**Research on revenue potential from a set of progressive taxation   
reforms in Malawi, Mozambique and Nigeria**

**Methodological note for internal use**

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*Research was conducted in 2019 for ActionAid by Michael Masiya and Frank Kalizinje.*

# **Summary results**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Malawi | | Mozambique | | Nigeria | | Notes |
| *Currency:* | **MWK** | **USD** | **MZN** | **USD** | **NGN** | **USD** |  |
| *Exchange rate:* | 730.27 |  | 63.58 |  | 305.79 |  | World Bank WDI, 2017 average |
| HNWI compliance | 1660385839 | $ 2,273,652 | 267074592 | $ 4,200,321 | 32438272656 | $ 106,080,189 | Revenue from improved compliance from setting up a HNWI unit |
| Property tax | 19437250000 | $ 26,616,434 | 3464660000 | $ 54,489,217 | 142688080000 | $ 466,620,979 | Assuming reaching 50% of revenue potential |
| PIT rate on top earners | 4463361549 | $ 6,111,912 | 110416565 | $ 1,736,538 | 641601657 | $ 2,098,177 | Increasing the PIT rate on the top band by 3% |
| Excise on luxury items |  | $ 9,655,000 |  | $ 12,891,000 |  | $ 134,568,000 | Introduction of an excise tax of 10% on imported goods, based on the current lists of luxury items |
| Tax incentives revision |  | $ 88,759,517 |  | $ 621,780,200 |  | $ 1,313,892,260 | Cost of CIT incentives |
| Tax treaties revision |  | $ 1,715,259 |  | $ 6,100,400 |  | $ 4,472,044 | Revenue forgone to limitations on WHTs on dividends and interests |
| TOTAL: |  | **$ 135,131,775** |  | **$ 701,197,676** |  | **$ 2,027,731,649** |  |
| Revenue increase (as GDP%) |  | **2%** |  | **6%** |  | **1%** |  |
| *GDP:* | 4546970m | $ 6,226,401,788 | 804464m | $ 12,651,923,669 | 114899250m | $ 375,745,475,551 | ICTD/UNU-WIDER GDR, 2017 |

# **Tax treaties revision**

The following is a methodological note and assumptions on tax revenue losses incurred due to low withholding tax (WHT) rates on interest and dividends limitations for Double Taxation Treaties (DTT) of Malawi, Mozambique and Nigeria. Estimates use data that is obtained from reputable and publicly accessible sources. In all the three countries, we provide estimates of costs for withholding tax rates on dividends and interest payments only. Although Oleksii B., Beer S., Loeprick J., and Vallada F. (2017) argue that increase in withholding tax rates at the individual treaty partner level may not necessarily imply increase in revenues, ActionAid (2016) posits that applying withholding taxes present a straightforward and cost effective way of ensuring that developing countries tax income of foreign owned businesses. Therefore, we work on the assumption that reduced WHT on dividends and interests in tax treaties leads to revenue forgone by countries.

In this study:

* Information on tax treaties is obtained from the freely available [ActionAid Tax Treaties Dataset](https://www.ictd.ac/dataset/action-aid-tax-treaties-dataset/) which provides 519 tax treaties signed by low- and lower-middle income countries in Africa and Asia (Hearson, 2016).
* We supplement the ActionAid tax treaties dataset with [Ernest and Young’s Worldwide Corporate Tax Guide of 2019.](https://www.ey.com/Publication/vwLUAssets/ey-worldwide-corporate-tax-guide-2019/$FILE/ey-worldwide-corporate-tax-guide-2019.pdf) [PWC’s Worldwide Tax Summaries](http://taxsummaries.pwc.com/uk/taxsummaries/wwts.nsf/ID/PPAA-85RDKF) and [Deloitte’s Corporate Tax Rates 2019](https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-corporate-tax-rates.pdf)
* Following McGauran & Fernandez (2013), ActionAid (2016) and Jansky (2018), the static approach is used to estimate revenue loss due to low withholding tax rates in DTTs of the three countries being studied. Thus, our estimates do not account for behavioural effects. This is mainly because of data limitations.[[1]](#footnote-1) For all the countries, we use the year 2017 as it is the most recent year in which data is available to permit our estimates.
* Basically, we obtain the estimates by firstly computing the revenue that are gotten with the use of the low WHT rates in DTTs. Secondly, we compute the revenues that would have been realised had it been that WHT rates subjected to non-treaty partners. Then to obtain the revenue loss, the latter is subtracted from the former.
* Data on Foreign Direct Investment (FDI) incomes and stocks is obtained from International Monetary Fund (IMF) [Balance of Payment](http://data.imf.org/?sk=7A51304B-6426-40C0-83DD-CA473CA1FD52) and the [Coordinated Direct Investment Survey (CDIS)](http://data.imf.org/?sk=40313609-F037-48C1-84B1-E1F1CE54D6D5) databases.
* Descriptive Statistics of FDI stock from DTT countries of Malawi, Mozambique and Nigeria in the year 2017 are presented in table 1.

Table 1: Share of FDI stock from DTT countries

|  |  |  |  |
| --- | --- | --- | --- |
| Country | USD Millions | | Percentage share of FDI from DTT countries |
| **FDI from DTT countries** | **Total FDI** |
| Malawi | 224 | 497 | 45% |
| Mozambique | 27348 | 37486 | 73% |
| Nigeria | 36494 | 78322 | 47% |

*Source: Author’s calculation using data from IMF CDIS database*

**Assumptions & Limitations**

* One strong assumption made in the study is that FDI flows and stocks are not influenced by changes in negotiated withholding tax rates in DTTs. Therefore, the estimates need to be taken with caution as they are but indicative
* FDI income is distributed across countries in a similar fashion to FDI stock
* We estimate revenue effects associated with dividend and interest payments only. FDI incomes related to royalty payments and capital gains are excluded. This is mainly because the majority of revenue losses in developing countries are mainly due to DTT rules relating to dividend and interest payments (ActionAid, 2018).
* In the case of Mozambique and Nigeria, we used FDI stocks as reported by the countries themselves. However, due to data availability constraints, for Malawi we used FDI stocks mirror data reported by treaty partners in IMF CDIS.
* On the basis of all data sources, the study managed to obtain data as latest as 2017 for FDI stocks, income and domestic rates
* Malawi’s DTT network is limited. As of August, 2019, Malawi had the following active DTTs: France, Norway, South Africa, United Kingdom and Switzerland (PWC, 2019). Most noteworthy, Malawi is currently renegotiating its DTT with Netherlands while those with Zimbabwe, Seychelles, Zambia, Botswana, Lesotho were signed but not yet in force. DTTs with Mauritius is being re-negotiated while those with Morocco and Portugal await ratification and signing by the Minister of Finance.
* Mozambique’s DTTs that are in force include with the following countries: Botswana, India, Italy, Macau, Mauritius, Portugal, South Africa, United Arab Emirates and Vietnam (PWC, 2019)
* Nigeria has DTTs with the following partner countries: Belgium, Canada, China, P.R.: Mainland, Czech Republic, France, Mauritius, Netherlands, Pakistan, Philippines, Romania, Slovak Republic, South Africa, Spain and United Kingdom. DTTs with South Korea and Sweden are still being ratified. (PWC, 2019).

**Findings**

Table 2: Revenue loss due to low WHT on Dividends and Interests

|  |  |
| --- | --- |
| Country | Revenue Forgone (2017) (US$) |
| Malawi | 1,715,259.26 |
| Mozambique | 6,100,399.81 |
| Nigeria | 4,472,044.46 |

*Source: Author’s calculations*

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# **Tax incentives revision**

The following is a methodological note and assumptions on tax revenue losses incurred due to tax incentives. The estimates are for Malawi, Mozambique and Nigeria and they make use of data that is obtained from reputable and publicly accessible sources.

**Scope of the Estimates**

Easson & Zolt (2003) define tax incentives as “special exclusions, exemptions, or deductions that provide special credits, preferential tax rates, or deferral tax liability. Thus tax incentives may fall in broad category of statutory[[2]](#footnote-2) or discretionary[[3]](#footnote-3) and they may indeed be categorised on cost or profit basis.[[4]](#footnote-4) Furthermore, tax incentives may be described according to their form[[5]](#footnote-5) or sector in which they fall.[[6]](#footnote-6) The study estimates tax incentives in general and this approach is warranted for ease of estimations because data on specific tax incentives is notoriously difficult to obtain (James, 2014).

Brixi, Valenduc and Li Swift (2004) and James (2014) identify three main methods of estimating the costs of tax incentives[[7]](#footnote-7) namely: revenue forgone method, revenue gain method and outlay equivalent method. The revenue forgone method is simply a static ex post calculation of revenue forgone by the government while the revenue gain method is an ex ante computation of extra revenues that would have been realised if the tax incentives are abolished. This is data intensive as it requires information on elasticity as well as an excellent understanding of taxpayer’s behaviours. The outlay equivalent method simply calculates the potential outlay that would have resulted into a similar gain for the taxpayer as the tax incentive in question. This study utilises the revenue forgone method to estimate losses from tax incentives.

The following is a list of main data sources, methodologies and assumptions that were used in estimating the tax incentives.

* We closely followed ActionAid (2018) to calculate the previous revenue forgone from tax incentives in the three countries. From these calculations we projected and adjusted the estimates of revenue forgone due to tax incentives for the year 2017 whose estimates were not available in any of the countries under study.
  + For Malawi, a study by PWC that was commissioned by UNDP in 2016, estimates that revenue forgone due to various tax incentives in Malawi was 25%, 15% and 9% of the total revenues for 2014, 2015 and 2016 respectively. Using annualised data on tax revenues from Malawi’s Ministry of Finance’s and GDP (in current US$) from [World Bank’s World Development Indicators (WDI)](https://datacatalog.worldbank.org/dataset/world-development-indicators), the revenue forgone was found to be about US$84.5[[8]](#footnote-8) million representing 1.6% of GDP (ActionAid, 2018). Much of the revenue lost emanated from Industrial Rebate[[9]](#footnote-9) scheme and it excluded some incentives on which data was not available i.e. capita allowances (PWC & UNDP, 2016). We built on this approach and data to further calculate revenue lost to tax incentives in 2014 and 2015 and found it to be US240.9 million and US$145.7 million respectively.
  + For Mozambique, IMF (2016) estimates that the country lost 3.3% of GDP in tax incentives which translates into US$559.7 million. Unlike Malawi, there were no estimates for more than one year.
  + IMF (2018) reports that a Nigerian Inter-Ministerial Committee undertook a partial estimation of 52 forms of tax incentives being executed by the Federal Government through various agencies in Nigeria. It was estimated that Nigeria lost about 1.28% of GDP to tax incentives in the period of 2011 and 2015. This translates into about US$1 trillion in revenue forgone. The incentives covered in the estimates mainly included tax waivers and concessions. We used these estimates to calculate revenue lost to tax incentives in 2011 to 2015.
* To estimate revenue lost to tax incentives for the year 2017, we grew the calculated estimates by the average annual growth rate (AAGR) of gross fixed capital formation (GFCF) which was calculated for the period 2011 to 2017. The GFCF was arrived at through pairwise correlation with other determinants of foreign direct investment (FDI) like GDP and trade openness.[[10]](#footnote-10) In the pairwise correlation, we also included the computed revenue forgone for the other years so as to establish its main driver out of the rest. So, for Malawi and Nigeria, GFCF was superior to others in terms of driving revenue loss due to tax incentives. Data on all these determinants of FDI was obtained from World Bank’s WDI. For Mozambique, pairwise correlation was not possible because we only had one observation of revenue loss i.e. in 2014 only. We therefore, assumed that the same GFCF holds as a key determinant of revenue loss due to tax incentives. The AAGR of GFCF was found to be 2.11%, 11.1% and -1.6% for Malawi, Mozambique and Nigeria respectively. These growth rates were multiplied with the most recent calculated revenue forgone in the countries under review.
* The 2017 revenue forgone due to tax incentives was found to be US$ 88.8 million for Malawi, US$ 621.8 million for Mozambique and US$1.313 billion for Nigeria. This represents revenue forgone as a percentage of GDP of 1.41%, 4.92% and 0.35% for Malawi, Mozambique and Nigeria respectively.

**Assumptions & Limitation**

* Determinants of FDI are synonymous to the determinants of tax incentives hence revenue forgone arising from tax incentives
* When adjusting revenue forgone to generate the 2017 estimates, we assume there was no discretionary tax change in the incentives that that would effectively affect the revenue forgone.
* Due to data constraints, we could not estimate the revenue forgone from various forms of tax incentives in the countries under study. As such, it could not isolate redundant incentives.
* We used the revenue forgone approach of estimating tax incentives hence we could not account for behavioural aspects of firms that may have a bearing on revenue forgone to tax incentives.
* The study’s estimates of revenue loss due to tax incentives are based on existing estimates. Albeit being from credible and reputable sources i.e. IMF, PWC, the estimates were most partial and possibly redundant. Therefore, by relying on these estimates, our estimates may have inherited some weaknesses from the existing estimates.

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# **Personal Income Tax rate increase for the top bracket**

**MALAWI**

The PIT structure in Malawi is given as follows:

|  |  |  |
| --- | --- | --- |
| Country | Income Bracket/Tax bands (MK) | Applicable Tax Rate (%) |
| Malawi  (MK) | First         360,000.00 | 0 |
| Next          60,000.00 | 15 |
| Excess of   420, 001- 35, 999, 999 | 30 |
| Excess over    36, 000, 000.00 | 35 |

**Model Assumptions:**

* Using Malawi Labour Force Survey 2013[[11]](#footnote-11), we obtained shares of employed individuals by education level. The survey also provides mean incomes per education level. Thus, we introduce years of experience in each category to vary the incomes and ensure larger spread of data. To further ensure a larger spread, within tertially category, we introduce four categories of Diploma, Bachelor’s degree, Master’s degree and PhD. We assume that in Malawi, among the share of the working population with tertially education: 3 percent have PhDs, 12 percent have Masters degrees, 35 percent have Bachelors degrees and 50 percent have Diplomas.
* We set out to use the 2018 and 2013 average Consumer Price Indices (CPIs) to adjust the mean incomes from 2013 to 2018. However, due to the re-basing of the CPI and low inflation in recent years owing to a tight monetary policy stance, the CPI figures were not reliable. Thus, we instead used the official exchange rate average for 2013 and 2018 to adjust the incomes. The average exchange rate for 2013 stood at MK328.17/USD and the average for 2018 stood at MK730.70/USD[[12]](#footnote-12).
* In the year 2018, the PAYE collection stood at MK 268,824,911,850.17 and this forms the baseline estimate which is expected to be yielded by the initial model parameters.

**Model Estimates**

* Malawi already introduced a 35% rate to income beyond MK3 million. Hence, we simulated the revenue gain from that measure. According to the model estimates, the measure resulted into a revenue gain of MK4.46 billion.
* When we computed the median of each bracket and compared to the adjacent upper-bracket, there is no definite or average increase from one bracket to the next[[13]](#footnote-13). Hence, we arbitrarily increased the top tier bracket by 1/3 (33%) to MK48,000,000and applied an arbitrary rate of 40% up from 35 percent. However, due to fewer earners beyond the suggested threshold, revenue gain was MK246.77 million which was 0.1 percent of baseline PAYE collection that year.

**MOZAMBIQUE**

The PIT structure in Mozambique is given as follows:

|  |  |  |
| --- | --- | --- |
| Country | Income Bracket/Tax bands | Applicable Tax Rate (%) |
| Mozambique (MZN) | First 42,000 | 10 |
| Next 42,000 - 168,000 | 15 |
| Next 168,000-504,000 | 20 |
| Next 504,000-1,512,000 | 25 |
| Excess over 1,512,000 | 32 |

**Assumptions**

* We obtain statistics from the 2018 Job Diagnostics Report for Mozambique by the World Bank. Out of a total population of 27.22 million the Working Age Population (WAP) was estimated at 13.92 million (about 58.3 percent). Out of this share, 76.5 percent are employed and 29 percent of this in the Non-Agriculture sector. Wage employees form 49.5 percent of the workers in the Non-Agriculture sector. The total working and wage-earning population excluding unpaid worker is 2.98 million.
* We use <https://www.averagesalarysurvey.com/mozambique> to obtain estimates of average incomes for various workers in Mozambique.
* We split the workers based on categorization in the World Bank Job Diagnostics report. In terms of age, wage-earning workers are split into 21-30 and 30+ and their proportions are segmented into public and private institutions. The reports also categorizes the workers in various educational levels viz; none, Some primary, Completed Primary, Some Secondary, Completed Secondary, Some Technical, and higher education.
* We obtain a figure of Personal Income Tax (IRPS) for the year 2018 from the website of the Mozambican Tax Authority which stood at MZN 33.15 billion. We assume that this figure is coming from 1.40 percent of the WAP which represents taxpayers in the tax register. It represents 13 percent of wage earning taxpayers. Inputting the estimated number of taxpayers at 194,381 into the model to produce the aforementioned IRPS figure.[[14]](#footnote-14)

**Model Estimates**

* On average, we found that the next bracket is the median of previous bracket multiplied by a factor of 4.5. That’s the new bracket covers income beyond MZN 4.54 million (MZN 1.01 million \*4.5). We introduce another interim bracket between MZN 1.01 million and MZN 4.54 million to cover for the gap between the old higher threshold and the new one.
* We assumed a top tier rate of 35 percent (arbitrary) that can also be adjusted in the model. The gain resulting from this increase is pegged at MZN 112.02 million representing 0.8 percent of the current IRPS figure.

**NIGERIA**

Nigeria’s PIT is structured as follows:

|  |  |  |
| --- | --- | --- |
| Country | Income Bracket/Tax bands (NGN) | Applicable Tax Rate (%) |
| Nigeria  (NGN) | First 300,000 | 7 |
| Next 300,000 | 11 |
| Next 500,000 | 15 |
| Next 500,000 | 19 |
| Next 1,600,000 | 21 |
| Above 3,200,000 | 24 |

**Model Assumptions:**

* The working population data is obtained from National Bureau of Statistics-Labour Force Statistics Volume 1 2018[[15]](#footnote-15). This has employment data up to 2018 Q3. We use the 2018 Q3 employment statistics split by qualification of workers who reported working over 40 hours+ a week, classified as fully employed.
* We split each category of education level into years of experience and we assume 1-5 years experience, 5-9 years experience, 9-14 years experience and greater than 14 years as determining the level of income within that category. Other ideal criteria would have been to split by industry or by age group but the assumptions regarding work experience would be hard to align with the industries and for age group it would not have been value-adding.
* Within each category of education level, we assume a mean income earned by individuals in that bracket based on a wide range of literature[[16]](#footnote-16).
* We use the use the labour force figure obtained from the National Bureau of Statistics-Labour Force Statistics Volume 1 2018. As of 2018 Q3, Nigeria’s Labour force stood at 90,470,592.
* We obtain an estimate of the Personal Income Tax (PIT) revenue for the year 2018 using three sources: the Government Revenue Dataset (GRD)[[17]](#footnote-17) by the International Centre for Tax and Development (ICTD)/UNU-WIDER, the African Tax Outlook[[18]](#footnote-18) and the Budget Statement of Nigeria (2019)[[19]](#footnote-19).
* GRD-provided PIT revenue shares of GDP up to 2016 and we projected up to 2018
  + The Nigeria budget statement provided a gross tax revenue figure of 2018 and we computed PIT using a share of 7.5 percent average obtained from the African Tax Outlook (ATO-2018)
  + We thus obtained an estimate of N297, 496, 000, 000.00.
* The IMF Report No. 18/64 titled “Nigeria-Selected Issues” published in March 2018[[20]](#footnote-20) observes that as of 2016, 10 million people (13 percent of labour force) were registered for PIT purposes in all the states of the federation including the Federal Central Territory of Abuja. The share of taxpayers registered for PIT comprised about 2 percent of the number of registered taxpayers. In our model, we assume that after two years, the share of PIT taxpayers stands at 4.1 percent of the total labour force.

**Revenue Estimates**

* On average, medians are multiplied by a factor of 2.4 to get to the next bracket. However, when we multiplied the median of the higher bracket (N4.8 million) with 2.4 the figure was too high at over N11 million. So what we did was look at how the last two brackets were arrived at. From N1.6 million to N3.2 million the bracket was multiplied by 2. So we multiplied N3.2 million by a factor of 2 to get N6.4 million which we designated as the starting point of the top tier bracket.
* The revenue estimated using baseline assumptions matches the PIT estimate of 2018, which stands at N297.50 bn. We then introduce a rate of 27 percent for incomes above N6.40 million per year. This yields a PIT of N298.14 bn yielding a revenue gain of N641.40 million for the year representing 0.2 percent of the baseline estimate.

# **Property tax reform**

Unlike developed countries who collect close to 2.2 percent of GDP in property taxes, Africa’s property taxes account for a meagre 0.38 percent of GDP[[21]](#footnote-21). In that regard, there is massive potential for enhancing property taxes in Africa. This improvement of the property tax potential goes beyond raising property tax rates as the rates are very low already and raising such rates would have little revenue impact if the existing inefficiencies underlying property tax management remain unresolved[[22]](#footnote-22). Some of these inefficiencies include manual records of properties, relegation of valuation professionals, less coverage of properties, and arbitrary use or non-uniformity in valuation methods. If African countries can address these challenges, there is a greater potential in property taxes than is currently been collected. In this section, we dwell on how three African countries viz; Malawi, Mozambique and Nigeria can enhance their property taxes and we attempt to estimate the potential revenue that these countries can realize from these reforms.

**Comparative Analysis of the Property Tax Systems of the three countries**

We compare the property tax systems of Malawi, Mozambique and Nigeria by dwelling on the administering authority, assessment system and reforms that these countries may have carried out. We present the comparison in Table 1.

Table 1: Comparative Features of Property Tax Systems

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Country | Administering Authority | Assessment System | Year of Major Reform | Nature of Reform | Scope/Scale of Reform |
| Malawi | City Councils | Market-based | 2018 | REMOP | Mzuzu City |
| Mozambique | Municipals | Banded, Record-book value, owner-reported value | 2018 | Introduction of mobile payment | Maputo |
| Nigeria | States | Market-based | 2018 | Hiking of property rates and electronic register of Property | Hiking –Lagos and electronic register –Across all states |

All the three countries have made considerable efforts in 2018 to reform their property tax system. However, according to the Doing Business Report (2019) by the World Bank, Malawi and Mozambique are yet to migrate fully from a manual property register. The Doing Business Report (2018) for Nigeria observed that despite the commencement of digitization process in 2004, progress has of late been very slow. The World Bank (2019), in the Doing Business Reports, urges all countries to “create a common database or link existing database that gather cadastral plans, ownership data and tax records”. There are a number of benefits associated with computerizing land or property records. In addition to saving costs of paper, digitization streamlines workflows and allows creation of backup copies –thereby, preventing losses of titles. However, the World Bank cautions against implementing digitization on an inefficient system. Thus, the measures meant to boost property tax potential must not be implemented in isolation, but rather, as a comprehensive package to reduce other inefficiencies within the system. In light of this caution, Revenue Mobilization Program (REMOP) becomes one of the most ideal considerations for countries on the verge of reforming their property tax system. One of the key reforms that the REMOP advocates for is the point-based valuation system, which is touted to be *very progressive*. In all the three countries under study, none employs the point-based system but mostly prevalent is the market-based system and other crude ways of estimating value. However, Malawi is one of the countries that implemented the REMOP in one of its cities, Mzuzu. In the upcoming section, we briefly summarize the REMOP program details for Mzuzu City in Malawi.

**MALAWI**

City of Mzuzu implemented the Revenue Mobilization Program (REMOP) Property Tax system which saw revenues increase seven-fold within 8 years from a meagre MK50 million per year in 2010 to MK 350 million in 2018. REMOP is composed of multiple phases, namely: discovery, assessment, billing, sensitization, collection, and compliance.

**Discovery:**

* Quadruped number of properties from 10,000 to 40,000.
* Introduction of physical address system
* Assessment:
* Area-based valuation with points (previously market-based system used) - (adding points for attractive features like having access to a paved road and deducting points for poor features such as lack of electricity)
* Points-based system more progressive than market-based
* Informal settlements assessed where market information not available
* Computer-aided mass appraisal

**Billing:**

* System for automating billing and tracking e-payments
* Billing annually than quarterly

**Sensitization:**

* Campaign: “My city, my responsibility”
* Sensitizing on link between tax and benefits –benefit principle.
* Using multiple communication channels

**Collection:**

* Ending door-to-door collection and introducing payments via banks
* Widening communication channels

**Compliance:**

* Issuing summons to defaulters using letters prepared by lawyers

**Challenges:**

Amendment of new act to carter for points-based valuation system as the old Land Management Act (1998) does not carter for the point-based valuation system.

**A model for African countries?**

A comprehensive REMOP model is suited for developing country contexts. First of all, in the case of Malawi, the other three cities –namely Lilongwe, Blantyre and Zomba must also consider implementing the REMOP program in order to enhance property tax revenues.

**MOZAMBIQUE**

In Mozambique, the property tax is designated as “Municipal Property Tax (Imposto Predial Autárquico – IPRA)”. This is the tax levied on the objective real estate value of an urban building that is regarded as infrastructure and built on the municipality’s urban land. Weimer (2012) estimated the unrealized potential of the property tax in Mozambique by Municipality. These estimates were arrived at through plausible and scientifically justified methodology. Hence, in our attempt to estimate the revenue potential of property tax in Mozambique, we lay our foundation from these estimates.

Weimer (2012) estimates that in 2009, the revenue collected at MT 8,271,830 was just 1 percent of the potential that could have realized. The unrealized potential stood at MT 818,911,121. Weimer (2012) explained that there are two reasons for this low value: the A low collection ratio of 11 percent which means that only very few taxpayers pay property tax and a low coverage ratio of 24 percent meaning the tax registers are of poor quality. This means that with appropriate reforms, the municipals would attain at least half of the unrealized potential. In order to improve collection, the most effective way is to revamp the property register and widen the tax net. Weimer (2012) also observed that each of the six municipals studied could more than triple the revenue amount of property tax.

In 2017, local municipals and the revenue administration collaborated to collect personal income tax (IPRS) derived from property. From the total collection, municipals would get to keep 10 percent of the collected funds. It was estimated that the revenue gain over the period 2018-2020 would be MT 256.2 million, which, on average provides a gain of MT 85.4 million per annum. Out of this, municipals would retain an amount close to MT 8.54 million.

**NIGERIA**

In 2018, Nigeria attempted to double property tax rates in Lagos but faced a backlash from the public who demanded a reversal of the policy. To some extent, this shows that the property tax base is very narrow as few taxpayers are complying with property taxes. What Nigeria would look to as progressive means of raising property taxes would be to increase the tax base by expanding the property register or improving valuation methods to provide for a truly reflective value of property tax. This could include adoption of the point-based system of valuation and regulation of the valuation market. Both reforms could be implemented under the REMOP programme and it could have great potential for boosting property tax revenues.

In the country report for Nigeria, IMF (2019) estimates that if Nigeria would implement property tax reform, the reform is likely to generate revenues amounting to 0.5 percent of GDP for the period 2018-2020. Thus, the REMOP would likely generate more considering the comprehensive nature of its implementation.

**Procedure for Estimating Potential Revenue from Property Taxes**

**Assumptions**

We make the following assumptions in the computation of property tax in the three countries:

* The average household size in Nigeria is 5.0 persons[[23]](#footnote-23), in Mozambique it is 5.1 persons[[24]](#footnote-24), and in Malawi it is 4.5 persons[[25]](#footnote-25).
* We assume that the urban population is indicative of the size of the urban properties. The estimate may further be enhanced by focusing only on percentage of households with access to electricity. This indicator extends to rural households with electricity as more likely to be in the tax net in as far as property tax is concerned. This carters for the challenge of setting a threshold to exclude disadvantaged households.
* Dividing the population with electricity access by average household size, we obtain the estimate of number of properties in each of the three countries.
* We assume that commercial properties make up 10 percent of the residential properties and their average assessed value is 3 times the value of residential properties in the City Centre.
* We use the following tax rates for properties:
  + **Malawi:** For purposes of this exercise, we assumed a rate of 0.4% of real estate assessed value.
  + **Mozambique**: Municipal real estate tax rates are as follows: (i) 0.4% for real estate with residential purposes; and (ii) 0.7% for real estate with commercial, industrial or independent professional activities, amongst other purposes.
  + **Nigeria:** As a guide only, commercial and residential owner-occupied properties attract an annual property Land Use Charge Rate of 0.394% of the assessed value of the property; new owner-occupier/individual properties are assessed at an annual land use charge rate of 0.132% of the assessed value of the property.
* We obtained estimated average property values from <https://www.numbeo.com/property-investment/> which provides a comparable estimate of property values for all countries in Local currency units.

From the aforementioned assumptions, we came up with a set of estimates.

**The Estimates**

In Local Currency Units, we summarize the estimates for potential property tax in the **three** countries as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| Country | Estimated Property Tax Revenue at full potential (Millions of LCU) | Estimated share in Tax Revenues | Estimated share in GDP |
| Malawi | 38,874.50 | 4.9% | 0.8% |
| Mozambique | 6,929.32 | 3.7% | 0.9% |
| Nigeria | 285,376.16 | 4.1% | 0.2% |

With implementation of REMOP, we assume that the three countries would be able to realize a modest *50 percent* of the full potential after the first phase of implementation and we estimate the following tax revenue potential:

|  |  |  |  |
| --- | --- | --- | --- |
| Country | Estimated Property Tax Revenue at full potential (Millions of LCU) | Estimated share in Tax Revenues | Estimated share in GDP |
| Malawi | 19,437.25 | 2.4% | 0.42% |
| Mozambique | 3,464.66 | 1.9% | 0.43% |
| Nigeria | 142,688.08 | 2.0% | 0.12% |

After the implementation of REMOP, the estimated share in GDP for Malawi and Mozambique would be higher than the average for African countries at 0.38 percent and at full potential, the share in GDP is over double the Africa Average. In the case of Nigeria, the low property tax-GDP ratio is not surprising as tax revenues in Nigeria only account for about 6.1 percent of GDP. Being a resource-rich country, the larger share of Nigeria’s revenues are non-tax revenues. Hence, in this case, 0.2 percent of GDP is very high. According to the IMF estimate of 0.5 percent of GDP in three years translates to an annual average of 0.17 percent of GDP which is rightly between the REMOP potential (0.12 percent) and full potential (0.2 percent) per annum.

**Local vs National Collection (A small note)**

Since in all countries, property taxes are effectively handled at local level –considering capacity advantages of surveyors, valuers and property maps, there is no compelling case for shifting to national level. What the central government would do to enhance capacity of local administrations would be to allocate a percentage of the revenue collected from property taxes, say 10 percent in the example of Mozambique, towards their operation costs or come up with some justifiable level of retention.

# **Improvement of HNWI compliance**

**Key Parameters Used in the Estimation**

**UGANDA**

* Oxfam report on the percentage income share (35.71) of the richest 10%
* HNWI paper on the collection from the HNWIs
* PAYE figure from the URA revenue report <https://www.ura.go.ug/Resources/webuploads/GNRART/Annual%20Revenue%20Report_2017_18.pdf>
* GDP from WDI, WB via <https://tradingeconomics.com/uganda/gross-national-income-constant-lcu-wb-data.html>

**MALAWI**

* In 2011, the rich accounted for 53% of total consumption (ref: OXFAM/Dangerous Divide Report)
* In Malawi, Total Final Consumption Expenditure accounts for 96.71 percent of GDP (WDI-WB, <https://tradingeconomics.com/malawi/final-consumption-expenditure-etc-percent-of-gdp-wb-data.html> )
* Computing share means about 0.67% of PAYE from the rich.

**NIGERIA**

* Richest 10 percent pegged accounting for 36 percent of National Income extrapolated from Oxfam Report <https://www.oxfam.org/en/even-it-nigeria/nigeria-extreme-inequality-numbers>
* PAYE obtained from ICTD Government Revenue Dataset (GRD) 2018
* National GDP figure obtained from WDI world Bank, Current (LCU)

**MOZAMBIQUE**

* According to New World Wealth, there are 1,100 millionaires and 50 people with assets over US$10 million in Mozambique.
* Assuming the average income of the 1,100 millionaires is US$5million and for the 50 people assuming average is US$15 million
* Then their total income will be USD 6,250,000,000 (MZN 379,500,000,000.00 in LCUs)
* GDP (LCU) billions is reported at MZN 804 bn for 2017 using data from <https://www.worldeconomics.com/GrossDomesticProduct/Mozambique.gdp> which is resulting in an imputed share of income of the top richest 10 percent of 47% which is closer to the average of 43% of Malawi and Nigeria.

**Results**

Using the aforementioned parameters, we estimate the following revenue gain from the setting up of HNWI unit:

|  |  |  |
| --- | --- | --- |
| Country | Tax Revenue Generated (In LCUs) | Proportion of PAYE |
| Nigeria | 32,438,272,655.72 | 10.90% |
| Malawi | 1,660,385,838.74 | 0.62% |
| Mozambique | 267,074,591.70 | 0.81% |

The share of PAYE is in line with Malawi and Uganda but the Nigeria share remains the highest and most ambitious.

**The Cost of Running a HNWI Unit**

Two approaches could be taken:

* First, we could do a Cost-Benefit Analysis and calculate NPV and IRR. However, this requires internal data and great precision. It also requires benchmarking with the Uganda case, which is not easily available.
* Second option is the cost of collection approach. This approach benefits from the cost of collection of tax revenues that the various revenue administrations have registered. In that case, the figures are relatively easy to obtain hence we use this approach.

|  |  |  |
| --- | --- | --- |
| The Cost of Collection Approach | Retention Rate | Presence of LTU? |
| Malawi | 3% of Gross Tax Collection | Yes |
| Nigeria | 4% of Gross Tax Collection | Yes |
| Mozambique | 4-4.5% of Gross Tax Revenue despite an allocation in the Act of 1% only | Yes (3 LTUs, one in each region) |
| Also receives about 7 percent of its budget as donor aid |  |

In this case, we may conclude that whatever the case, collecting revenues from HNWI in these countries must not exceed the cost of collection at present since it is that share that drives how much revenue authorities are willing to invest in collecting revenues from a set of taxpayers. Absent cross-subsidization, it would be viable to collect within the specified retention rates which are collectively given as 3-4.5%. This may make it viable to pursue the HNWI especially for Nigeria which has yielded an expected HNWI revenue share of over 10 percent in PAYE. The fact that in each of these countries there is an LTU present may simplify setting up of the HNWI unit since it may also start as a sub-branch of the LTU. However, various countries may differ on this approach.

# **Excise tax on luxury items**

The study was mainly guided by three principles of excise taxation in Africa proposed by Haughton & Bolnick (1998). They postulated that:

* “Increased reliance on excise taxes is consistent with an equitable tax system”
* “Excise taxes should be confined to the traditional excises and a limited number of luxury items.”
* “Revenue from excise taxes could be doubled in most African countries”

To arrive at the estimates for the three countries (Malawi, Mozambique and Nigeria), the research used the following data sources and methodology:-

* While estimation of revenue gains due to introduction of local excise rate on luxury items is desirable, tax revenue figures per excisable product was difficult to find in the countries under study. This is probably due to the sensitivity of such tax data.
* As such, we relied on imported luxury items whose values were easy to find on publicly available international trade databases like [World Bank’s WITS](tps://wits.worldbank.org), [UN COMTRADE](https://comtrade.un.org/) and [International Trade Centre (ITC)](https://www.trademap.org/Index.aspx) databases. Furthermore, the import tax rates (i.e. Import duty, import excise and import VAT) were easily accessible on the websites of the revenue administrations of the countries under study. The availability of such data in international trade permitted estimations of revenue gain due to introduction of import excise rates on luxury items. This approach is also justified because the three countries are net importers of luxury consumables.
* According to Bernard (2008) and Zhou & Yang (2013), luxury goods are non-essential and dispensable items whose demand increases with increase in income and at times the increase in demand surpasses that of income. Thus, in economic theory, a luxury item has income flexibility of greater than 1. As highlighted by Deloitte (2019) the consumption of luxury items continues to be on the rise, hence providing an opportunity to progressively raise revenue through excise taxation.
* The standard list of luxury items was identified from two main sources: firstly, the already excisable goods in the Customs and Excise tariffs books[[26]](#footnote-26) of the countries under study and a survey from the literature. Furthermore, it was almost impossible to get baseline data i.e. tax revenue on locally excised goods in the three countries under study. Otherwise, the rich people in the three countries locally consume goods like; beers, wines, spirits, electronics like smartphones and Television sets, vehicles, petroleum fuels, canned and preserved foods, meat as well as sweet and savoury snacks.
* The products were identified and grouped according to Harmonised Commodity Description and Coding System (HS code) 4 digit level. In order to ensure that the estimations of tax revenue gains are done in a progressive manner, products affecting the poor were excluded.[[27]](#footnote-27) After identifying the products
* The respective import values were obtained from ITC database. The year 2017 was used as it is the most recent year in which reliable data is available.
* All the countries under study, calculate the import taxes on CIF basis. Therefore, the values obtained from ITC were used as values for duty purpose (VDP).
* Using the countries’ Customs and Excise Tariffs books and following Pelikan & Brockmeier (2008), we calculated simple average/un-weighted tariff rates (i.e. import duty, import excise and import VAT) for each product group identified. As lamented by Bach et al (2001), the problem with simple average/un-weighted tariff rates is that they do not consider the relative importance of specific disaggregated tariff lines in the product groups. Instead Manole & Martin (2005) propose use of trade weighted average tariffs. Nevertheless, we opted for the former due to data constraints i.e. trade values are available only up to HS6 yet the countries under review trade at HS 8 like Malawi and HS10 like in the case of Nigeria. Thus, it would require us to obtain transaction level trade data from the countries and this proved difficult.

We then calculated baseline compound duty rates applicable to each product group.

* The calculated compound duty rates were applied on the trade values of the product groups in order to obtain baseline revenues for each product group for the year 2017.
* Then an argument rate of 10% import excise was introduced and new compound duty rates recalculated.
* This re-calculated compound duty rate was applied on the trade values (VDP) of the products.
* In this way, new revenue figures associated with the newly introduced import excise duty rate were obtained. New revenue figures were subtracted from the baseline revenues to obtain the revenue gain.
* In the model, introducing any other import excise duty rate of one’s choice (on the yellow cell) gives the associated revenue gain automatically.
* Revenue gains from introduction of a 10% import excise duty rate on the selected luxury items yield US$9.655 million, US$12.891 million and US$134.568 million for Malawi, Mozambique and Nigeria respectively.
* One key limitation of the study is that it used a static approach and did not estimate potential increase in informal trade due to the introduction the excise duty rate on the luxury items. Future research ought to attempt to calculate this potential risk.

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1. Firm level data and tax administration data would permit an estimation that accounts for behavioural responses. However, such data is hard to obtain. [↑](#footnote-ref-1)
2. See ActionAid (2018) Making tax work for girls’ education: How and why governments can reduce tax incentives to invest more in girls’ education. Norad. [↑](#footnote-ref-2)
3. ibid [↑](#footnote-ref-3)
4. Meinzer M., Ndajiwo M. Phoya R. & Diakite (2018) Comparing tax incentives across jurisdictions: a pilot study. Tax Justice Network Publication. [↑](#footnote-ref-4)
5. Easson and Zolt (2004) Tax Incentives. Washington: World Bank institute. [↑](#footnote-ref-5)
6. See ActionAid (2018) Making tax work for girls’ education: How and why governments can reduce tax incentives to invest more in girls’ education. Norad. [↑](#footnote-ref-6)
7. As noted by Holland & Vann (1998), it was Surrey (1973) who first likened tax incentives to direct expenditure programs and coined the term “tax expenditures”. Thus, tax incentives and tax expenditures are sometimes used synonymously. Ross (2018) argues that “all tax incentives are tax expenditures but not all tax expenditures are tax incentives”. Therefore, methodologies of estimating their cost is synonymous for they both lower tax burden and forego revenues which would have otherwise been used to finance the government. [↑](#footnote-ref-7)
8. Note that ActionAid (2018) found that revenue forgone was about US$87 million which represented 1.6% of GDP. Here we find US$84.5 million yet still representing 1.6% of GDP because we used updated GDP figures from World Bank’s World Development Indicators (WDI) [↑](#footnote-ref-8)
9. Industrial rebate scheme is a Customs tax incentive that involves import and excise duty exemptions of raw materials for some specific manufacturing industries (PWC & UNDP, 2016). [↑](#footnote-ref-9)
10. See Schneider & Frey (1985), Asiedu (2002)Peter & Spatz (2002), Cervis & Carmudan (2007), Luiz (1997), Singhania (2018) and Blonigen (2005) [↑](#footnote-ref-10)
11. [www.nsomalawi.mw/latest-publications/malawi-labour-force-survey-2013.html](http://www.nsomalawi.mw/latest-publications/malawi-labour-force-survey-2013.html) [↑](#footnote-ref-11)
12. Sourced from <https://www.rbm.mw/Statistics/MajorRates> [↑](#footnote-ref-12)
13. From Bracket 1 to Bracket 2, median was multiplied by 2.3 yet from Bracket 2 to Bracket 3, median was multiplied by 92. [↑](#footnote-ref-13)
14. The average number of taxpayers in the tax register is slightly on the lower side. However, we intend to obtain additional data on wages that can make the model more robust. [↑](#footnote-ref-14)
15. [https://nigerianstat.gov.ng/download/856](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwiJj_HEudHjAhVmURUIHWBfBvMQFjABegQIDBAE&url=https%3A%2F%2Fnigerianstat.gov.ng%2Fdownload%2F856&usg=AOvVaw2NVMv_maT2opE1sAdo9OFn) [↑](#footnote-ref-15)
16. <https://www.quora.com/What-is-a-good-salary-for-expats-working-in-Lagos-Nigeria>

    <https://www.payscale.com/research/NG/Location=Abuja/Salary>

    <https://wageindicator.org/labour-laws/labour-law-around-the-world/minimum-wages-regulations/minimum-wages-regulations-nigeria> [↑](#footnote-ref-16)
17. <https://www.wider.unu.edu/project/government-revenue-dataset> [↑](#footnote-ref-17)
18. <https://www.gtac.gov.za/Eventdocs/ATAF%20ATO%203rd%20Edition%20PPTNM%20Nara%20Monkam.pdf> [↑](#footnote-ref-18)
19. <https://www.budgetoffice.gov.ng/index.php/2019-budget-speech> [↑](#footnote-ref-19)
20. <https://www.imf.org/~/media/Files/Publications/CR/2018/cr1864.ashx> [↑](#footnote-ref-20)
21. https://www.doingbusiness.org [↑](#footnote-ref-21)
22. Again, there was a backlash in 2018 when the Nigerian Government announced that it had raised property taxes (Particularly, Land Use Charge (LUC))–roughly doubling the rates. Eventually, on account of massive outcry, the Government bulged and reduced the rates. [↑](#footnote-ref-22)
23. <https://dhsprogram.com/pubs/pdf/FR148/02Chapter02.pdf> [↑](#footnote-ref-23)
24. <https://hub.arcgis.com/datasets/28dc47d0e37a4bea9592f808de511861> [↑](#footnote-ref-24)
25. <https://dhsprogram.com/pubs/pdf/SR237/SR237.pdf> [↑](#footnote-ref-25)
26. For Malawi the Customs tariffs book is available at <https://www.mra.mw/>, for Mozambique <http://www.at.gov.mz/index.php/eng/Customs-Tariff> and Nigeria <https://customs.gov.ng/?page_id=3127> [↑](#footnote-ref-26)
27. For instance, while personal carrying vehicles were included in the estimates, vehicles for carrying over 12 persons for transportation purposes like minibuses were excluded because the excise tax on them may be shifted to the poor masses. Goods carrying vehicles like were excluded as the excise taxes may distort production efficiency. [↑](#footnote-ref-27)