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Depreciation allowances in South Africa

The corporate income tax gap in South Africa: A top-down approach



Outline of discussion

- Data discussion
 - Extraction and data management
 - Datasets
 - Data problems
 - Alignment of two datasets
- Questions
 - Depreciation allowances in South Africa
 - CIT gap in South Africa: A top-down approach
- Way forward



CIT SARS DATA

Data extraction and management (1)

Nature of the ITR14 corporate income tax return and assessed data

- Data based on the income tax return data of companies that submitted ITR14 tax returns for the period 2014 to 2017.
- Successful submission of ITR14 information leads to issuing of a notice of assessment (ITA34C) – contains assessed data on which the taxable income and tax liability of companies is determined.
- Revised assessments may be issued if SARS audits a company based on, amongst other things, flagged errors in the reconciliation of a company's submitted information or inaccurate information submitted originally being rectified. Audit results may result in revised ITR14 information submitted, altering certain data fields in the originally submitted ITR14 information.
- The ITR14 balance sheet, income statement and tax computation data were supplemented with the ITA34C assessed data for each company, including corporate profits or losses after adjustments, prior year tax losses, taxable income and tax liability.
- The ITR14 corporate income tax return data are in calendar years and in current year prices.

Data extraction and management (2)

Extraction

- The ITR14 data sets (balance sheet, income statement, tax computation), were extracted in May 2019 by corporate segment (**turnover tax companies, SBC, medium to large companies**).
- Data sets were cleaned according to basic validation principles, e.g. ensuring that the minimum number of variables and records are extracted, variable completeness checks were conducted, last iterations of the ITR14 tax return (that is, if revisions to original returns existed) are extracted, outliers and duplicate returns were removed.
- Assessed variables from the corporate income tax ITA34C assessed data were extracted to enhance the ITR14 tax return data. SARS business rules were applied to this enhanced dataset to extract valid assessed data as deemed in the calculation of a company's final assessed tax liability **by taxable income groups similar to the Tax Statistics publication**.
- The data quality framework was applied to ensure validity and use of the data, combined SASQAF (Statistics South Africa, 2010) dimensions and the big data quality standards for assessment (Cai and Zhu, 2015: 4, 5).

Data extraction and management (3)

- Duplicate records were eliminated. These records constituted on average approximately 0.5% of the original tax records extracted (i.e. the full dataset). The number of unique records equals the remaining total number of records in the data.
- Outliers in terms of turnover were discarded.
- Individual assessed data records were linked to the respective ITR14 records **but limited accounting income and balance sheet information.**
- Consistency check of the data framework: recalculation of the control totals, tax computation totals, reconciliation between accounting profit and taxable profit or loss and taxable income or loss.

Data extraction and management (4)

Table: Observations in original extract and observations remaining after removal of duplicates

| Year | Total original extracted records | Total unique tax reference numbers | Duplicate records discarded |
|-------------|---|---|------------------------------------|
| 2014 | 846,089 | 841,452 | 4637 |
| 2015 | 854,227 | 849,710 | 4517 |
| 2016 | 881,926 | 876,232 | 5694 |
| 2017 | 835,920 | 831,428 | 4492 |

Data set ITR14

ITR14 data reports whereby companies are grouped by category: turnover tax companies, SBC, medium to large companies, calendar years 2014 to 2017

- Income statement items: gross income, sales, cost of sales, other income, gross profit / loss, main expenses, accounting profit / loss
- Tax computation table with all the adjustment tax rules applied to accounting profit / loss
- Taxable profit or loss after adjustments
- Balance sheet items: fixed assets, trade assets, long terms loans, trade liabilities, equity account

Data set ITA34C

ITA34C data reports companies grouped by taxable income groups, loss or less than R0, R0, above R0 to R10m, R10m to R100m, above R100m, calendar years 2014 to 2017

- Assessed tax data
- Income statement items, turnover, accounting profits
- Tax computation table
- Taxable profit / loss
- Assessed losses prior years
- Taxable income or loss

Data problems (1)

Extraction of the corporate income tax data:

- Anonymised ITR14 data were extracted by SARS TCEI (Tax, Customs and Excise Institute (TCEI),) on an individual corporate tax return data level by category of company (SBC, medium to large companies, turnover tax companies) to enable the analysis of the data by the SARS data team with power pivot tables.
- The data were verified and checked for accuracy by SARS TCEI by analysing summary data reports that were created using SAS statistical software.
- The ITR14 data was **inconsistent and not reconcilable** to the control totals as well as taxable profits or losses and **excluded** assessed data, thus current year taxable income or loss and final tax liability.
- The SARS TCEI data team **validated** the ITR14 data against the ITR14 data available at the National Treasury secure tax administrative data research facility and confirmed the similarity of the data.

Data problems (2)

Accuracy of the data was tested by imputing the control totals

Data problems identified:

- Differences between the extracted control totals and those imputed - for instance, gross income did not equal sales plus other income.
- Differences between accounting profit and taxable profit or loss before assessed losses could not be reconciled after applying the tax computation rules.
- Significant variations in the annual values for certain item source codes were observed.
- Item source codes that needed to correspond, did not - for instance, accounting depreciation in the income statement and accounting depreciation stated in the computation rules.
- Very high net accounting and gross profits in the data extracted by SARS could not be explained when compared to the profits in South African Reserve Bank survey data.

Data problems (3)

Linking assessed data to ITR14 return data and imputing taxable income or loss and tax liability

- Time limitations necessitated the use of the Tax Statistics configuration of taxable income groups (taxable loss, R0, above R0 to R10m, R10m to R100m, above R100m) by sector. Analysis based on the size of companies was therefore not possible.
- ITR14 data limited to sales, fixed assets, other assets, accounting depreciation.
- ITA34C data limited to accounting profit or loss, tax computation data, taxable profit or loss, prior year's tax losses carried forward, taxable income or profit, tax liability.
- Needed to develop a methodology to calculate the use of taxable losses (current year and prior years) against current year taxable profits to determine the tax gap. Six scenarios were developed.
- Analysis of income statement and balance sheet information for the depreciation allowances paper was limited due to the inconsistency of the ITR14 data.
- Analysis for depreciation paper limited mainly to average calculation over the four years under review, by taxable income groups. Sensitivity micro analysis and capital versus labour ratios could not be done due to the limitations in the accuracy and availability of detail data.

Depreciation paper: Question 1

Construction of taxable income, assessed losses and corporate tax revenue

- Values for taxable income, assessed losses and tax liability were sourced from the ITA34C assessed data.
- Summarised reports for the period 2014 to 2017 were download by taxable income groups as published in the annual Tax Statistics publications.
- Limit the analysis and policy recommendations due to non-access to individual data and determining the reasons for outlier data, for instance 2016 tax year.

Depreciation paper: Question 2

Tax depreciation: consideration of the impact of what some companies “throw” in the “other” category.

- On the selection of “other” descriptions are added to define “other”.
- Need to check individual entries to determine the extend of “other”.
- Possible that companies may elect to use “other”, rather than scrutinising the list of items available.

Depreciation paper: Question 3

Constant ratio of at least 2:1 for tax to accounting depreciation?

- Accounting depreciation as reflected in the income statements of tax registered companies can be seen as the more accurate write-off of assets over the productive life of assets by companies to reflect the annual replacement cost of assets. Depreciation is an expense and for accounting purposes will avoid the annual over- or under-deduction of this expense item.
- Tax depreciation includes the standard wear and tear allowances for assets as per the SARS schedule *plus* special depreciation allowances for certain assets in specified sectors of the economy - for example, mining assets with an immediate expense of capital costs, manufacturing assets with accelerated write-offs over three years.
- The difference in the accounting and tax annual write-offs of assets as an expense against income is the major reason for the accumulation of prior year tax losses, the deferment of taxes due, and low effective tax rates.
- Accelerated allowances are indeed a real fiscal cost and can indeed be thought of as opportunity cost and deferral as its continuation (in perpetuity!). Opportunity cost can therefore be linked to the most precious or valuable foregone alternative opportunity, be it lower corporate tax or high priority expenditures.

Depreciation paper: Question 4

The potential revenue gains from aligning tax with accounting treatment seem significantly larger than anticipated?

- The limitation in the analysis due to the ITR14 data problems prevented:
 - the accurate determination of the accumulation of prior years tax losses;
 - the extent of the deferment of taxes due by the different categories of companies, small, and medium to large;
 - the capital intensity of companies with accumulated losses;
 - the ability of small companies and various sectors to access the tax flow benefit; and
 - the effective rate of taxation of businesses and sectors that are more labour intensive.
- Domestic revenue mobilisation and transfer pricing may also be a point of discussion and analysis, given the extent of prior years' accumulated tax losses for South African companies.
- Companies need to have adequate liquidity and solvability to be financially sustainable in the long term. It is important to determine what percentage of which category of companies by sector are remaining in a taxable loss while being profitable in accounting terms.
- A lower marginal corporate tax rate is beneficial to all companies and also for foreign companies planning to invest in South Africa.
- The tax system can become more equitable, more neutral and therefore more efficient and effective when the tax base is broadened and the marginal tax rate is globally competitive.

Depreciation paper: Question 5

The potential revenue gains from aligning tax with accounting treatment seem significantly larger to us than we would have anticipated. For example, are you saying that, in 2015, if tax and accounting depreciation periods were aligned, the fiscus could have saved R68bn? Then, for 2016 this estimate almost halves. Will be interesting to hear your thoughts on this.

- The calculation is limited to averages and only for companies with taxable income greater than zero.
- Sector analysis, especially for capital intensive sectors such as mining, manufacturing, electricity and transport, indicates relatively large annual variances.
- Depreciation allowances are driven by expenditure on fixed assets.

Depreciation paper: Question 6

- **Does line 9 use the average tax rate discussed in footnote 18?**
 - Applies to total tax depreciation as allowed by SARS less accounting depreciation. The average tax rate is calculated as ASSESSMENT TAX PAYABLE / ASSESSMENT TAXABLE INCOME.
- **Table 1 does not mention the 11D R&D incentive?**
 - That was an omission, but the 11D R&D incentive was included in the calculation of the investment allowances.
 - The paper summarised wear and tear allowances, special depreciation allowances and investment allowances separately.

CIT gap paper: Question 1

Which datasets were used for the two papers?

- Summarised ITR14 and ITA34C reports from 2014 to 2017
- Individual company ITA34C data from 2015 to 2017

CIT gap paper: Question 2

Information on the 6 categories of assessed losses in the CIT gap paper

- The CIT gap calculation is based on the current year tax losses utilised against current year's taxable income as the gap is determined for profitable companies.
- The ITR14 and ITA34C data sets do not explicitly have the tax losses utilised for the current year.
- A methodology was developed to calculate the current years tax losses utilised based on the available data sets.
- Six scenarios were identified to calculate the current years tax losses utilised depending on the accounting profit or loss of a company, net computation adjustments, prior years tax losses carried forward and taxable income or loss for the year.

CIT gap paper: Question 2 (2) Six scenarios:

■ **Scenario 1:** From **accounting profit to calculated taxable profit** after net adjustments.

- *Tax payable (if positive taxable income net of carried-over losses)*
- *Calculate cumulative loss for specific year*
- *No calculated current-year losses*

■ **Scenario 2:** From **accounting profit to calculated taxable loss** after net adjustments.

- *No (positive) taxable income to deduct any cumulative (carried-over) losses*
- *Taxable income and tax payable are both zero.*
- *Current-year losses added to cumulative losses brought forward from previous years*

■ **Scenario 3:** From **accounting loss to calculated taxable profit** after net adjustments

- *Difference between calculated taxable profit and calculated taxable income at applicable average tax rate is utilized cumulative losses for specific year*
- *Positive calculated taxable income, and tax payable*

■ **Scenario 4:** From **accounting loss to calculated loss** after net adjustments

- *Current year's taxable losses added to cumulative losses brought forward from previous years*
- *Zero utilization in the current year of previous year's tax losses, no (positive) taxable income, no taxes payable*

■ **Scenario 5:** From **zero accounting profit to calculated taxable profit** after net adjustments

- *Difference between calculated taxable profits and calculated taxable income at applicable average tax rate is utilized cumulative losses for specific year*
- *Positive taxable income, taxes payable*

■ **Scenario 6:** From **zero accounting profit to calculated loss** after net adjustments

- *Current year's taxable losses added to the cumulative losses brought forward from previous years*
- *Zero utilization in the specific year of previous year's tax losses*
- *No (positive) taxable income, no taxes payable*

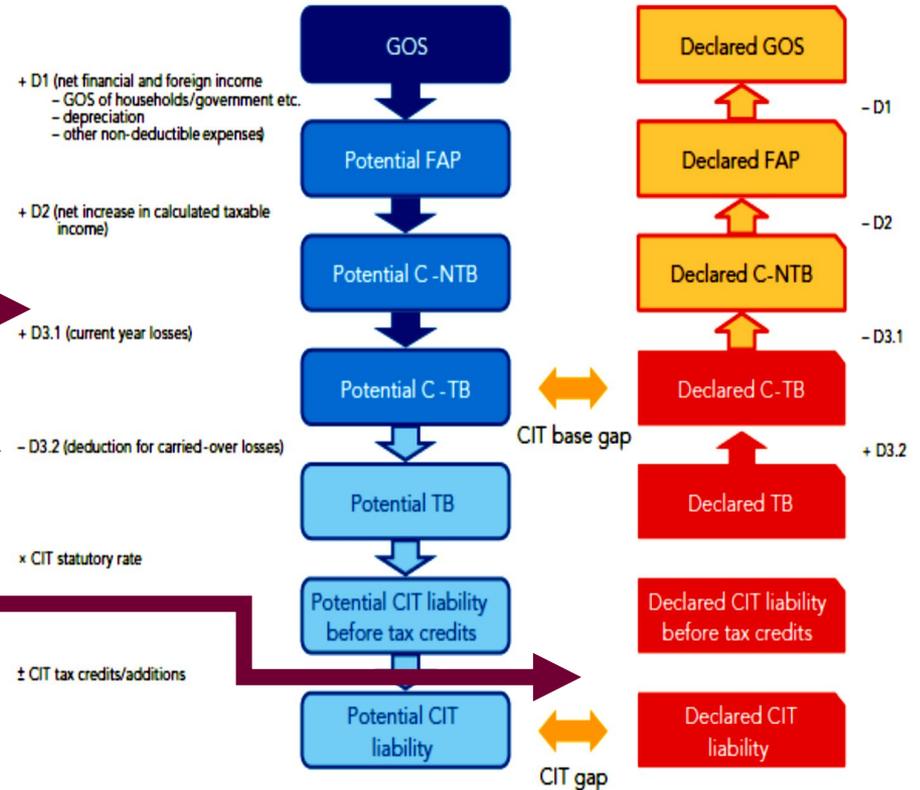
CIT gap paper: Question 2 (2)

Six scenarios:

Important variables calculated from this methodology:

- Current-year losses (adding up losses from scenarios 2, 4, and 6)
- Portion of the cumulative (carried-over) losses deducted from the potential current-year tax base (adding up from scenarios 1, 3, and 5)
- Calculated taxable income and tax payable (adding up income and tax paid from scenarios 1, 3, and 5)

FIGURE 2. Concept of CIT Gap



CIT gap paper: Question 3

Choice of 2014-2017 as opposed to 2013-2017. We've been doing most of our analysis starting in 2013.

- Research papers prefer to base results on the longest time series that data is available.
- In May 2019 the 2014 to 2017 calendar years seemed to have been the most complete and stable series to use for the two firm papers.
- The ITR14 data posed many challenges when analysed.
- The ITA34C data had to be added to compensate for all the data challenges identified.
- The tax gap paper was more data intensive and the adding of detail individual company data became necessary to calculate the current year's tax losses utilised.
- The tax gap paper covers the period 2015 to 2017 due to data problems identified in the 2014 calendar year.

Way forward: Depreciation allowances

- Prepare comprehensive corporate income tax data based on individual company ITR14 data linked to the ITA34C for each company since the first calendar year when e-filing data became available.
- Reassess the wear and tear schedule allowances and align with current depreciation schedules of companies across size of companies and sectors.
- Reassess special tax depreciation allowances in terms of cost and benefit calculations with appropriate sunset clauses.
- Determine the causes for accumulated tax losses and address the causes rather than the symptoms.
- Determine the impact of tax depreciation allowances on the taxation of profits and the capital to labour ratios in terms of the principles of taxation.

Way forward: CIT gap

- Prepare comprehensive corporate income tax data based on individual company ITR14 data linked to the ITA34C for each company since the first calendar year when e-filing data became available.
- Extend the gap analysis to include the financial sector.
- Refine the calculations based on more detailed data.
- Support and enhance the top-down gap analysis with a bottom-up approach based on tax administrative data
- Institute an annual determination of the CIT gap to be used as an integral strategic focus of tax administration and tax policy reform.

Summary to conclude

- The in-depth analysis of corporate income tax data unlocked findings previously not known and simultaneously opened endless new research possibilities.
- SARS is commended for the progress made in terms of the availability of electronic data for research purposes.
- The research team was given an opportunity to learn and develop and for that we as a collective thank UNU-WIDER and SARS for the opportunity to participate in the drafting of the two research papers.
- Thank you all for your participation and interest shown to unlock the findings of the two research papers.
- Consider ways and means of internalising these analyses as an annual institutional capability of SARS.