managed from the IMF, and also sponsored by the Inter-American Center of Tax Administrations, Intra-European Organisation of Tax Administrations, OECD, and the World Bank. The centre of gravity of this group of organisations is in the global North. In quality, coverage, and accuracy, ISORA remains much inferior to the OECD’s recurrent *Tax Administration*, which covers mainly OECD member states.

[30] The technical advice from the IMF is that ‘inactive’ should be distinct status, granted when it is clear that the taxpayer is going out of business and has no filing obligations. It is a step on the way to complete de-registration (IMF 2019: 20-21).

6. Improving registration policy

We can be fairly confident that the registration problems we discuss here will diminish as African tax agencies further digitise their operations – and especially as they interface more with other (mainly government) databases, including cross-government ID databases. But they cannot simply wait until the digital tide comes to the rescue. Many are taking some steps to tackle registration problems – even if the full extent of these problems is rarely acknowledged, and perhaps often not understood. Drawing on the practical experience of the three tax administrators among the authors of this paper, and recent research on registration issues in Africa conducted mainly through the ICTD, we offer some guidance on how more effective registration procedures might be put in place in the relatively short term. We group our suggestions into three categories: practices to avoid, practices to be wary of, and positive lessons to build on. Before presenting them, a few comments are in order:

- There is a very simple abstract answer to the question of which businesses or individuals should be registered – those that are likely to be liable for tax now or in the foreseeable future. Registration should be all about targeting. The challenge is to target effectively.
- Targeting is necessary in sub-Saharan Africa and other low-income environments because the great majority of individuals, and a substantial proportion of businesses, have low income or turnover, are not tax liable, and should not appear as clutter on the tax register.
- There are considerable differences between African national tax agencies in formal registration procedures, actual registration practices, and in the degree and type of digitisation. Our policy suggestions are inevitably broad, and would need tailoring to specific environments.
- The detailed empirical research into actual registration practices that helped to stimulate this paper is nearly all very recent. Among other things, it suggests that: (a) registration practices are diverse, and influenced by complex interactions between a number of different parties – notably tax agency managers, their staff, political leaders, tax advisers, and taxpayers themselves; and (b) taxpayers themselves often have very little understanding of the formal procedures that are supposed to govern registration and the filing of tax returns, and often simply do as instructed by tax collectors and advisers (Beach 2018; Mascagni *et al.* 2022). More research might lead to further policy conclusions. We know enough, from the research literature and our own professional experience, to make some immediate practical policy recommendations.

6.1 Practices to avoid

1. **There is no justification for recurrent in-the-street campaigns designed to register large numbers of new taxpayers.** Some African tax agencies still organise registration campaigns that might, at best, be appropriate in circumstances of political and institutional instability – especially post-conflict situations – where information about the potential tax base is very scarce. Campaigns involve targeting urban blocks sequentially, and sending in task forces every day to check the tax registration status of all identifiable (small) businesses, and collect the data needed to register the un-registered. An excellent study of one such campaign in Freetown, Sierra Leone in 2021 provides evidence that, as one would expect, the results of these campaigns are meagre (Gallien, Occhiali and van den Boogaard 2023). The data collected in these unscheduled street interactions is often inaccurate, and is anyway not in itself sufficient to generate actual new registrations. A further process was needed. Few new registrations were completed. The individuals for whom data was collected were mainly working in low-income occupations. For example, 72 per cent of the newly-identified businesses were retailers (Gallien *et al.* 2023: 12),[31] while higher-income activities, like finance and insurance, barely featured. The potential additional revenue is small. As was almost inevitable, most of the campaign staff were on short-term contracts. Their dominant motivation was to complete as many forms as possible. The process likely worsened relationships between the Sierra Leone Revenue Authority and the public.[32]
2. **Paying bonuses to tax agency staff to register new taxpayers is not justified** – unless these bonuses are directly tied to the amount of revenue collected from those new taxpayers over a subsequent period of several years.

6.2 Practices to be wary of

1. **Using the number of new taxpayer registrations as a performance indicator for either tax agencies or their staff is undesirable in most circumstances.** There are two (rather weak) arguments for using registration numbers as an indicator of organisational performance. One is that it

[31] For comparison, when staff members of the Malawi Revenue Authority were surveyed on these issues in 2023, they identified a number of categories of informal business that were especially likely to be liable for tax in principle, but physically elusive and therefore rarely registered. They included: loan sharks, online clothes retailers, wedding caterers, and decorators (Sulu pers. comm. 2023).

[32] The researchers suggest that there may have been positive benefits to the campaign in terms of 'familiarising many businesses with a revenue authority that they previously had very little engagement with' (Gallien *et al.* 2023: 3). There is, however, no evidence to support this claim, and no evaluation of the extent to which the exercise might rather have been perceived as harassment. People who had some warning of the impending arrival of the survey staff often quickly absented themselves (Gallien *et al.* 2023: 23).

represents some diversification away from an excessive or sole emphasis on the achievement of revenue collection targets. The other is that there will be individuals or companies who are (newly) liable and should be registered for tax, and this is a way of incentivising that. Conversely, the practice has perverse consequences, notably: (a) likely inflation in the number of unproductive taxpayers, and (b) the fact that this tends to disincentivise the use or development of procedures to ensure that new registrations are accurate.[33] Further, rewarding of tax agency field staff and supervisors for new registrations, whether through bonuses or inclusion of new registrations in individual performance targets,[34] is to forego an opportunity. Tax agency staff often have – or could acquire – knowledge about specific individuals and businesses that should be registered for tax, but are not. If their rewards for new registrations were tied to the revenue collected from those registrants over the next three or four years, they would have more incentive to target registrations productively.

2. **Simplified registration can be too simple.** As explained above, individuals and companies may require tax registration for non-tax purposes, and simultaneously wish not to be identifiable for tax purposes. Unless the initial registration process includes adequate identity checks these people may succeed in registering, and thus only clutter up the tax register. Registration campaigns, both physical and online/third-party, tend to generate similar inaccuracies. We summarise in Section 3 the procedural and behavioural failings that led to large-scale errors in the Uganda tax register mechanisms, when pressure was simply to expand the tax register.[35]
3. **Mass registration of new taxpayers using third-party (digital) data sources has potential costs as well as benefits**. The increasing scope to access and download third-party data of various kinds is one of the most significant contemporary sources of improvement in the effectiveness of tax administrations globally. When it comes to expanding and verifying the tax register, the major sources of third-party data in lower-income countries are typically: other government agencies dealing with business, professional, and driving licences, property and motor vehicle registration, passports, and government procurement.[36] Tax agencies would be remiss if they were not

[33] And, less directly, this may distract attention from facilitating de-registration when it is needed.

[34] When the Malawi Revenue Authority began in 2021 to implement a new presumptive tax on small-scale businesses, each staff member was given a target of registering 60 new businesses for the new tax (Sulu pers. comm. 2023). Research revealed that Rwanda Revenue Authority staff who conduct tax education classes for unregistered taxpayers sometimes put pressure on participants to register, even if their current circumstances do not warrant it (Mascagni *et al.* 2022: 10).

[35] The Uganda Revenue Authority has since tightened up its registration processes. Individuals – but eventually not companies – have, since 2022, been able register instantly online, but only by using their National Identification Number for validation.

[36] In some countries, an even more basic level of data integration, between different tax collection organisations, has still to be achieved. This is especially the case in the (mainly francophone) countries

attempting to access data from these sources. At the same time, the indiscriminate download of this data can be costly in terms of the work that it generates, relative to the number of new taxpayers identified. When the Rwanda Revenue Authority first interfaced with the IT system of the national business register, it obtained data on large numbers of people and enterprises who would never pay tax. In 2016 it undertook a separate exercise to clear these entities from the tax register. The Uganda Revenue Authority, which has been expanding its tax register rapidly for a long time, recently attempted to cast the tax net even wider by accessing the client lists of, in particular, the National Water and Sewerage Corporation (water bills), UMEME (electricity bills), the land registry, and various licensing authorities. The basic procedure was first to try to match the third-party data (names, telephone numbers, and email addresses) obtained from these other organisations with the information already in the tax register. If a match was not possible, the people and businesses concerned were 'forcibly registered' (the URA's term) for tax, issued with new TINs, and notified through text messages and emails. Forcible registration accounted for almost half of the very large increase in the total number of registered taxpayers in 2021-22 and 2022-23 (Scarpini *et al.* forthcoming).[37] Predictably, this very large increase in registration was not reflected in revenue collection. The registration was done by staff on temporary contracts, whose remuneration was tied to the number of new registrations.

6.3 Positive lessons to build on (targeting)

1. **Digital technologies do, however, make it increasingly easy to adopt a risk-based approach in using third-party data.** Like some other African tax agencies, the Rwanda Revenue Authority has developed risk-based rules within its digital systems that permit the selection of potentially productive taxpayers from government and other third-party databases with which it is able to interface. These rules may, for example, cross-check a taxpayer's credit or bank transactions against the VAT registration threshold, contributions towards pensions against Pay As You Earn (PAYE) records, or the value of reported imports against income and VAT registration thresholds. Those entities falling within the risk parameters are then prioritised for

where customs and one or more domestic tax departments remain separate within the Ministry of Finance. But even formal integration of all tax-collecting organisations into a semi-autonomous revenue agency, which is prevalent in anglophone Africa in particular, does not necessarily result in effective data integration. There are repeated accounts of large-scale importers who feature prominently in customs records, but are not even registered for PIT, CIT, or domestic VAT.

[37] In response to complaints, the URA management temporarily stopped the forced registration exercise, and advised that people should first be contacted to confirm that they are not already registered, before they are added to the register.

registration. A similar analysis might determine, for example, that information about the customers of electricity utilities should be accessed by the tax agency (only) after monthly electricity consumption exceeds a threshold – say 100 kWh – that suggests that these consumers might be liable for tax in terms of income or business turnover.

2. **Make de-registration easier for taxpayers**. We know from a range of sources that businesses typically find it hard to de-register. Tax agencies often place on them the burden of proving that they are no longer operational. This difficulty, in turn, encourages some businesses routinely to submit nil returns because they believe that this will decrease the chance that they receive attention or a visit from a tax collector (Mascagni *et al.* 2022: 9). Processing these nil returns represents a cost to the tax agency, as well as the taxpayer. This captive-like situation can only have negative effects on popular perceptions of the tax system. There are not yet many African tax agencies that have a taxpayer registration manual with, for example, clear definitions of active/inactive/dormant taxpayers, and clear criteria for deregistration.
3. **There may be considerable benefits to expanding the currently few records of people paying PIT through PAYE.** In low-income countries, the proportion of the population registered for PIT is often very low (Section 1). But even these figures are often a considerable exaggeration. Many – and sometimes a majority – of the people nominally registered for PIT are only connected to the tax agency through the PAYE system. Their employers deduct from their pay the PIT due from the remuneration in that particular employment, and remit that money directly to the tax agency. Employers submit an annual (or quarterly or monthly) report to the tax agency, which includes a list of employee names, figures on gross salary and tax deducted, and sometimes a few personal details like age and address. But the employees do not have TINs, and are thus not tax-registered in the full sense of the term (e.g. Mengistu and Mascagni 2018). Crucially, this means that the tax agency has no means of easily identifying the individual employees under PAYE, and building up a full picture of their earnings from other employment, property, or financial investments. Most public and formal sector employees in sub-Saharan Africa earn relatively high salaries, and would probably be liable for tax on their other income. Requiring all PAYE-payers – or at least those earning high incomes – to be registered for TINs would generally be a desirable way of expanding the tax net. The Kenya Revenue Authority has taken this path. Employers are now required to deduct and submit a PAYE return on a monthly basis, indicating the employee name and their TIN. The employee is also required to submit an annual tax return showing all income –

including that from formal employment, from which PAYE was deducted and paid by the employer.[38]

4. **Mandatory registration of certain categories of professionals is sensible in some circumstances.** We know that relatively highly paid professionals, like medics, engineers, accountants, lawyers, performers, and consultants of many kinds, are often able to evade tax, either by avoiding registration or by under-declaring income (Kangave *et al.* 2016; Ogembo 2020). These people are often self-employed, and may take much of their remuneration in cash. In these circumstances, it may make sense to require members of certain professions to register for taxation. Where membership of – or certification with – a professional body is a requirement to practise the profession, that membership/certification might itself carry an obligation to register. It should then be possible to obtain the cooperation of the professional body – such as the Medical Council or the Institute of Chartered Accountants – in ensuring registration.[39] Mandatory registration does not directly address the problem of non-filing of tax returns or under-declaration of tax liabilities in filings, but it does provide a useful starting point, and is much more targeted and strategic than mass registration campaigns.
5. **There are high potential returns from identifying urban property rental transactions.** The renting of commercial and residential property – especially to expatriates and foreign-based organisations (embassies, international organisations, non-governmental organisations, and overseas companies) – is known to be a significant source of income for wealthier people in African cities. Many of these transactions are not declared at all, or the amounts are under-stated. Although the property assets are relatively visible and easy to track down physically, the rental transactions are largely informal from the perspective of a tax agency. A number of African countries have legislation mandating the reporting of private property rental agreements to the tax agency – by landlord, tenant, or both. In Rwanda it has been mandatory since 2018 to report within 15 days of signing an agreement. These laws are not, generally, very effective. Landlords have an incentive to discourage their tenants from accurately reporting the identity of their landlord. In Uganda, landlords are required to provide the TINs of tenants from whom they receive rent. A scrutiny of tax returns in 2020 revealed that landlords failed to provide accurate TINs for 85 per cent of the tenants from whom they received rental income (Mayega *et al.* 2021: 16-22). Deploying more tax administration resources to obtain accurate information, especially for expatriates and foreign tenants, is likely to be very worthwhile in revenue terms.

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[38] The Uganda Revenue Authority has recently made it mandatory for employers to add the TIN details of employees in monthly PAYE returns. The employees, however, are not required to file their own individual returns, unless they have more than one employment or have business income.

[39] The Government of Sri Lanka adopted a variant of this strategy in 2023, as originally proposed by Moore and de Mel (2023).

6. **Local offices of large international organisations are potentially a major source of information on taxable income.** In African capitals, overseas embassies and offices of international organisations are typically large-scale employers, and procure a wide range of services from local suppliers (transport companies, builders and building services providers, security companies, hospitality providers, NGOs, consultants, etc.). Requiring them to report all local employment and procurement can considerably expand the tax net in a positive way. Recently in Rwanda the US Embassy alone helped provide information that led to around 3,000 additional people paying PIT through PAYE.

7. Concluding comments

There is considerable scope to improve the way taxpayers are registered in Africa. The essence of this improvement is a shift from valuing the number of registered taxpayers, regardless of whether they are productive or non-productive, to focusing on the registration of (only) taxpayers who need to be registered. Above all, to focus on those likely to be liable for tax, and thus productive. To some extent this is happening anyway because of digitalisation, especially the increasing scope to interface the digital data systems of tax agencies with those of a wide range of other organisations. This interfacing provides discipline – an incentive to pay more attention to data accuracy, and potential penalties for failure to do so. But there is no need to wait for these contextual factors to work their magic. There are a wide range of measures that tax agencies can take in the short and medium term to ensure that more of the businesses and people who should be paying taxes actually get onto the tax register.

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