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Working Paper 77

Tax in Development: Towards a Strategic Aid Approach

Olav Lundstøl

May 2018

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ICTD Working Paper 77
First published by the Institute of Development Studies in May 2018

ISBN: 978-1-78118-439-4

Available from:
The International Centre for Tax and Development at the Institute of Development Studies, Brighton BN1 9RE, UK
Tel: +44 (0) 1273 606261
Email: info@ictd.ac.uk
Web: www.ictd/en/publications

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Charity Registration Number 306371
Charitable Company Number 877338

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Olav Lundstøl

Summary

Raising a higher share of the value added in an economy for the public purpose is associated with state building, modern economic growth and development. From 2002-3 to date, low- and lower-middle income countries raised total tax and non-tax revenue from 11-12 per cent and 18-19 per cent of GDP up to 17-18 per cent and 25-26 per cent of GDP in 2014-15. Continuing to improve tax systems is key to realising the development dividend available today through improved technology and institutions, whereby it is possible to raise living standards faster and at lower cost. The remaining development challenges are significant for the majority of the world's population and therefore the Sustainable Development Goals (SDGs) were agreed in 2015 to address these challenges. The majority of the financing for the SDGs must come from domestic sources (as it did with the Millennium Development Goals, with a 77 per cent share). This being the case, it is surprising that in 2015 only 0.13 per cent of global official development assistance was utilised to promote improved tax and revenue systems. With the Addis Ababa Agenda and the Addis Tax Initiative, this is changing, and several donors and partners are in the process of scaling up support to domestic resource mobilisation and tax system reforms. Therefore, it is of relevance to share some thoughts on the underlying objectives and justification for raising domestic revenues, experiences with revenue and tax-related aid, and a first-level layer framework for assessment of potential partner countries (low- and lower-middle). A ranking exercise is presented, utilising some key economic indicators such as income, poverty, financing levels of expenditure and investment (domestic and foreign), tax effort, tax aid, and a political and institutional assessment. This paper finds a significant group of developing countries that receive limited assistance and have both large needs and large potential in terms of tax and revenue. The top ten countries are in sub-Saharan Africa. Links are provided to the Norwegian partner country categorisation to illustrate the correlation between these two types of country ranking/prioritisation. Finally, other factors relating to donor-partner analysis and dialogue are discussed, including political and administrative prioritisation of revenue reforms, absorptive capacity in institutions, and the likelihood of particular interventions delivering results.

Keywords: development; financing; tax; aid.

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Acknowledgements

The author is grateful for collegial comments on prior drafts, from Håkon Mundal, Lars Loe and Knut Thonstad in Norad in particular. He also recognises the very helpful guidance and comments from external peer reviewers and Mick Moore at the ICTD in particular. Likewise professional editing services from Jane Belton are gratefully acknowledged.

The views and opinions expressed in the report do not necessarily correspond with those of Norad. Responsibility for the contents and presentation of findings and recommendations rests with the author.

Acronyms

ATI	Addis Tax Initiative
CPIA	Country policy and institutional assessment
DRM	Domestic revenue mobilisation
FDI	Foreign direct investment
GDP	Gross domestic product
IMF	International Monetary Fund
ISORA	International Survey on Revenue Administration
LIC	Low-income country
LMIC	Lower-middle-income country
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
RA-FIT	Revenue Administration Fiscal Information Tool
PFN	Public finance management
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
WB	World Bank

Introduction

This discussion paper represents a working document which briefly summarises:

- evidence and arguments for the importance of tax[1] in development;
- tax and the financing of the Sustainable Development Goals (SDGs) agenda;
- status, cost effectiveness and principles of tax aid in development;
- a basic framework for assessment of partner countries for tax aid;
- elements of further donor-partner country dialogue and identification for tax aid.

It is important to emphasise that this document represents one element of work in the development of a Norwegian strategy, plan and institutional response to the Addis Tax Initiative commitment made in 2015. It is hoped that this may be of interest to both donor and partner countries, as well as to the overall international community involved in development. Today, many donors and partner countries are currently engaged in different forms of preparations for scaling up their aid in the area of tax and non-tax related public revenue assistance.

The paper presents a first-level layer of assessment of the need and potential for tax aid[2] as seen through a set of economic indicators. The emphasis is on a country's ability to finance both the state budget and related key private expenditures (of households and businesses). Further assessments are obviously necessary, and for many donors, it is likely that the process to identify potential partner countries, public revenue themes and ways to deliver such aid will be decided based on, for example, proven partner country commitment to public revenue reforms and absorptive capacity, as well as an assessment of likelihood of positive results.

Following the basic framework developed in this paper to scope the need and potential for tax aid in developing countries, others may want to extend and/or adjust this to include other criteria. Other tools typically utilised include external country assessments; national development and revenue strategies and plans; diagnostic assessments of tax administration and policy, and domestic versus international tax issues; recent collection and use of public revenues; and political economy and institutional studies.

1 Fundamentals of tax in development

1.1 State, modern economic growth and revenue

The payment of tax has long been associated with a country's degree of societal organisation as well as with increased use of rule-based institutions. Tilly (1992) provided a millennial perspective focusing in particular on taxation in state building in early modern Europe from A.D. 990-1992. State financing, military power and security for citizens and inhabitants in specific geographic areas was central. However, why is there really a need for taxation? In principle, both the private and the public sector can utilise available resources (natural and manmade) to carry out tasks and to produce goods and services. In some areas, this can be delivered more effectively by the public sector than by each individual or by firms. This has to do with market imperfections (information and coordination failures),

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1 The term 'tax' is herein used somewhat interchangeably with domestic revenue mobilisation (DRM), revenue and public revenue throughout the document. We highlight the difference in particular as it relates to tax or revenue estimates and targets, to emphasise what is included.

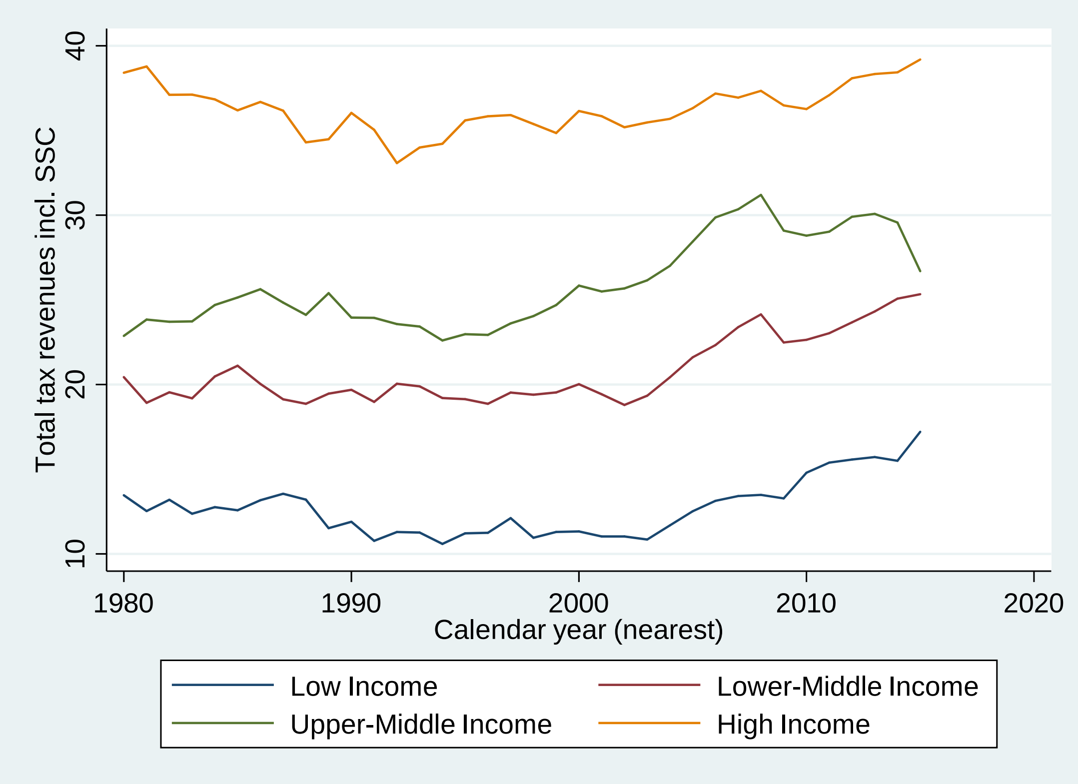
and the public good characteristics present in some goods and service areas. Among these are, for example public safety, law, infrastructure, education, health, and providing an enabling and regulatory framework for citizens and businesses.

As shown by Lindert (2004), in most developed economies, modern economic growth from the late nineteenth century went together with much higher ratios of total public revenue (tax and non-tax) to income. A radical example of this is the case of public spending in the social sectors in Europe and the USA, which increased from 1 to 25 per cent of GDP from 1900 to 2000. The relationship of civil rights and duties within a jurisdiction is at the centre of the social fiscal contract between citizens and rulers. Different selection and election processes can show citizens' revealed preferences in terms of governments that can provide them with the best goods and services for the least cost (tax), but these systems depend on access to and use of the right to vote. The connection between tax and governance manifests itself in different ways. Moore (2008) summarises three. The first is continuous bargaining between citizens and the state, where the payment of tax and the delivery of public goods and services are at the centre. The second is through the state's incentive to promote growth because public finances depend on it through tax. Finally, tax collection critically depends on the quality of institutions and organisations.

1.2 Revenue capacity and potential in developing countries

Revenue collection, as a share of gross domestic product (GDP), tends to rise with higher income levels (see Figure 1 below). Similar to the experience referred to above for developed countries, recent literature clearly strengthens the argument for stronger revenue systems in developing countries also, to promote service delivery and development for the majority. According to the International Monetary Fund (IMF), increased tax capacity up to certain levels has also been associated with higher rates of economic growth for both developed and developing countries (Gaspar, Jaramillo and Wingender 2016). Meheus and McIntyre (2017) provide recent global data showing that there is not a 1:1 relationship between the level of GDP and public revenues (which in this case includes social contributions, grants and other revenues as well as tax). They do find a positive but somewhat weak relationship, however, with a correlation of 0.387 on average. This finding relates both to fundamental differences in the structure of the economy and its governance, as well as policy and compliance. The collection of tax is often positively associated with improved overall governance including, specifically, democratic accountability and lower corruption. For the period 1990-2005, this holds on average across sub-Saharan Africa (SSA), according to a study by Baskaran and Bigsten (2013).

Figure 1: Global tax revenue levels (including social security costs – SSC[3]) as a percentage of GDP by country income group



Source: Jukka Pirtilla, Thinking of WIDER Tax Research, UNU-WIDER Presentation, October 2017

There is a longstanding discussion about what represents an appropriate level and composition of tax revenue considering different factors such as effectiveness in the delivery of services and goods, economic growth and sustainable development. It is unlikely that there is one answer to this question that applies across time and place as both the efficiency and effectiveness conditions can fundamentally change.

Despite this, there is today mounting evidence that tax collection levels below 15 per cent of GDP[4] tend to be insufficient to establish and maintain a minimum welfare state, to promote sustained economic development (World Bank 2017b). Manuel and Hoy (2015) indicate a median revenue capacity (tax and non-tax) requirement of 18 and 26 per cent of GDP for low-income countries (LICs) and lower-middle-income countries (LMICs) respectively. Notwithstanding the progress reflected in Figure 1 above regarding total revenue (tax and non-tax) collection in most developing countries over the last few decades, there is still little doubt that there is potential remaining to increase public revenue in many developing countries. Ranges of estimates from tax effort[5] and gap[6] studies vary from a potential increase of 20-70 per cent of current tax levels collected across developing countries.

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3 Note that for most low-income countries and many lower-middle income countries social security costs are small due to a large formal sector and limited pension rights. For upper-middle income and high-income countries, this is significantly different.

4 This refers specifically only to tax and does not include non-tax revenues.

5 Utilising methods and models to estimate to what extent a country's level of tax collection (tax/GDP) is low or high when comparing to other countries and adjusting for income level, structure of the economy, urbanisation and governance factors.

6 Usually an estimate of the difference between the total amounts of taxes owed to the government versus the amount they actually collect, considering the available information about the economy, taxpayers, tax legislation and the relevant documentation available.

Moore and Prichard (2017) provide a menu of what they call ‘dangling fruit’ in terms of areas with the highest potential to increase total revenue in low-income countries. They indicate that each of these areas have the potential to increase the total revenue take by 1-2 per cent of GDP over a five to ten-year period. The majority are under domestic control, albeit linked to international tax issues, thereby indicating that progress is possible nationally with specific policy and implementation. The list includes: transfer mispricing in international economic transactions; mining, tobacco and alcohol; exemptions; implementing VAT; taxing the rich; property taxes; and turning government institutions and enterprises into better taxpayers. The challenge may be more political than technical in most countries, and the equity, growth, governance and fiscal effects significantly different.

Today, 65 developing countries collect below 15 per cent of GDP from tax and in many of these, aid accounts for more than 10 per cent of GDP (World Bank 2017b). This is despite the fact that the group of low-income countries dropped from 63 to 34 countries from 2000 to date (and may decline to 16 countries by 2030). It shows that the challenge of inadequate levels of domestic public revenue collection to deliver adequate public services, promote growth, reduce poverty and achieve development is present in both low and lower-middle-income countries (as well as others). Different sub categories of countries have different characteristics and needs when it comes to building effective tax systems. Related to this, it is also noteworthy that extreme poverty will be increasingly concentrated over the next decades in fragile states, where by 2035 up to 80 per cent of the world’s poor will live. The majority of this extremely poor population will be living in Africa (OECD 2015).

1.3 Tax increase and fiscal incidence

However, how tax collection/capacity rise also matters for development. One example is the effect of increased resource tax collection on non-resource tax in SSA in recent decades. This represents both an element of and a manifestation of the ‘resource curse’ in practice: an overemphasis on resource-related sectors and revenues can either directly affect the allocation of the factors of production to non-resource areas or/and enable a ‘ruler rent seeking behaviour’ where the incentive to focus on a broad tax base is low (Subramanian and Sala-i-Martin 2003). Crivelli and Gupta (2014) show that in the period from 1992-2009 on average a 1 per cent of GDP equivalent rise in resource tax collected reduced non-resource tax collection by 0.3 per cent of GDP in a group of 35 resource-rich developing countries.

Beyond the resource versus non-resource dichotomy in tax and development, there are a number of other topics. These include for example trade versus consumption taxes, and indirect versus direct taxes. McNabb and LeMay-Boucher (2014) find that the effects of different taxes on growth vary according to a country’s income level, and that revenue-neutral increases in personal income taxes or social contributions have been harmful for long run per capita GDP growth. Similarly, the shift from trade taxes to consumption taxes has had only modestly positive effects on growth for lower-middle-income countries.

These findings clearly indicate that advice and conditionality related to tax policy reforms in developing countries should be crafted considering a country’s stage of development and actual historical experience, and transitions in comparable situations across time and place. Much too often, generic advice and thinking based on first best from an orthodox economic efficiency point of view across time and place is given with great confidence to governments. This potentially has important implications both for reform-shifts from the broad categories such as trade/foreign taxes to domestic taxes, as well as within categories such as how to tax consumption and income.

Recently, Lustig (2017) has provided clear indications based on a number of detailed fiscal incidence studies that many developing countries have regressive policies and practices both on the revenue and expenditure side. The main negative effects tend to be associated with how consumption taxes and the pattern of social expenditure-service delivery affect poverty in particular. In such a situation, increased revenues may have mixed effects on inequality and poverty overall.

2 Development, sources of financing and expenditure

2.1 Development, cost and financing models

The pace of economic and human development progress intensified from the nineteenth to the twentieth century and onwards. What previously had taken many centuries or millenniums to achieve was now often happening in much less than a century. Over the last century, life expectancy more than doubled at the global level, from 31 to 66 years. In Africa, a similar improvement took place with an increase from 25 to 51 years (Casabonne and Kenny 2011).

Improvements in technology available at lower prices (e.g. medicines and vaccines), combined with widespread access to this technology (due to higher income levels) and increased usage (due to improved literacy and education), have together had a large impact on development outcomes. Improved policies, programmes, organisations and institutions within gradually changing governance frameworks have also contributed towards this at different levels. It is also notable, however, that progress in many areas (health, for example) often did not stop or regress even in countries and regions with weak institutions and slow economic growth (Casabonne and Kenny 2011).

Due to the overall improvements in assets (at individual, household and societal level) and their productive use, it was possible in 1999 to achieve the same average life expectancy as in 1870 with only one-tenth of the income level (US$300/PPP/CAP (purchasing power parity; per capita) versus US$3,000/PPP/CAP). Another indication of progress is how much real income is needed to secure a minimum level of calories to avoid food poverty (Casabonne and Kenny 2011).

It has therefore been possible in recent history to reduce poverty and improve livelihood conditions significantly faster than it has been previously. Investment in social and productive capital has on average been highly productive in particular in the developing world over several decades. This also applies to specific areas, for example it has been established that in many poor countries, securing one additional year of schooling has been associated with a 10 per cent higher salary level (however, this has been measured mainly in the formal sector).[7]

Exactly how these improvements have happened has varied significantly across countries and over a period of time. There have been large variations in terms of the respective roles of the private and the public sector regarding the financing and/or payment of expenditures including investments and consumption to produce/deliver goods and services. There can be great variance both between countries at similar income and development levels and between those at greatly diverging income and development levels. In low-income countries in Africa, for example, in the education sector, the direct payment of costs by households varies between around 10-60 per cent of the costs in primary school (Niger to Togo), 10-80

[7] www.globalpartnership.org/data-and-results/education-data

per cent of the costs for secondary school (Mali to Rwanda) and 5-75 per cent of the costs for tertiary school (Malawi to Guinea).[8]

2.2 Financing for development

The fundamental source of most financing for development throughout history has always been domestic. This is the case for both private and public sector investment and consumption. Today, total revenues (tax and non-tax) in Africa amount to ten times that of aid and three to four times that of aid, foreign direct investment and remittances put together (Fjeldstad and Lundstøl 2017). External influences, through technology, innovation and financing and capital, have also played important roles in many countries in critical periods of transformation and will continue to do so across the developing world.

Ndikumana and Blankson (2015) provide a further indication of the importance of domestic sources in the financing of development by examining the relative importance of different domestic and foreign sources when it comes to total investment in Africa. They decompose the main sources of domestic investment in 50 African countries for the period 1970-2012. Domestic savings and domestic credit were the main drivers behind this investment (17-30 per cent of GDP in the period covered). External sources of financing such as foreign direct investment (FDI) had a small but positive effect on investment levels (1-4 per cent of GDP), whereas external debt levels had a negative but not significant effect. Trade and the current account also had substantial influence on investment while the fiscal deficit did not. In the same study, aid (2.5-8 per cent of GDP) and personal remittances (1-3.5 per cent of GDP) seemed to have limited direct impact on investment, indicating that the majority financed consumption (public and private) and humanitarian aid. Note however that the distinction between consumption and investment is not always obvious, as the financing of health, education and other recurrent social sector consumption-expenditures represent investment in human capital.

How do the above findings, looking specifically at investments and recent figures for different sources of financing for development, fit with the expectations related to the Sustainable Development Goals (SDGs)? Regarding the actual financing of the Millennium Development Goals (MDGs), 77 per cent of funding came from developing countries' own domestic resources.[9] This attests to the importance and potential of emphasising the role of domestic resource mobilisation. The SDGs set out an ambitious agenda for 2030 with 17 general goals and a multitude of underlying targets. The needs/gap to reach the goals in terms of public finance requirements have been estimated as high as 27 per cent and 7 per cent of GDP for low and lower-middle income countries (Cobham and Klees 2016). It is doubtful that such a high increase in public expenditure is realistic considering current government revenue levels in poor countries as well as in developed countries. However, it still illustrates the magnitude of the challenge for the poorest developing countries in particular and the potential need to prioritise the poorest countries.

2.3 Tax potential and efficient service delivery

It is important to retain reservations regarding an uncritical scaling up or maximisation of public revenue through taxation in all countries through all available means. What this paper wants to promote is rather a strong revenue system and moving closer to optimal tax and non-tax collection: not a theoretical 'first best' option, but a practical one given local characteristics and restrictions. Long and Miller (2017) emphasise the importance of utilising a whole of government approach, linking tax to public service delivery and the SDGs. They

8 https://ourworldindata.org/global-rise-of-education, Section 1.2.
9 www.oxfam.org/sites/www.oxfam.org/files/file_attachments/rr-financing-sustainable-development-goals-110615-en.pdf, p4.

show that already, many developing countries have high tax capacity (tax/GDP) and tax effort (tax collection considering the income level, structure of the economy and governance characteristics). Therefore, improved revenue systems, compatible with higher rates of saving, investment, growth, equity and poverty reduction, need to be at the core of any public revenue strategy.

Pritchett and Aiyar (2015) ask whether and when tax constitutes a fair ‘price of civilisation’ or a ‘tribute to Leviathan’. The first view argues the need to retain an element of the value added in the economy to fund public goods and services associated with civilisation in modern states. The second is the challenge that in most countries taxation contains elements of distortions, such that the payment does not equate to the cost of efficient public goods and service delivery. This can be significant and contribute to retain a vicious circle of low tax morale/compliance with poor service delivery. Slemrod (2016: 4) refers to a slightly different but related challenge: ‘Revenue… may be low because the only taxes it is feasible to raise impose a high social cost, one not warranted by the productivity of government revenue.’

Moore and Prichard (2017) similarly emphasise the importance of achieving equity and reducing the corruption and rent extraction of the rentiers. Moore (2015) explores why the tax governance dividend may not happen, since rulers can shape the bargaining agenda around revenues. This advantage can be misused to retain or segment citizens/taxpayers into competing political groups. In summary, there is a strong reminder in the literature on tax and development that it matters ‘how tax is collected, from whom and how the revenue is spent’ (Moore and Prichard 2017: 6). Nevertheless, in contrast to Long and Miller (2017), Moore and Prichard argue strongly that ‘there are good reasons for the governments of many low-income countries to take advantage of the current international consensus to find ways of raising additional revenue’ (Moore and Prichard 2017: 6).

3 A brief overview of tax aid in development

3.1 International commitments of tax aid

The importance of domestic resource mobilisation (DRM), both private and public, was clear already in the financing for development conference in Monterrey in 2002. Another high-level meeting on development partnerships, in Mexico in 2014, delivered the following statement: no developing country should be overly dependent on other countries’ resources for its own development. Still, development priority, and programming and technical cooperation in particular, focus so far mainly on the expenditure side. Granted, there has been an emphasis on the income side in public financial management and macroeconomic initiatives in development, but this has been more from a stabilisation and balance of public accounts perspective.

The negotiations that led to the 2015 SDGs and the Addis Tax Initiative (ATI) developed the importance of DRM. One of the SDGs, SDG 17.1, specifically encourages increased international efforts to: ‘strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection’.[10] The ATI specifically outlines the following commitments up to 2020 and beyond:[11]

- Double the level of technical cooperation related to DRM/tax by 2020.
- Increase the focus on taxation as a vehicle to reach the SDGs by 2030.

[10] https://sustainabledevelopment.un.org/sdg17
[11] www.addistaxinitiative.net/

- Confirm the commitment to harmonised national policies that affect development.
- Enable developing country implementation of the international tax agenda, such as the OECD/G20 BEPS project and the new global standard on Automatic Exchange of Information (AEOI).
- Include developing countries in the global tax discussion in relevant international forums.
- Strengthen the taxation and management of revenues from natural resources.

At the request of the G20, the World Bank (WB), IMF, Organisation for Economic Co-operation and Development (OECD) and the UN formed a global platform in 2016 to collaborate more effectively in the area of tax and capacity development (The Platform for Collaboration on Tax – PCT). In a conference organised in Berlin in June 2017 by the ATI Secretariat, the first comprehensive OECD data on the donor financing of domestic resource mobilisation in development was presented.

3.2 Actual international tax aid

The ATI DRM report (ATI 2017) confirms that so far, donor support in this area has been limited, at US$224 million in disbursement in 2015, or, in relative terms, only 0.13 per cent of official development assistance (ODA). Table 1 below shows this for the top 10 donor countries in relative terms. Within the framework of the abovementioned international commitments of doubling DRM aid and related actions, so far 39 countries have signed the ATI (of which 20 are donor and 19 are partner/developing countries), as well as 12 supporting organisations.

The efforts so far continue to be somewhat concentrated in a few countries on both the donor and the developing country sides. The United Kingdom, United States and Germany account for above 60 per cent of all funding. About one-third of bilateral DRM funding until recently went to just three countries (Afghanistan, Tanzania and Mozambique). The least developed countries did receive the largest share of funding (47 per cent of disbursements and 57 per cent of commitments), but as many as 34 developing countries received less than 1 per cent of all tax-related aid, and a sub-group of 26 low income and lower-middle-income countries did not receive any direct tax aid. It would also appear that the countries with the lowest tax collection, below 15 per cent of GDP, received the most tax aid (50 per cent of disbursements and 59 per cent of commitments) (OECD 2017 and IMF/WBG/OECD/UN 2016).

Table 1 ODA to DRM: top 10 donors (for 2015)

Disbursements				**Commitments**			
Country	ODA to DRM (US$ million)	% of total ODA to DRM	ODA to DRM as % of country ODA	Country	ODA to DRM (US$ million)	% of total ODA to DRM	ODA to DRM as % of country ODA
United Kingdom	40.83	23.39	0.22	United Kingdom	61.04	33.64	0.46
United States	36.79	21.08	0.12	Germany	31.72	17.48	0.15
Germany	29.79	17.06	0.17	United States	26.88	14.82	0.08
Norway	13.73	7.87	0.32	Norway	14.09	7.77	0.30
Sweden	8.85	5.07	0.12	Switzerland	7.81	4.30	0.25
Canada	7.32	4.19	0.17	Finland	7.13	3.93	0.81
Denmark	7.12	4.08	0.28	Denmark	6.99	3.85	0.28
Switzerland	5.75	3.29	0.16	Belgium	6.66	3.67	0.32
France	5.69	3.26	0.06	France	5.81	3.20	0.04
Finland	4.54	2.60	0.35	Canada	4.47	2.46	0.08

Source: OECD 2017

When assessing international DRM aid, it is important to note that there is still a significant methodological and reporting challenge linked to capturing all DRM aid globally. The largest gap is most likely when such aid is channelled through the multilateral financial institutions (IMF and WB) but possibly also to some extent through the African Development Bank (AFDB), the Inter-American Development Bank (IDB) and the Asian Development Bank (ADB). This includes both programming that is only DRM-related but also in particular public finance management (PFM) and macroeconomic initiatives and donor funds with multiple objectives and areas of work including DRM.

An indication of the above was provided in a recent WB evaluation report of all identified support to tax policy and administration assistance in the period 2005-15. In this period, a total budget of US$28.4 billion was committed to 205 projects in 107 countries. Most of these projects were programmatic development policy operations with investment projects involving tax only accounting for 11 per cent. Most of the funds were committed in middle-income countries (78 per cent) with a tax collection rate of 10-20 per cent of GDP, whereas low-income countries only received a small share (5 per cent). On average, the estimate is that 10-14 per cent of the support had a tax reform component, translating into an average of US$280-400 million per year in tax aid. This amount alone represents a higher amount than all other international tax aid in 2015 (WB 2017a and ATI 2017). It is likely that tax aid provided by the IMF and other international financial institutions (IFIs) is also significantly underreported in OECD and ATI data.

4 Fundamentals of tax aid: focus, cost effectiveness and capacity

4.1 Potential tax capacity upside and policy-administration divide

In principle, it should be possible to establish a set of criteria and indicators concerning the need and potential for tax aid in developing countries. Section 5 and Appendix 1 examine in more detail such economic and development indicators for low and lower-middle income countries, focusing in particular on income and poverty, savings, credit, investment and expenditure, and net foreign financing.

Beyond this framework for a first preliminary assessment regarding allocation of tax aid, there are also a number of tax specific indicators. At the aggregate level in terms of tax capacity (tax/GDP), a fundamental starting point for estimating the potential would seem to be the level of tax effort. This indicator tries to estimate to what extent a country is collecting a low, high or just right level of taxes when compared to other countries, adjusting for differences in levels of income, structure of the economy, urbanisation, formalisation and governance along key dimensions.

Clearly, this is a difficult exercise, but it can still provide a useful indication for many countries, in particular when used together with other relevant tax indicators. In principle, tax effort estimates could provide an indication of where the potential upside is highest without overtaxing the economy. Recent work by Ananou and Houngbonon (2015) shows that the level of tax effort (called ‘tax gap’ in their paper, but basically reflecting the same as a calculation of tax effort) stayed flat in Africa over the last decade. This may confirm some scope for public policy and administrative reform efforts to close the gap and increase public revenues. Long and Miller (2017) to some extent question this by showing high average tax efforts in many developing regions, including in Africa.

It is important here to note some limitations with regard to tax effort estimates. These entail a comparison across time and place of the level of tax collected (as a share of GDP) adjusted for structural and governance characteristics. As already noted, however, even adjusting for all these factors, the appropriate level of tax collected and the role of the state in delivering goods and services has changed dramatically over time, and even from decade to decade. In addition, these estimates depend critically on the development strategy and model chosen, which also varies between regions and within regions. Note that a strong case for improved taxation exists also for countries with a high tax effort but, in this context, with an emphasis on improving the effectiveness of the tax system (policy and administration) and not necessarily raising the level of revenue collected (tax/GDP).

Recent work has been trying to separate to what extent a low tax effort or large tax gap is due to problems with tax policy and/or administration and compliance (see Keen and Slemrod 2017). Note however also the circularity problem related to tax gap estimates (if there is no legislation to tax a specific item (e.g. capital gains), then it will not be identified as a gap if it is not taxed (Moore and Prichard 2017: 7)). Furthermore, there are today a number of tax diagnostics (covering both policy and administration) and databases with updated performance data for tax administrations (for example RA-FIT (Revenue Administration Fiscal Information Tool) and ISORA (International Survey On Revenue Administration) at the IMF.[12] These can often provide a useful basis for assessment work to decide on the need for and the design of assistance strategies and programmes.

Narrowing down from the national level assessment and selection process, there is a significant literature and experience considering which potential areas to focus on, often segmented, for example by: tax policy and tax administration; domestic and international taxes; resource and non-resource taxes; direct and indirect taxes; national and local taxes; formal and informal taxes. It is also possible to think of assistance in the areas of research, media, justice, accountability and transparency related to tax systems.

4.2 Cost effectiveness of tax aid

Regarding the cost-effectiveness of tax aid, this paper refers only to some general dilemmas and a few examples (more details are available in other reports[13]). As with most aid, an overall note and disclaimer is necessary regarding attribution of results and impact at the aggregate level in country and in a sector. Tax aid is, more often than not, only an element of and a contribution to larger national strategies, plans and programmes. A clear example is the donor effort through the IMF's Tax Policy and Administration Topical Trust Fund (TPA-TTF).[14] From 2011-2016 it assisted 21 countries through assistance and advisory services with varying focus, effort and duration. In these countries, tax collection on average increased from 14.5 to 16.2 per cent of GDP in the period of assistance. This is a very significant result, despite the issue of attribution, considering that the cost of all these assistance projects (including also a number of global data, research and regional projects) was just US$30 million.

In some countries and with certain tax aid interventions it is sometimes possible to ascribe and attribute influence more directly in terms of tax collection. This applies to assistance with improving and carrying out tax audits of international enterprises and certain sectors (e.g. extractives). OECD report that through their Tax Inspectors Without Borders (TIWB) programme they have contributed to an increase in tax collection of US$245 million through 21 such projects.

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12 RA-FIT has now been replaced by ISORA as the survey tool utilised.
13 See for example OECD (2015) and WB (2017a).
14 The TPA-TTF has now been replaced by another tax trust fund at the IMF, the Revenue Mobilization Trust Fund (RMTF).

In Zambia, the national tax authority report that due to an institutional cooperation with the Norwegian Tax Authority (NTA), they have increased collection through tax reassessments by 635 million Norwegian Krone (NOK) (around US$80.6 million) in the period 2011 to 2016. The total cost of this assistance was NOK66 million (around US$8.4 million), representing a cost-benefit ratio of 1:10. In the same period, the Government of Zambia quadrupled the number of tax audits it carried out and doubled its number of employees. Similarly, in Tanzania the Norwegian Tax Authority assisted the removal of a large backlog of tax audits in the mining sector from 2012 to 2015 at a cost of NOK9 million (around US$1.14 million). This resulted in multiple outputs and improvements, including one company paying an estimated NOK1 billion (around US$127 million) in additional taxes due to reassessments. The equivalent cost-benefit ratio was at least 1:100, taking into account only the largest tax reassessments and collection.

4.3 Capacity development through tax aid

Several recent reports and documents by international institutions such as the IMF, WB, OECD and the UN[15] describe the experience of providing external assistance to developing countries in building tax capacity to mobilise national resources to finance development. Developing capacity in general in a country or at regional and higher levels requires strengthening or mobilising the ability of people, organisations and institutions to implement tasks, to solve problems, and to identify and reach objectives.

This type of aid (capacity development) has existed for a long time. By some accounts, it is actually how aid started in the early years in the 1950-60s in many developing countries. In 2011 it was estimated that this type of aid accounted for around US$18 billion, or 13 per cent of total global ODA. The IMF today estimates that one-third of its budget and resources go towards capacity building. For Norway, the estimate in 2015 was approximately 20 per cent of bilateral aid. Exact estimates are hard to come by because this type of aid is included in most sectors and programmes, often without being explicitly described as ‘capacity building’ or ‘capacity development’ in the aid statistics.

Recommendations from the Platform for Collaboration on Tax in their report ‘Enhancing the Effectiveness of External Support in Building Tax Capacity in Developing Countries’ argue for the need to focus and strengthen several enablers to build tax capacity (p4).

- *A coherent revenue strategy as part of a development financing plan* (national development strategy/plan; SDGs strategy/plan; sector development strategy/plan; medium term revenue strategy/plan and medium term expenditure frameworks).
- *Strong coordination among well-informed and results-oriented providers* (ATI and the Platform framework of the IMF, WB, OECD and UN; country level donor groups; sector advisory groups; government-led and harmonised strategy under PFM; tax policy and tax administration).
- *A strong knowledge and evidence base* (there is need to deliver more and better applied research on tax policy and administration, both regarding domestic and international issues and potential, including overall fiscal incidence, so as to ensure that rising tax capacity as much as possible is compatible with the end goal of the SDGs, and in particular that of poverty reduction).
- *Strong regional cooperation and support.*
- *Strengthened participation of developing countries in international rule setting.*

Given the emphasis above on the need for coordination and for basing interventions on common analytical and diagnostic assessments, it is striking that the area of tax aid largely consists of project type interventions (see Table 2 below) where this is difficult, albeit not

15 See for example WB 2017a, OECD 2017, and IMF 2016.

impossible, to achieve. It will be important for donors and partner countries to see to what extent they can ensure, in a scaling up of such aid, an improved level of coordination and, not least, avoid overlap and interventions with limited efficiency due to a low level of ownership. It would also seem a key challenge to scale up efforts on research and core support to NGOs working in this field, to ensure that the programming of this aid rests to a large extent on applied research, empirical evidence and concerns about power, equity and poverty.

Table 2 ODA to DRM by aid type (for 2015)

	Disbursements		Commitments	
Aid type	**Amount (US$ m)**	**%**	**Amount (US$ m)**	**%**
Project-type interventions	120.42	68.99	114.92	63.339
Contributions to specific-purpose programmes and funds managed by international organisations (multilaterals, INGOs)	19.16	10.975	21.09	11.623
Basket funds/pooled funding	13.46	7.711	24.70	13.616
Donor country personnel	10.97	6.283	10.47	5.773
Other technical assistance	7.97	4.563	5.70	3.140
Core support to NGOs, other private bodies, public private partnerships and research institutes	2.22	1.272	4.49	2.474
Sector budget support	0.29	0.168	N/A	N/A
Development awareness	0.06	0.035	0.06	0.034
Administrative costs not included elsewhere	0.00	0.001	0.00	0.001
Total	174.55		181.44	

Source: OECD 2017

5 Towards a basic tax aid framework for assessing potential partner developing countries

5.1 Conceptual framework for country assessment and ranking

To get a more precise understanding of the need and potential in developing countries for increased public resource mobilisation, this paper presents below a mapping of the countries classified by the IMF as either low-income countries (LICs) or lower-middle income countries (LMICs). This emphasis is due to the SDG financing gap estimates, where it is clear that the largest shortfall by far is likely in these countries. This is notwithstanding the fact that there could be opportunities in these countries that from a pure cost-benefit perspective are even more promising than in richer developing countries. This should however primarily be addressed through a differentiated full or partial cost recovery service from private and/or public available capacity within a portfolio perspective. Donors could support this at low cost without interfering or undermining the overall focus of tax aid.

In total, there were 86 LIC and LMICs in the world in 2015 according to the IMF (IMF 2015). To focus further on the countries with the greatest need from an income and poverty perspective, countries that have a combination of an income >US$4000 in GNI/CAP/PPP (or >US$7000 GNI/CAP/NOM) and a poverty level <10 per cent (1.90 USD/CAP/DAY/PPP) are excluded.[16] This leaves a smaller group of countries (Somalia and a few small Pacific Island State countries are excluded from this group to facilitate analysis and comparability).

[16] GNI – gross national income; CAP – capita/per capita; PPP – purchasing power parity; NOM – nominal.

Countries are then mapped to assess the need and potential for increased efforts to mobilise public resources through tax and non-tax sources with significant external tax aid. Different sets of indicators are combined to enable assessment: the need for assistance from an economic and poverty perspective; from a savings, investment and public expenditure perspective; from an external private and public finance perspective; and in terms of current and future tax collection potential. By using a wide range of economic indicators,[17] a nuanced view is reached of each country's access to finance considering its level of development and potential going forward:

- Gross national income (GNI), poverty (POV) and human development (HDI);
- Public expenditure (PEXP), investment (INV) and savings (SAVE);
- Domestic credit (DCREDIT), personal remittances (PREMIT), net aid (NAID) and net foreign direct investment (NFDI);
- Tax capacity/collection (TAX) (here including both tax and non-tax public revenues as typically classified);
- Tax effort non-resource related (TAXEFF-NRT),[18] tax aid (TAXAID) and country policy and institutional assessment – WB (CPIA).

5.2 Findings from the assessment of LICs and LMICs

Table 3 presents the countries according to their summary ranking, Av 5 = (Av 1 + Av 2 + Av 3 + Av 4)/4, as well as the underlying ranking of three composite indicators and one singular indicator:

- **Av 1 (GNI, POV, HDI)** – summing up the average rank in terms of a combination of an average of two measures of GNI (gross national income measured as nominal and in purchasing power parity per capita), POV (percentage of population with an income level below US$1.9/day) and HDI (the score on the human development index).
- **Av 2 (PEXP, INV, SAVE)** – summing up the average rank in terms of a combination of PEXP (public expenditure as a percentage of GDP), INV (investments as a percentage of GDP) and SAVE (savings as a percentage of GDP).
- **Av 3 (DCREDIT, PREMIT, NAID, NFDI)** – summing up the average rank in terms of a combination of DCREDIT (domestic credit as a percentage of GDP), PREMIT (personal remittances as a percentage of GDP), NAID (net aid as a percentage of GDP) and NFDI (net foreign direct investment as a percentage of GDP).
- **Av 4 (TAX) –** tax collection (as a percentage of GDP, with non-tax not included).

The summary indicator Av 5 provides an indication of which countries are the poorest, have the lowest access to financing for development (public and private) and the lowest levels of public expenditure (financed from both domestic and foreign sources). Table 3 shows a domination by SSA countries, which is not surprising given their predominance in the lists of LIC and LMICs. Among the top half of countries, there is only one from Latin America (Guatemala), six from Asia and the Middle East (Yemen, Pakistan, Afghanistan, Myanmar, Cambodia and Bangladesh) and 24 from SSA. In the bottom half of countries, there is higher representation from Latin America (Haiti, Honduras, Nicaragua, Bolivia and Guyana) and Eastern Europe and Central Asia (Tajikistan, Uzbekistan, Kyrgyz Republic and Moldova), whereas East Asia and South Asia remain at a similar level as in the top half (Lao PDR, India, Papua New Guinea (PNG), Nepal, Timor Leste and Vietnam). Overall, this gives a relative predominance of SSA countries, with a share of 77 per cent in the top half and 52 per cent in the bottom half subcategories of countries.

[17] See Appendix 1 for explanations of the indicators regarding sources (with web links) and a full list of individual and composite indicators utilised in Tables 3 and 4, as well as in Appendix 2.

[18] In the rest of this paper, this is referred to simply as 'TAXEFF' for short, but the data utilised is specifically referring to the non-resource related part. See footnote 20 and Brun and Diakite 2016 for more information.

An overall observation regarding Table 3 regards significant variation in ranking between the different composite indicators; this occurs both between regions and within regions. Many Asian and European countries, for example, have significantly lower rates of poverty at similar levels of income than many African countries. There are however also significant differences between countries at similar income levels concerning their levels of savings, investment and expenditures, as well as foreign financing and investment. Differences in both governance and resource endowment, possibly related to non-renewables in particular, could be among the explanatory factors. Within the group of African countries there are also large divergences. One example is Zambia and Cote D'Ivoire: although they have similar income levels, the latter country has half the poverty rate of the former.

Table 3 Ranking of LIC and LMICs by Av 5[19]

		Av 1 (GNI, POV, HDI)	Av 2 (PEXP, INV, SAVE)	Av 3 (DCREDIT, PREMIT, NAID, NFDI)	Av 4 (Tax)	Av 5 (1-4)
1	South Sudan	17.8	3.5	11.75	2	8.76
2	Guinea Bissau	8.25	3	23.75	7	10.50
3	CAR	2.75	8	23.75	10	11.13
4	Yemen	27	3.5	15	6	12.88
5	DRC	5.75	13.5	22.75	15	14.25
6	Eritrea	16.3	4	25.75	15	15.26
7	Madagascar	11	17.5	22.75	12	15.81
8	Burundi	3.75	5.5	26.75	28	16.00
9	Sierra Leone	11	15.5	30.5	11	17.00
10	Chad	17.5	40	10	3	17.63
11	Nigeria	33.5	22	14.25	1	17.69
12	Malaw i	7.75	9.5	27.25	27	17.88
13	Sudan	42	21	14.25	4	20.31
13	Guinea	11	8	27.25	35	20.31
14	Rw anda	17	22	22.75	24	21.44
15	Mali	17	22	26	26	22.75
16	Burkina Faso	14	15	23.5	40	23.13
17	Uganda	21	37	22.5	13	23.38
18	Pakistan	39	18	22.25	15	23.56
19	Cameroon	31	30	10.5	23	23.63
20	Afghanistan	19	39	23	14	23.75
21	Myanmar	42	32	17.75	5	24.19
22	Niger	6.8	49	27.5	17	25.08
23	Cote D'Ivoire	28	24	17.75	31	25.19
24	Tanzania	25	42	21	16	26.00
25	Guatemala	48	15	25.25	19	26.81
26	Congo Rep	42	40	17	9	27.00
27	Benin	19	35	22.75	32	27.19
28	Cambodia	37	22	30.25	20	27.31
29	Comoros	18	22	31.25	39	27.56
30	Bangladesh	34	44	25.75	8	27.94
31	Ethiopia	18	50	27	21	29.00
32	Gambia	21	20	38.5	37	29.13
33	Angola	41	19	14.75	44	29.69
34	Kenya	31	24	23.25	41	29.81
35	Lao PDR	40	33	20.5	29	30.63
36	Haiti	21	44	34.5	25	31.13
37	Liberia	8.8	15	47.5	54	31.33
38	Togo	14	30	36.5	46	31.63
39	Tajikistan	42	18	25	45	32.50
40	Lesotho	24	24	26	58	33.00
41	Zimbabw e	30	12	34.25	57	33.31
42	Honduras	42	31	26.75	34	33.44
43	Mozambique	8.3	40	35.25	52	33.89
44	India	43	52	23	18	34.00
45	Ghana	37	37	29.25	36	34.81
46	Senegal	23	36	31.75	50	35.19
47	PNG	37	48	14.5	43	35.63
47	Zambia	29	52	19.5	42	35.63
48	Mauritania	41	52	28.25	22	35.81
49	Nepal	28	55	31.5	30	36.13
50	Sao TP	35	41	37	33	36.50
51	Guyana	53	15	36.75	51	38.94
52	Uzbekistan	41	50	16.5	49	39.13
53	Djibouti	32	36	34.75	55	39.44
54	Nicaragua	46	41	36.25	36	39.81
55	Timor Leste	37	39	27.25	59	40.56
56	Bolivia	50	34	27	53	41.00
57	Vietnam	49	47	32	38	41.50
58	Kyrgz Rep	42	46	33.5	48	42.38
59	Moldova	50	31	35.5	56	43.13
60	Cabo Verde	50	52	44	47	48.25

19 As well as their ranks by Av 1, 2, 3 and 4.

In Table 4, the countries are presented in their order of overall rank result for a chosen sum of singular and composite indicators (see Appendix 1 for further details): Av 9 = (Av 1 + Av 2 + Av 3 + Av 4 + Av 6 + Av 7 + Av 8)/7[20] as well as for three singular indicators:

- **Av 6 (TAXEFF) –** an estimate of the effort made in a country to collect tax revenue (tax/GDP) as compared to other countries, when adjusting for different key factors that affect the ability to pay taxes, such as income level, the structure of the economy, urbanisation and governance. Measured from 0-100, with a higher number indicating a higher effort.
- **Av 7 (TAXAID) –** measures the estimated total tax aid (in current US$) disbursed to the developing country from donor countries.
- **Av 8 (CPIA) –** a summary rating carried out by the WB of the political and institutional quality in a given country, utilising a variety of available sources and expert assessments. Utilised by WB in aid allocation decisions between countries.

The resulting rank should be used with some caution due to the sensitivity of the indicators chosen, somewhat varying quality of data, and whether the overall direct and indirect weight of each indicator is the most appropriate for the purpose. In most cases, it may also need to be complemented by other filters and indicators to identify the countries where the need and potential related to tax aid is the highest.

Table 4 shows a similar predominance of SSA countries in the top half of countries (27) as in Table 3. There is only one country from Latin America (Honduras, up from 42nd to 21st rank compared to Table 3), six from East Asia, South Asia and the Middle East (Yemen, Pakistan, Afghanistan, Myanmar, Cambodia and Bangladesh) and 20 from SSA. In the bottom half (27) there is again a higher relative representation of Latin America (Nicaragua, Bolivia and Guyana), Eastern Europe and Central Asia (Uzbekistan, Kyrgyz Republic and Moldova), and East Asia and South Asia (India, PNG, Nepal, Timor Leste and Vietnam). This gives a representation of 74 per cent and 59 per cent from SSA in the top and bottom half of countries in Table 4.

Looking at the variations between Tables 3 and 4 in terms of the overall ranking shown by Av 5 and Av 9 respectively, there are some major changes up and down the list. Among the top 15 countries in Table 4, 11 countries are the same. The largest relative change is the Republic of the Congo that moves up from 26th rank in Table 3 to 9th in Table 4. The other 'newcomers' among the top 15 sub group is Cameroon (up from 19th to 12th rank), Afghanistan (up from 20th to 13th rank) and Pakistan (up from 18th to 14th rank). Among countries that were in the top 15 sub group in Table 3, Malawi and Burundi have the largest relative drop, respectively down from 12th to 26th rank and 8th to 27th rank. Both are countries with relatively low levels of income and high poverty and low levels of savings, but in relative terms they have a high tax effort, tax aid and a low governance rating, contributing to their deteriorating rank in Table 4.

[20] A note regarding Av 6 is that it represents an estimate: an average has been calculated based on data from Brun and Diakite 2016, combining two different methods of tax effort focusing on the non-resource tax revenue. It would be preferable to use a tax effort estimate for the entire economy; however, the countries included in earlier studies (see for example Fenocchieto and Pessino 2013 and Minh Le, Moreno-Dodson and Bayraktar 2012) leave out several countries which are included here. Regarding the data on tax aid, please refer to the discussion on pages 14-15 above regarding completeness.

Table 4 Ranking of LIC and LMICs by Av 9[21]

		Av 6 (TAXEFF-NRT)	Av 7 (TAXAID)	Av 8 (CPIA)	Av 9 (1-4 and 6-8)
1	Guinea Bissau	4	5	39	12.86
2	Chad	5	16	2	13.36
3	Nigeria	3	1	20	13.54
4	Yemen	6	13	30	14.36
5	South Sudan	43	18	7	14.72
6	Sierra Leone	23	7	12	15.71
7	Madagascar	17	9	23	16.04
8	CAR	20	8	40	16.07
9	Congo Rep	8	1	3	17.14
10	Guinea	10	1	29	17.32
11	DRC	11	20	36	17.71
12	Cameroon	12	4	18	18.36
13	Afghanistan	2	22	15	19.14
14	Pakistan	13	1	26	19.18
15	Eritrea	40	19	25	20.72
16	Niger	18	12	17	21.04
17	Burkina Faso	27	29	1	21.36
18	Rwanda	29	31	7	21.82
19	Cote D'Ivoire	44	2	6	21.82
19	Bangladesh	7	36	8	23.25
20	Uganda	22	33	16	23.50
21	Honduras	19	6	6	23.54
22	Sudan	51	1	35	24.04
22	Cambodia	9	28	22	24.04
23	Myanmar	14	41	19	24.39
24	Tanzania	31	34	2	24.43
25	Mali	35	10	38	24.86
26	Malawi	50	26	28	25.07
27	Burundi	53	27	33	25.29
28	Ethiopia	38	21	9	26.29
29	Comoros	25	14	37	26.61
30	Ghana	24	2	22	26.75
31	Gambia	30	3	38	26.79
32	Uzbekistan	21	1	11	27.07
33	Benin	32	25	33	28.39
34	India	39	2	22	28.43
35	Togo	45	1	32	29.21
36	Timor Leste	1	11	31	29.32
37	Nepal	16	8	41	29.93
38	Bolivia	33	1	13	30.14
39	Mauritania	37	1	35	30.89
40	Kenya	47	35	17	31.18
41	Vietnam	26	23	5	31.43
42	Lesotho	54	1	34	31.57
43	Senegal	36	40	5	31.68
44	Guyana	48	1	20	32.11
45	Moldova	49	1	4	32.36
46	Djibouti	42	17	14	32.96
47	Mozambique	34	39	24	33.22
48	Nicaragua	41	30	4	33.46
49	PNG	52	15	27	33.79
50	Zambia	46	32	20	34.36
51	Cabo Verde	28	24	11	36.57
52	Kyrgz Rep	55	38	21	40.50

21 As well as their ranks by Av 6, 7 and 8.

From a development policy and current partner country perspective, how does the above ranking of countries to prioritise for tax aid look? As a small illustration, countries are matched with the official current list of partner countries as identified in the recent Norwegian White Paper on the SDGs and aid (May 2017). There are four categories of countries to which Norway provides aid, with the first three categories receiving larger amounts of assistance. Each of the categories comprises eight countries and targets types of countries that have somewhat different characteristics: long-term strategic partnership countries; stabilisation and conflict prevention countries; and global challenge countries. The fourth category includes a longer list of cooperating partner countries with more limited programming and partnerships.

Matching the results from Table 4 with the priority countries for Norwegian development aid gives the results presented in Table 5 by category of collaborating countries. It is clear that with current general geographical and country priorities, there are some developing countries with both a high need and potential that fall outside this list. Judging from the OECD tax aid statistics (see ATI 2017), although these are somewhat lacking in coverage, there are today a number of countries that currently do not receive significant tax aid from Norway or other donors that could be considered. These include, for example, individual countries such as Nigeria, Sierra Leone, Madagascar, Nepal and South Sudan, as well as broader sub categories such as Sahel (Niger, Chad, Mali, Burkina Faso and Cameroon) and Central African countries (Central African Republic (CAR), the Republic of the Congo and the Democratic Republic of the Congo (DRC). Many of these are fragile states albeit with different characteristics. Not included below are a number of Pacific small island states that are also on the low end of receiving tax aid.

Table 5 Categorisation of developing countries according to Norwegian aid policy[22]

Rank across Norwegian Partner Country categories					
Uganda	rank 20	CAT 1	Partner country	Longterm strategic partnership	Embassy
Myanmar	rank 23	CAT 1	Partner country	Longterm strategic partnership	Embassy
Tanzania	rank 24	CAT 1	Partner country	Longterm strategic partnership	Embassy
Malawi	rank 26	CAT 1	Partner country	Longterm strategic partnership	Embassy
Ethiopia	rank 28	CAT 1	Partner country	Longterm strategic partnership	Embassy
Nepal	rank 37	CAT 1	Partner country	Longterm strategic partnership	Embassy
Mozambique	rank 47	CAT 1	Partner country	Longterm strategic partnership	Embassy
South Sudan	rank 5	CAT 2	Partner country	Stabilisation and conflict prevention	Embassy
Afghanistan	rank 13	CAT 2	Partner country	Stabilisation and conflict prevention	
Mali	rank 25	CAT 2	Partner country	Stabilisation and conflict prevention	Embassy
Nigeria	rank 3	CAT 3	Partner country	Global challenges	Embassy
Yemen	rank 4	CAT 4	Cooperating country		
Sierra Leone	rank 6	CAT 4	Cooperating country		
Madagascar	rank 7	CAT 4	Cooperating country		Embassy section
CAR	rank 8	CAT 4	Cooperating country		
Congo Rep	rank 9	CAT 4	Cooperating country		
DRC	rank 11	CAT 4	Cooperating country		Embassy section
Cameroon	rank 12	CAT 4	Cooperating country		
Afghanistan	rank 13	CAT 4	Cooperating country		Embassy
Pakistan	rank 14	CAT 4	Cooperating country		Embassy
Eritrea	rank 15	CAT 4	Cooperating country		
Niger	rank 16	CAT 4	Cooperating country		
Burkina Faso	rank 17	CAT 4	Cooperating country		
Rwanda	rank 18	CAT 4	Cooperating country		
Cote D'Ivoire	rank 19	CAT 4	Cooperating country		
Bangladesh	rank 19	CAT 4	Cooperating country		Embassy
Honduras	rank 21	CAT 4	Cooperating country		
Sudan	rank 22	CAT 4	Cooperating country		Embassy
Cambodia	rank 22	CAT 4	Cooperating country		
Burundi	rank 27	CAT 4	Cooperating country		
Ghana	rank 30	CAT 4	Cooperating country		Embassy
India	rank 34	CAT 4	Cooperating country		Embassy
Timor Leste	rank 36	CAT 4	Cooperating country		
Bolivia	rank 38	CAT 4	Cooperating country		
Kenya	rank 40	CAT 4	Cooperating country		Embassy
Vietnam	rank 41	CAT 4	Cooperating country		Embassy
Guyana	rank 44	CAT 4	Cooperating country		
Moldova	rank 45	CAT 4	Cooperating country		
Mozambique	rank 47	CAT 4	Cooperating country		Embassy
Nicaragua	rank 48	CAT 4	Cooperating country		
PNG	rank 49	CAT 4	Cooperating country		
Zambia	rank 50	CAT 4	Cooperating country		
Liberia	rank 37 (Av 5)	CAT 1	Partner country	Longterm strategic partnership	
Haiti	rank 36 (Av 5)	CAT 2	Partner country	Stabilisation and conflict prevention	
Somalia	No data	CAT 2	Partner country	Stabilisation and conflict prevention	

6 Towards a strategic approach in tax aid

6.1 Financing for development and tax

There is little doubt that tax and public revenue is positively associated with state building, economic growth and development over time. There is a strong case both theoretically and empirically for the governance and development dividend of tax as put forward by Moore (2008). It is also clear that the optimal level of tax collection and size of the public sector have changed a lot over time, as Lindert (2004) has shown in the context of the US and

[22] The four categories of partner countries used in this table represent the current policy of Norway as reflected in the white paper from May 2017 as well as in Appendix 1 of the official budget proposition to parliament for 2017-18. The text in column 5 explains the main intention in terms of the type of collaboration and justification. In general, CAT 1-3 include the countries that receive the highest bilateral aid from Norway, and where Norway typically is present with several projects and types of development assistance. Note that the concept of partner countries is currently under review and will be treated in a forthcoming white paper in 2018. This may introduce changes. The final column in the table shows whether Norway has an embassy, an embassy section or no direct diplomatic representation in the country in question.

Europe. A similar observation applies for the followers and latecomers in achieving modern economic development.

Current developing countries seem to have an unprecedented opportunity to achieve development both faster and at a lower cost per unit. For many developing countries, this will require an intensification of domestic revenue mobilisation and improving tax systems, together with linkages to service delivery and development for the majority. Success will depend on growing the economy and securing both private and public finance for development expenditure. This paper has focused on the task of and potential for raising public revenue mainly through taxation. Fortunately, on average the trend for developing countries is positive in recent decades.

6.2 Partner country assessments in tax aid

The scaling up of domestic resource mobilisation to 2020 and beyond provides an opportunity to think more systematically about how to allocate larger funding for tax aid both geographically and thematically. For most donor countries and their agencies, this will involve considering a range of criteria. This paper has emphasised one framework with a set of associated criteria that assesses the needs and the potential of developing countries to mobilise domestic public resources for public expenditures. Obviously, there are a number of alternative approaches and criteria and in reality, many donors may be driven more by political realities and priorities combined with path dependency and established country partnerships, as well as by indications of who is ready to work on revenue reforms among developing countries (and who communicates this actively to the donor community). A related major consideration is absorptive capacity in the partner country in general, considering that so far, the majority of tax aid has been delivered through relatively stand-alone project type interventions (see Table 2). Another different but related agenda is the national versus regional and international agenda and reforms in the area of public revenue and tax systems.

What has this paper found through utilising the chosen assessment framework for potential partner countries in the field of tax aid? A first observation was related to a question of whether there was any difference between a ranking of countries based on income, poverty and human development (Av 1) and a ranking of countries based on the aggregate of all the indicators (Av 9). Significant changes were in fact found for most countries except a very few such as Tanzania, Timor Leste, Mauritania, Uganda and Nicaragua. The average change in rank was -80 per cent, meaning that change is most dominant downwards for countries. Note that some of this was dominated by large shifts seen by a few countries such as Burundi, CAR, Mozambique, Malawi, Togo and DRC. The largest upward shift in rank happened for countries such as Nigeria, Chad, Yemen, Guinea Bissau, the Republic of the Congo, South Sudan, Pakistan and Cameroon. It seems obvious that for this last sub group there were strong political, institutional and security explanations for the low level of both tax collection and effort on average.

Similarly, there are also changes between the summary indicator in Table 3 (Av 5) to Table 4 (Av 9). The largest relative change upwards in rank is the Republic of the Congo (moving up from 26^{th} to 9^{th} rank), whereas other newcomers in the top 15 group of countries include Cameroon (up from 19^{th} to 12^{th} rank), Afghanistan (up from 20^{th} to 13^{th} rank) and Pakistan (up from 18^{th} to 14^{th} rank). Two countries that fall out of the top 15 country sub group are Burundi (down from 8^{th} to 27^{th} rank) and Malawi (down from 12^{th} to 26^{th} rank).

The analysis in Table 4 shows a predominance of SSA countries in the list when considering both the needs and potential for tax-related aid using the identified indicators. It also confirms that there is a significant group of aid orphan countries when it comes to tax aid. Among the top half of countries (27) there is only one from Latin America (Honduras, up from 42^{nd} to 21^{st}

rank),[23] six from East Asia, South Asia and the Middle East (Yemen, Pakistan, Afghanistan, Myanmar, Cambodia and Bangladesh) and 20 from SSA. The distribution between the upper and lower half of the table (27 countries in each sub category) is 74 per cent and 59 per cent from SSA respectively.

6.3 The focus of tax aid and trade offs

Moving from the overall ranking of developing countries by need and potential for tax aid, a natural next step is to assess to what extent emphasis should be on tax policy and/or administration (compliance). Brun and Diakite (2016) provide a first indication of this related to tax effort estimates, whereas Keen and Slemrod (2017) provide a theoretical basis and indicative empirical perspective on how to estimate this related to tax gap calculations. In the first contribution, the authors disentangle overall tax effort into tax policy effectiveness and tax administrative efficiency.

An overall finding, widely reflected in the literature (see Ananou and Houngbonon 2015) is that resource rich countries tend to have lower tax efforts. Regarding the policy-administration duality of tax, Ananou and Houngbonon find that overall, inefficiencies and low tax capacity/collection are related more to poor tax policy (statutory and incentive-exemptions in tax conditions, adapted through investment, trade and tax treaties, economic zones, contracts and agreements) than to tax administrative performance. There are however significant variations between countries, emphasising again the need for country specific analysis and scoping work.

This paper has not gone further into a detailed empirical or country comparative discussion of trying to identify to what extent need and potential is to be found in policy or administration (compliance); in resource (non-renewable and renewable) sectors or non-resource sectors; urban or rural areas (informal and formal); nor the fundamental impact of design and implementation of a public revenue strategy.

Furthermore, as has been evidenced increasingly in recent literature, there is a need to assess the impact of tax on a wide range of indicators such as savings, investment, growth, poverty, and the equity of different fiscal policy (revenue and expenditure-related) choices. There will continue to be trade-offs and countervailing forces that need to be more carefully considered in country analysis to raise public resources that more effectively promote development.

6.4 Tax in development strategies and remaining selection and design challenges

When the potential in the area of tax policy and administration has been established through different available studies, diagnostics and country assessments, there is a need to get more specific in terms of thematic focus and delivery modality. Linked to this is also a requirement to put increased emphasis on longer term national level planning and strategic frameworks for public revenue mobilisation in developing countries. The IMF, together with its PCT partners in DRM and capacity building in the area of tax, has been developing a Medium-Term Revenue Strategy (MTRS) approach. This could provide an appropriate longer term government framework integrating all relevant aggregate actions and targets related to domestic revenue mobilisation. This may prove effective, especially if made operational with developing country governments taking the lead, and clear links to: national development plans and strategies; medium term expenditure frameworks; revenue authorities' corporate plans, public financial management plans and annual budgets. This would also provide an

[23] Note that Guatemala would have been likely to be included in this group of countries, but this comparison was not possible due to lack of data for the scoring of several indicators needed to construct comparables for Av 9.

opportunity for donor coordination under one comprehensive framework with clear roles and responsibilities over a multi-year period.

Both diagnostic tools (principally the Tax Administration Diagnostic Assessment Tool (TADAT) developed by the IMF) and overall comparative data (through the global databases administered by the IMF – first through RA-FIT and today through ISORA) are currently mainly available to assess the quality of tax administration (although elements such as customs, specialised areas such as extractives, and human resources are currently not covered). For tax policy there is a much less developed diagnostic tool, as well as difficulties in assembling and using comparative data for different countries. The WB is currently developing a tax policy assessment tool (TPAT) in partnership with the IMF, and there are of course global databases with some comparative policy data. Overall, the Public Expenditure and Financial Assessment (PEFA) diagnostic (hosted by the WB), as well as a number of other internal IMF/WB and other organisational tools, are being used by a number of agencies and partners to shed some light on policy quality.

Nevertheless, even if the countries with the largest relative development needs and potential for improved tax systems are identified, challenges remain relating to what is realistic from a more specific political economy perspective, including potential partner institutions and effective forms of collaboration. To these could also be added the already mentioned importance of looking into the inequality and poverty effects of tax and redistribution efforts at the country level as seen through service delivery and public expenditure (Lustig 2017). Clearly, some countries perform significantly better here than others, but this element has not been included in this ranking exercise, and this paper does not provide any of the emerging empirical evidence forthcoming on this area as the coverage is still limited.

For most donors, as for most development aid today, a comprehensive framework where alternative aid interventions are systematically assessed against each other does not exist. This is despite efforts to carry out indicative needs assessments and planning at global, regional and country levels. Instead, a more practical approach at the country level might often possibly be aimed for, trying to assess where to find the ‘dangling fruits’ as Moore and Prichard (2017) call them with respect to opportunities to increase DRM in the developing world. Based on different characteristics of both contributing and receiving partner countries, there may however also be certain options and choices that stand out. To what extent the alternatives can be assessed through a cost-benefit lens or alternative choice methodology is still relatively uncharted territory except perhaps at the project level in country (e.g. some projects carried out by the UK Department for International Development (DFID).

Appendices

Appendix 1 Explanation of indicators: abbreviations, source (including definitions) and ranking

Indicators

The indicators utilised in the tables in Appendix 2 (and in aggregated sub indicators in tables 3 and 4) to rank developing countries in terms of need of and potential for tax aid are:

Indicator	Source (including definition in link)	Year
Av 1 (GNI+POV+HDI)		
GNI/NOM/CAP (in US$) (gross national income/nominal/per capita)	https://data.worldbank.org/indicator/NY.GNP.PCAP.CD	Latest available year (mostly 2015 or 2016)
GNI/PPP/CAP (in US$) (purchasing power parity)	https://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD	Latest available year (mostly 2015 or 2016)
POV (% of population <1.90 US$/day)	https://data.worldbank.org/indicator/SI.POV.DDAY	Latest available year (mostly 2015 or 2016)
HDI (score on the human development index)	http://hdr.undp.org/en/data	Latest available year (mostly 2015 or 2016)
Av 2 (PEXP+INV+SAVE)		
PEXP (as % of GDP) (public expenditure)	www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx	Annual average of 2010-2015 (or earlier years if later years not available)
INV (as % of GDP) (investment)	www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx	Annual average of 2010-2015 (or earlier years if later years not available)
SAVE (as % of GDP) (savings)	www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx	Annual average of 2010-2015 (or earlier years if later years not available)
Av 3 (TAX+DCREDIT+NAID+PREMIT+NFDI)		
TAX (as % of GDP) (tax capacity/collection)	www.wider.unu.edu/project/government-revenue-dataset	Annual average of 2010-2015 (or earlier years if later years not available)
DCREDIT (as % of GDP) (domestic credit)	https://data.worldbank.org/indicator/FS.AST.PRVT.GD.ZS	Annual average of 2010-2015 (or earlier years if later years not available)
NAID (as % of GDP) (Net aid)	www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx	Annual average of 2010-2015 (or earlier years if later years not available)
PREMIT (as % of GDP) (personal remittances)	https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS	Annual average of 2010-2015 (or earlier years if later years not available)
NFDI (as % of GDP) (net foreign direct investment)	https://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS	Annual average of 2010-2015 (or earlier years if later years not available)
Av 4 (TAX)	See above	See above
Av 5 (Av 1 + Av 2 + Av 3 + Av 4)	An average of the ranking of the four by country	See above
Av 6 (TAXEFF) (from 0-100) (tax effort)	http://publi.cerdi.org/ed/2016/2016.10.pdf	For 2010 (or latest available data)
Av 7 (TAXAID) (in US$) (total tax aid disbursed from donor countries to a developing country)	www.addistaxinitiative.net/documents/Addis-Tax-Initiative_Monitoring-Report_2015_EN.pdf	For 2015

Av 8 (CPIA) (summary indicator) (country policy and institutional assessment – World Bank)	http://datatopics.worldbank.org/cpia	For 2015 (or latest available data)
Av 9 (Av 5 + Av 6 + Av 7 + Av 8)	An average of the ranking of the four by country	See above

Some countries were removed from the tables as the assessment evolved due to either a lack of data and/or, in the case of some countries in the Pacific, being very small (these were considered to require a different and possibly sub regional approach). In tables 3 and 4, the number of countries as a result dropped to 62 and 54 respectively.

Countries are mapped and sorted through a series of tables which present the results of a simple ranking exercise without any attempt at weighting or differentiating. This is directly influenced however through using a mix of composite and singular indicator ranking.

The singular indicators are (see the table above for details regarding definition, source and year):

- Av 4 (TAX)
- Av 6 (TAXEFF)
- Av 7 (TAXAID)
- Av 8 (CPIA)

The composite indicators are (see the table above for details regarding definition, source and year):

- Av 1 (GNI+POV+HDI)
- Av 2 (PEXP+INV+SAVE)
- Av 3 (TAX+DCREDIT+NAID+PREMIT+NFDI)

Changes to this method or adding up of ranks by indicator can evidently influence the end mapping result. Countries are ranked from first to last based on their relative performance. For all but one of the indicators, the highest rank is given to the country with the poorest performance (the only exception is for the CPIA, where the best performance is given the highest rating, to include the composite political and institutional aspect). This is not necessarily always a conceptually nor theoretically obvious correct basis for ranking countries, as you may have countries with, for example, a higher rate of tax collection (Av 4), that in reality have an even higher potential to increase their level of collection. To some extent, this possible distortion is removed through using a variety of indicators whereby together they may provide a comprehensive rank that provides a relative idea of the need and potential for development assistance in the area of public revenue and tax in particular. Removing this distortion altogether is however impossible in such an approach.

This is also why complementary and/or secondary or more layers and/or filters are required to check the validity of the ranking and sorting of possible partner countries. As indicated earlier in the paper, there are similarly fundamental issues related to government ownership of revenue reforms and absorptive capacity. Ideally, an assessment like this should also look into a country’s record of accomplishment or consider the potential elasticity of increases in tax collection related to, for example, the levels of public expenditure, public service delivery, growth and poverty. From this, an informed opinion/assessment must also be shaped on the donor side with regards to what is likely for the coming years in order for a commitment to be made regarding tax aid allocation, design and follow up.

Appendix 2 Detailed country tables

	GNI/NOM/CAP		GNI/PPP/CAP		POV		HDI		Av 1
CAR	320	2	620	1	66	7	0.20	1	2.75
Burundi	260	1	730	3	74	3	0.28	8	3.75
DRC	410	6	720	2	77	2	0.30	13	5.75
Niger	390	5	950	4	46	15	0.25	3	6.75
Malaw i	350	3	1140	6	71	4	0.33	18	7.75
Mozambique	580	12	1170	7	69	5	0.28	9	8.25
Guinea Bissau	590	13	1450	10	67	6	0.26	4	8.25
Liberia	380	4	720	2	39	19	0.28	10	8.75
Madagascar	420	7	1410	9	78	1	0.37	27	11
Sierra Leone	630	14	1560	13	52	12	0.26	5	11
Guinea	470	9	1120	5	35	23	0.27	7	11
Togo	540	11	1330	8	49	14	0.33	21	13.5
Burkina Faso	660	15	1660	17	44	17	0.27	6	13.75
Eritrea	520	10	1500	12	63	8	0.42	35	16.25
Rw anda	700	17	1720	19	60	9	0.34	23	17
Mali	790	19	1970	23	49	14	0.29	11	16.75
Chad	880	23	2110	25	38	20	0.24	2	17.5
South Sudan	790	19	1630	15	43	18	0.33	19	17.75
Benin	860	22	2050	24	50	13	0.30	15	18.5
Ethiopia	590	13	1620	14	34	25	0.33	19	17.75
Afghanistan	630	14	1940	22	36	22	0.33	17	18.75
Comoros	790	19	1490	11	18	34	0.27	7	17.75
Gambia	450	8	1640	16	45	16	0.45	42	20.5
Haiti	820	20	1760	20	25	29	0.30	14	20.75
Uganda	670	16	1820	21	35	24	0.34	24	21.25
Lesotho	1280	34	3290	36	60	9	0.32	16	23.75
Senegal	1000	25	2380	27	38	20	0.33	20	23
Tanzania	910	24	2630	29	49	14	0.40	31	24.5
Yemen	1140	28	2720	31	19	33	0.32	16	27
Cote D'Ivoire	1420	37	3260	35	29	28	0.29	12	28
Zambia	1490	40	3640	41	58	10	0.37	26	29.25
Nepal	730	18	2500	28	15	35	0.41	32	28.25
Zimbabw e	850	21	1710	18	21	32	0.48	48	29.75
Kenya	1340	36	3070	32	34	25	0.39	29	30.5
Cameroon	1320	35	3070	33	24	30	0.35	25	30.75
Nigeria	2790	52	5810	53	54	11	0.33	18	33.5
Djibouti	1030	26	2200	26	23	31	0.47	45	32
Bangladesh	1140	29	3560	40	19	33	0.41	33	33.75
Sao TP	1760	43	3250	34	32	26	0.43	37	35
Timor Leste	2290	50	4550	45	44	17	0.42	34	36.5
PNG	2160	47	2700	30	38	20	0.52	50	36.75
Cambodia	1070	27	3300	37	3	44	0.44	38	36.5
Ghana	1480	39	4080	44	14	36	0.39	30	37.25
Uzbekistan	2160	47	6200	55	67	6	0.59	56	41
Lao PDR	1740	42	5400	50	23	31	0.43	36	39.75
Pakistan	1440	38	5320	49	6	41	0.38	28	39
Angola	4180	57	6470	58	30	27	0.34	22	41
Congo Rep	2540	51	6320	56	37	21	0.45	40	42
Mauritania	1230	32	3690	42	6	41	0.51	49	41
Sudan	1920	44	3990	43	15	35	0.46	44	41.5
Honduras	2280	49	4750	46	18	34	0.44	39	42
India	1590	41	6030	54	21	32	0.45	43	42.5
Tajikistan	1240	33	3460	39	5	42	0.53	53	41.75
Kyrgz Rep	1170	31	3310	38	3	44	0.58	55	42
Myanmar	1160	30	4930	47	7	39	0.53	52	42
Nicaragua	1940	45	5060	48	4	43	0.48	47	45.75
Guatemala	3590	55	7530	60	10	37	0.45	41	48.25
Vietnam	1990	46	5720	52	3	44	0.56	54	49
Bolivia	3000	53	6710	59	7	40	0.48	46	49.5
Cabo Verde	3280	54	6320	57	8	38	0.52	51	50
Moldova	2240	48	5400	51	0	45	0.63	57	50.25
Guyana	4120	56	7580	61	14	36	0.64	58	52.75

	PEXP		INV		SAVE		Av 2
CAR	15.1	6	12.5	7	5	9	8
Burundi	33.4	43	13.6	9	-3.7	2	5.5
DRC	13.9	3	14.9	11	11.1	16	13.5
Niger	25.7	26	42.1	53	24.2	45	49
Malaw i	30.5	38	13.6	9	5.6	10	9.5
Mozambique	33.7	46	48.2	55	13.9	24	39.5
Guinea Bissau	18.4	9	7.9	2	3.2	4	3
Liberia	33.6	45	8.8	4	15.3	25	14.5
Madagascar	14.7	5	16.9	17	12.1	18	17.5
Sierra Leone	19	10	22.7	28	-3.4	3	15.5
Guinea	25.6	25	15	12	-3.3	4	8
Togo	27.3	31	25.1	32	15.7	28	30
Burkina Faso	24.1	21	16.3	15	9.8	14	14.5
Eritrea	30.6	39	8.6	3	1.5	5	4
Rw anda	26.5	29	25.2	33	7.7	11	22
Mali	20.4	14	19	23	13.1	21	22
Chad	21	17	28.5	40	19.8	40	40
South Sudan	39.4	52	10.7	6	-5.2	1	3.5
Benin	20.7	16	25.3	34	17.5	35	34.5
Ethiopia	17.8	8	35	48	30.1	52	50
Afghanistan	24.5	23	22.9	29	28.3	48	38.5
Comoros	25.2	24	17.9	21	13.4	22	21.5
Gambia	27.8	33	21.1	26	9.3	13	19.5
Haiti	24.2	22	29.3	42	25.1	46	44
Uganda	17.3	7	26.9	36	19.4	37	36.5
Lesotho	51.6	55	9.3	5	21.2	43	24
Senegal	29	36	25.8	35	17.7	36	35.5
Tanzania	19.1	11	29.3	42	20.6	42	42
Yemen	29	36	6.4	1	3	6	3.5
Cote D'Ivoire	21.5	18	16.2	14	17.3	33	23.5
Zambia	22.9	19	34.9	47	36.4	57	52
Nepal	19.4	13	37.4	51	40.4	58	54.5
Zimbabw e	28.6	35	16.7	16	4.2	8	12
Kenya	25.7	27	21.1	26	13.4	22	24
Cameroon	20.6	15	21.1	26	17.4	34	30
Nigeria	13.6	2	15.3	13	16.9	31	22
Djibouti	42.2	54	34.8	46	15.4	26	36
Bangladesh	13.9	3	28.3	38	29.5	50	44
Sao TP	39.4	53	35.4	50	17	32	41
Timor Leste	31.1	41	17.4	19	59	59	39
PNG	23.1	20	28.4	39	33.6	56	47.5
Cambodia	20.6	15	22.1	27	11.9	17	22
Ghana	27.3	31	27	37	17.7	36	36.5
Uzbekistan	33.5	44	30.8	44	33.5	55	49.5
Lao PDR	26.1	28	28.3	38	15.65	27	32.5
Pakistan	20.4	14	15	12	13.8	23	17.5
Angola	36.9	47	12.9	8	16.2	29	18.5
Congo Rep	38.6	50	28.3	38	19.9	41	39.5
Mauritania	26.9	30	46.9	54	29.2	49	51.5
Sudan	14.6	4	18.1	22	12.2	19	20.5
Honduras	27.7	32	23.5	31	16.6	30	30.5
India	27.3	31	35.3	49	32.9	54	51.5
Tajikistan	28.3	34	17.6	20	10.8	15	17.5
Kyrgz Rep	37.9	48	30.9	45	25.3	47	46
Myanmar	19.3	12	20.4	25	19.5	38	31.5
Nicaragua	24.5	23	29.4	43	19.7	39	41
Guatemala	13.5	1	13.9	10	12.3	20	15
Vietnam	29.3	37	28.6	41	31.1	53	47
Bolivia	38.3	49	19.2	24	21.3	44	34
Cabo Verde	33.2	42	39.4	52	29.8	51	51.5
Moldova	39	51	23.4	30	16.9	31	30.5
Guyana	30.8	40	17	18	8.5	12	15

	TAX		DCREDIT		NAID		PREMIT		NFDI		Av 3
CAR	9.45	10	29.7	32	19.2	51	0.012	3	1.4	9	21.00
Burundi	13.58	28	25.1	27	21	53	1.8	17	1.5	10	26.67
DRC	10	15	7	3	13.1	44	0.1	5	8.3	39	29.33
Niger	10.82	17	13.3	6	11.8	41	2.1	19	11.6	44	34.67
Malaw i	13.56	27	21.4	19	16.4	50	0.5	9	6.3	31	30.00
Mozambique	20.36	52	30.2	33	14.9	47	1.1	13	29.4	48	36.00
Guinea Bissau	7.95	7	16.7	13	10.6	39	5.5	29	2.1	14	27.33
Liberia	20.86	54	35.1	39	59.8	55	22	47	44.1	49	50.33
Madagascar	9.77	12	14.8	9	5.3	22	4.5	27	6.5	33	27.33
Sierra Leone	9.51	11	15.3	11	15.6	49	1.6	16	14.9	46	37.00
Guinea	14.8	35	29.7	32	7.8	33	1.3	14	6	30	25.67
Togo	16.6	46	38.4	42	9.4	36	9	36	6.4	32	34.67
Burkina Faso	15.63	40	23.1	21	9.8	37	2.4	21	2.2	15	24.33
Eritrea	10	15	104.5	57	6.5	27	0.5	9	1.5	10	15.33
Rw anda	12.6	24	13.3	6	15.2	48	2	18	2.6	19	28.33
Mali	12.99	26	18.8	16	9.9	38	6.3	31	2.6	19	29.33
Chad	5.37	3	9.2	4	4.2	15	0.06	4	2.4	17	12.00
South Sudan	1.7	2	12	5	10.8	40	0	1	-1.3	1	14.00
Benin	14.41	32	20	17	7.3	32	2.5	22	2.7	20	24.67
Ethiopia	11.47	21	43.4	46	8.3	34	1.3	14	2.1	14	20.67
Afghanistan	9.8	14	20.9	18	30.2	54	1.5	15	0.4	5	24.67
Comoros	15.5	39	24.4	25	12.6	43	19.2	46	1.6	11	33.33
Gambia	15.1	37	38.3	41	13.5	45	16.7	45	3.4	23	37.67
Haiti	12.9	25	24.6	26	20.3	52	22	47	1.8	13	37.33
Uganda	9.78	13	15.2	10	7.1	30	3.7	25	4	25	26.67
Lesotho	48.93	58	0.4	2	7.2	31	197	52	2.6	19	34.00
Senegal	18.91	50	34.5	38	7.3	32	11.7	41	2.3	16	29.67
Tanzania	10.58	16	18.6	15	7.2	31	1	12	4.5	26	23.00
Yemen	7.1	6	16.7	13	2.6	10	7.3	33	-0.3	4	15.67
Cote D'Ivoire	14.26	31	27	29	4.9	20	1.3	14	1.3	8	14.00
Zambia	16.2	42	23.3	22	4.2	15	0.2	6	6.8	35	18.67
Nepal	13.86	30	69.6	54	4.7	19	26.6	48	0.4	5	24.00
Zimbabw e	25.3	57	55.3	51	6.3	26	13.7	43	2.4	17	28.67
Kenya	15.88	41	42.8	45	5	21	2.3	20	0.9	7	16.00
Cameroon	11.71	23	14.4	8	2.4	8	0.8	11	2.2	15	11.33
Nigeria	1.6	1	21.4	19	0.5	3	4.5	27	1.3	8	12.67
Djibouti	20.92	55	34.3	37	9.9	38	2.7	23	9	41	34.00
Bangladesh	9	8	59.4	52	1.3	5	9.2	37	1.4	9	17.00
Sao TP	14.61	33	32.8	35	12.2	42	5.2	28	11.5	43	37.67
Timor Leste	135	59	24	24	6.8	28	7.6	34	3.4	23	28.33
PNG	16.3	43	34	36	3.9	14	0.1	5	-0.4	3	7.33
Cambodia	11.09	20	36.9	40	5.7	25	1.6	16	8.6	40	27.00
Ghana	15	36	32.6	34	4.2	15	5.6	30	8	38	27.67
Uzbekistan	18.5	49	17.9	14	0.5	3	8.8	35	2.1	14	17.33
Lao PDR	13.62	29	26.7	28	4.4	17	0.7	10	4.7	27	18.00
Pakistan	10	15	46.8	47	1.3	5	6.3	31	0.6	6	14.00
Angola	16.46	44	67.2	53	0.3	2	0	2	-1.3	2	2.00
Congo Rep	9.43	9	-4.1	1	3.6	13	0.27	7	19.2	47	22.33
Mauritania	11.48	22	29.6	31	6.9	29	0.38	8	13.4	45	27.33
Sudan	6.19	4	21.6	20	2.3	7	1	12	2.5	18	12.33
Honduras	14.75	34	23.7	23	3.5	12	16.6	44	5.6	28	28.00
India	10.84	18	76.3	55	0.2	1	3.5	24	1.7	12	12.33
Tajikistan	16.5	45	15.9	12	4.3	16	38.1	51	2.9	21	29.33
Kyrgz Rep	18.2	48	14.3	7	9	35	28.5	50	9.2	42	42.33
Myanmar	6.6	5	27.4	30	2.2	6	0.8	11	3.6	24	13.67
Nicaragua	15	36	47.7	48	5.4	23	9.5	38	7.5	36	32.33
Guatemala	10.84	19	39.6	43	0.8	4	10	39	2.2	15	19.33
Vietnam	15.2	38	115	58	2.5	9	6.6	32	5.7	29	23.33
Bolivia	20.6	53	53.2	49	2.8	11	4.1	26	3.3	22	19.67
Cabo Verde	17.89	47	82.7	56	14.3	46	10.1	40	6.7	34	40.00
Moldova	23.2	56	40.1	44	5.6	24	26.7	49	4	25	32.67
Guyana	20.3	51	53.9	50	4.5	18	13.3	42	7.7	37	32.33

	TAXEFF		TAXAID		CPIA		Av 9
CAR	52.86	20	0.20	8	2.42	40	16.07
Burundi	84.95	53	2.22	27	2.98	33	25.29
DRC	46.10	11	1.31	20	2.92	36	17.71
Niger	52.58	18	0.36	12	3.35	17	21.04
Malaw i	70.63	50	2.21	26	3.18	28	25.07
Mozambique	59.53	34	9.51	39	3.23	24	33.22
Guinea Bissau	35.10	4	0.11	5	2.46	39	12.86
Madagascar	52.28	17	0.23	9	3.23	23	16.04
Sierra Leone	54.19	23	0.13	7	3.47	12	15.71
Guinea	43.84	10	0.00	1	3.15	29	17.32
Togo	66.49	45	0.00	1	3.03	32	29.21
Burkina Faso	55.04	27	2.79	29	4.04	1	21.36
Eritrea	64.13	40	1.13	19	3.22	25	20.72
Rw anda	56.29	29	3.14	31	3.63	7	21.82
Mali	60.51	35	0.25	10	2.71	38	24.86
Chad	35.15	5	0.61	16	3.78	2	13.36
South Sudan	66.00	43	0.98	18	3.63	7	14.72
Benin	58.38	32	2.18	25	2.98	33	28.39
Ethiopia	62.00	38	1.67	21	3.50	9	26.29
Afghanistan	31.32	2	1.81	22	3.38	15	19.14
Comoros	54.36	25	0.46	14	2.86	37	26.61
Gambia	57.92	30	0.04	3	2.71	38	26.79
Uganda	53.65	22	3.72	33	3.36	16	23.50
Lesotho	90.96	54	0.00	1	2.97	34	31.57
Senegal	60.91	36	10.83	40	3.69	5	31.68
Tanzania	58.14	31	4.30	34	3.78	2	24.43
Yemen	35.76	6	0.37	13	3.12	30	14.36
Cote D'Ivoire	66.27	44	0.01	2	3.68	6	21.82
Zambia	66.54	46	3.55	32	3.30	20	34.36
Nepal	51.23	16	0.20	8	2.38	41	29.93
Kenya	66.77	47	4.73	35	3.35	17	31.18
Cameroon	47.19	12	0.04	4	3.34	18	18.36
Nigeria	33.83	3	0.00	1	3.30	20	13.54
Djibouti	65.27	42	0.65	17	3.39	14	32.96
Bangladesh	38.04	7	5.57	36	3.52	8	23.25
Timor Leste	24.27	1	0.35	11	3.08	31	29.32
PNG	74.99	52	0.50	15	3.19	27	33.79
Cambodia	41.50	9	2.61	28	3.28	22	24.04
Ghana	54.32	24	6.47	37	3.49	10	26.75
Uzbekistan	53.00	21	0.00	1	3.48	11	27.07
Lao PDR	50.09	15	0.00	1	3.21	26	
Pakistan	47.54	13	0.00	1	3.21	26	19.18
Congo Rep	40.99	8	0.00	1	3.73	3	17.14
Mauritania	61.56	37	0.00	1	2.95	35	30.89
Sudan	74.00	51	0.00	1	2.95	35	24.04
Honduras	52.61	19	0.11	6	3.68	6	23.54
India	63.38	39	0.01	2	3.28	22	28.43
Kyrgz Rep	98.00	55	6.72	38	3.29	21	40.50
Myanmar	48.00	14	13.89	41	3.33	19	24.39
Nicaragua	65.00	41	2.87	30	3.70	4	33.46
Vietnam	54.52	26	2.03	23	3.69	5	31.43
Bolivia	58.64	33	0.00	1	3.45	13	30.14
Cabo Verde	55.47	28	2.07	24	3.48	11	36.57
Moldova	69.29	49	0.00	1	3.70	4	32.36
Guyana	66.87	48	0.00	1	3.30	20	32.11

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