Southern Africa – Towards Inclusive Economic Development

SA-TIED Technical Note 2

Identifying foreign firms and South African multinational enterprises

CIT-IRP5 panel v4.0

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About the project

Southern Africa –Towards Inclusive Economic Development (SA-TIED)

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CIT-IRP5 panel v4.0

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January 2021

Abstract: The identification of foreign firms and South African multinational enterprises (MNEs) in the CIT-IRP5 panel has proved to be a challenge for many researchers. The CIT-IRP5 panel contains variables indicating different thresholds that determine foreign ownership. The dataset also has variables that researchers can use to identify South African MNEs. Using the approaches employed by researchers who have attempted to identify foreign firms and South African MNEs in the data, four foreign firms and MNE indicators have been added to the CIT-IRP5 panel v4.0. This technical note documents the approach followed in the creation of each indicator. This note also highlights the possible company classifications in the data and fields on the ITR14 form that can be used to identify these classifications.

Key words: multinational enterprises, foreign firms, tax data, South Africa

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Note: The panel is a part of South Africa's secure data facility for research using the national administrative tax data. For more information, please visit: https://sa-tied.wider.unu.edu/data.

Supplementary material: The STATA.do files used to prepare this note are available on the technical note's webpage.

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1 Introduction

Foreign firms may exhibit different characteristics from domestic firms, and researchers may be interested in exploring these differences. Researchers need to have a mechanism that can easily allow for the classification of firms as foreign or domestic. The identification of foreign firms in the CIT-IRP5 panel (also known as the SARS-NT panel¹) has proved to be a challenge to researchers. The degree to which a company is foreign owned is reflected in the proportion of shares owned by a foreign company/companies. The dataset has several variables that indicate foreign ownership at 10% and more than 50% thresholds, where the ownership thresholds indicate the minimum proportion of shares belonging to a foreign company/companies. When used together, these variables can effectively identify a sample of foreign firms within the panel. Similarly, domestic firms operating in foreign countries may display characteristics that differ from domestic firms without foreign connections. Researchers may, therefore, also be interested in identifying South African multinational enterprises (MNEs); the data has variables that can be useful to researchers in this regard.

The CIT-IRP5 panel v4.0 contains four new indicators that identify foreign firms and MNEs. The creation of these indicators follows approaches used by researchers attempting to identify foreign firms and South African MNEs in the panel (Aterido et al. 2019; Wier and Reynolds 2018; Sørensen 2020; Hlatshwayo forthcoming). Since the variables required to create the indicators were only asked in the company Income Tax Return 14 (ITR14²) 14 form, as opposed to its predecessor Income Tax 14 (IT14), the created indicators are only well captured from 2013 onwards. This note documents the approaches employed in the creation of the foreign firm and MNE indicators in CIT-IRP5 v4.0. Here we provide an overview of the company types, identify foreign firms and South African MNEs, and provide information on the new variables created for researcher use.

2 Overview of company types

Before attempting to identify foreign firms and domestic MNEs, it helps first to understand the possible categories of firms present in the data as illustrated by Table 1 (see Appendix A: Foreign firm classifications, for more information on the categories presented in Table 1). Category A represents pure domestic firms. These are firms that have local origins³ and are owned⁴ or controlled by South African resident firms. Firms belonging to Category B have domestic origins but are controlled by foreign, non-resident firms. Category B would include companies whose operations started in South Africa, but whose interests were sold, and are now direct subsidiaries of foreign companies. Category C firms originate from foreign countries but are controlled locally (e.g. associates) and Category D represents pure foreign firms (for example, subsidiaries and branches of foreign firms).

¹ The paper by Pieterse et al. (2018) provides a comprehensive introduction to the SARS-NT panel.

² The ITR14 form replaced the IT14 form in 2013.

³ By 'origin', we mean the location where a company started its operations.

⁴ The ownership threshold for Table 1 is more than 50%.

Table 1: Possible categories of domestic and foreign firms

		Ownership		
		Domestic	Foreign	
Origin	Domestic	Α	В	
Oligili	Foreign	С	D	

Source: authors' illustration based on firm origin and ownership definitions.

All companies captured in the CIT-IRP5 panel can be classified into four mutually exclusive categories: domestic stand-alone, locally-held group, foreign-held group, and other. This classification is dependent on how firms respond to two questions in ITR14, as shown in Table 2. The questions are:

- 1. Is the company part of a group of companies that prepares consolidated financial statements?⁵
- 2. Is the ultimate holding company resident outside South Africa?

Based on the answers to these questions (either 'Y' or 'N'), companies can be divided into four groups; these groups are shown in Table 2:

Table 2: Company type classification

Q1	Q2	Company type	Additional information
N	N	Domestic Standalone	Taxpayers in this category are all assumed to be domestic stand-alone companies. They do not meet the accounting consolidation requirement for financial reporting purposes in respect of 2017 onwards. Prior to 2017, the question was based on the section 1 of the Income Tax Act definition of a group of companies, which has a 70% ownership test. Based on the reasoning under N/Y, some of these companies could be part of a local held group.
Y	N	Local-held group	A taxpayer in this category is part of an accounting group (for 2017 and later tax years; see footnote 7) that may consist of a few or many other South African and non-resident companies. The company is directly or indirectly controlled by a South African company. For indirect control, there may be other intermediary South African holding companies or other group companies that in aggregate control the taxpayer, but not individually. This category would also include a South African parent of an MNE
Y	Y	(Ultimately) Foreign-held	A taxpayer in this category is part of a group that meets the accounting consolidation requirement for financial reporting purposes (this is in respect of tax years 2017 and later; see footnote 7). They are South African companies that are either owned directly or indirectly by an ultimate holding company in a foreign country.
N	Υ	Other	While it may seem unlikely that a 'N' and 'Y' situation would arise, it appears that some taxpayers only test this in relation to being a group together with their immediate parent. Intermediate parents are not required to prepare consolidated accounts.

Source: authors' illustration.

The classification in Table 2 plays a significant role in the two-step process of identifying South African 'parents' of MNEs. The first step would involve restricting the sample to firms belonging

⁵ It is critical to note that there was a change in the question posed to taxpayers in respect of a group between the 2016 and 2017 ITR14 forms. For tax years up to and including 2016, the group question was based on section 1 of the Income Tax Act — where a group is defined as having at least a 70% ownership criterion. From 2017 onwards, the group question is based on accounting consolidation — implying a more than 50% ownership or control criterion.

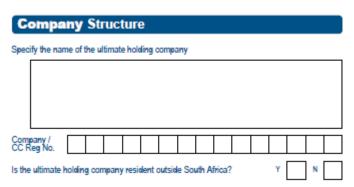
to the 'local-held group'. The identification of South African parents of MNEs happens in the second step by identifying locally-held firms that have foreign connections. As will be explained later in the note, the ownership threshold associated with parents of MNEs is more than 50% of its shares, or control in another manner (through a different class of shares or through the right to appoint the majority of board members). Researchers wishing to work with a 10% ownership threshold could resort to identifying foreign-connected firms (FCFs) (Hlatshwayo forthcoming 2020).

3 Identifying foreign firms

To identify foreign firms in the CIT-IRP5 panel, one needs an indicator that captures associates and subsidiaries of foreign firms. A foreign firm can operate in South Africa as an associate or as a subsidiary. A subsidiary is a business whose parent is a majority holder of more than 50% of its shares whereas an associate is a company whose parent possesses a minority stake in the ownership of the company. This implies that an associate of a foreign company could form part of a group of companies that are locally controlled if local firms own more than 50% of its shares. Researchers wishing to 'strictly' identify foreign-owned firms may not include associates given that they are domestically controlled even though they have foreign parents.

An external company can also conduct its business in South Africa by establishing a branch that can be considered as a South African office or division of the external company (Lumsden 2014). Importantly, a branch of a foreign company is not a separate legal entity for tax purposes in South Africa. A population of foreign firms in the panel would, therefore, comprise of subsidiaries, associates and branches of foreign firms.

Figure 1: Ultimate holding company question on the ITR14 form



Note: the fields have been checked and are the same in the versions ITR14 v2013.0.13, ITR14v2014.0.5, ITR14v2015.00.28, ITR14v2016.00.19, ITR14 v2017.00.24 and ITR14 v2018.00.05.

Source: ITR14 Form v2018.00.05, available from SARS. Reproduced here with permission.

Using different approaches, a couple of studies have attempted to identify foreign firms in the CIT-IRP5 panel. Some researchers have used the strict definition of 'foreign firms' which comes from a question on the ITR14 form. These researchers relied solely on the variable that indicates whether a firm is ultimately controlled by a foreign company (Aterido et al. 2019; Wier and Reynolds 2018). A snapshot of the 'ultimate holding company' question on the ITR14 form is shown in Figure 1, and Box 1 is a snapshot from the guide document which instructs companies on how to complete this field.

Box 1: Guiding text to completing the 'ultimate holding company' question of the ITR14 form

- Is the ultimate holding company resident outside South Africa? Specify "Yes" or "No".
 - If Yes, specify the tax residency country code of the ultimate holding company: If the user clicks on this field, a popup is displayed which contains a list box containing a list of valid country names. The popup also contains two buttons: "Ok" and "Cancel". Alternatively refer to Annexure F for a list of all the valid country names.
 - If "No" is selected, complete the following field:
 - If No, specify the income tax reference number of the ultimate holding company: Enter the income tax number.

Source: external guide: How to complete the Income Tax Return (ITR14) for companies IT-GENG01 Revision 8 (p.71). Reproduced here with permission.

Table 3: ITR14 fields used in the identification of foreign firms

Category	ITR14 fields	ITR14 form	Variable names
Non-resident	Is the company resident ⁶ in South Africa for income tax purposes?	Company information (p.1)	TR14_c_sarestax
	Is the company resident outside South Africa due to foreign incorporation (and not being effectively managed in SA)? 7	Non-residency (p.4)	ITR14_c_foreignincorp
	Is the company resident outside South Africa by virtue of a treaty to avoid double taxation? ⁸	Non-residency (p.4)	ITR14_c_foreignincorpddt
Subsidiary/Associate	Is the ultimate holding company resident outside South Africa?	Company structure (p.5)	ITR14_c_fgnhold
	 Total dividends subject to double taxation relief 	Dividends declared (p.3)	c_divdtr
Branch	Is this return in respect of a branch/permanent establishment/agency of a foreign company?	Company/ close corporation particulars (P.2)	ITR14_c_fgnbranch

Source: authors' illustration based on Sørenson (2020).

While this indicator captures subsidiaries, it excludes branches of stand-alone foreign firms and associates of foreign firms. Conceptually, the 'ultimate holding company' indicator only captures Firms belonging to category B and some firms belonging to category D in Table 1. Other researchers have used a broader definition, which classifies all firms belonging to Categories B, C and D as foreign firms. This has been achieved by using the 'ultimate holding company' question in conjunction with other questions to identify these foreign firms (Sørensen 2020; Hlatshwayo forthcoming).

The study by Sørensen (2020) classifies firms into three categories based on their response to six questions on the ITR14 forms. These categories include (i) non-resident, (ii) subsidiary/associate,

⁶ Tax residency and tax non-residency are not necessarily synonymous with domestic and foreign. A subsidiary of a foreign company would be tax resident in South Africa if it forms a permanent establishment in South Africa.

⁷ This question is asked to companies that respond 'No' to being resident in South Africa for income tax purposes.

⁸ This question is asked to companies that respond 'No' to being resident in South Africa for income tax purposes.

and (iii) branch. Firms are classified as foreign if they fall into any one of these categories. Table 3 indicates the questions that make up these categories.

The indicator variables corresponding to the ITR14 fields in Table 3 are all available in the CIT-IRP5 panel v4.0 and researchers can use this approach to identify foreign firms.

4 Foreign firm indicators in the CIT-IRP5 panel

Incorporated into CIT-IRP5 panel v4.0 are two foreign firm indicator variables that researchers can use to identify foreign firms. These variables are ITR14_c_foreign_strict and ITR14_c_foreign_broad (see Table C1 of Appendix C for the number of firms classified as foreign, using the ITR14_c_foreign_broad and ITR14_c_foreign_strict indicators, by company type). The approach used to construct these variables is similar to the procedure employed by previous researchers who have used the CIT-IRP5 data to identify foreign firms (Aterido et al. 2019; Wier and Reynolds 2018; Sørensen 2020; Hlatshwayo forthcoming). This section details the creation of these indicators.

4.1 Subsidiaries of foreign firms: ITR14_c_foreign_strict

The variable ITR14_c_foreign_strict captures the subsidiaries of foreign firms in the data. Companies classified as foreign, using this indicator, are those that responded 'Yes' to the question on the ITR14 form which asks, 'Is the ultimate holding firm resident outside South Africa?'. Table 4 shows the number of firms classified as foreign using the ITR14_c_foreign_strict indicator across the years. Each column represents a variable in the CIT-IRP5 panel v4.0 (see Appendix B for more information on the contents of Tables 4–9).

Table 4: Strict foreign firm indicator

		Ultimately fore	eign controlled?	
Tax year	Total number of firms	No	Yes	ITR14_c_foreign_strict
2008	690,249	113	40	40
2009	595,980	279	119	119
2010	754,750	305	118	118
2011	757,522	696	348	348
2012	813,419	4,145	2,326	2,326
2013	833,077	8,313	3,324	3,324
2014	855,929	8,525	3,559	3,559
2015	873,371	8,689	3,827	3,827
2016	918,050	8,723	3,917	3,917
2017	908,405	7,566	2,903	2,903
2018	788,527	7,801	1,391	1,391

Note: tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel

Source: CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

It is worth noting the link between the question used to construct a strict foreign firm indicator and the question that asks whether a firm belongs to a 'group of companies'. The 'group of companies' question underwent a significant change in 2017. Before 2017, the question asked, 'Is the company a subsidiary of a group of companies as defined in s1?' (the ownership threshold in section 1 of the Income Tax Act is 70%). From 2017 onwards, the question changed to 'Is the company part of a group of companies that prepare consolidated financial statements?'. The ownership threshold for the new question is more than 50%. The lowering of the ownership threshold should imply an increase in the number of firms responding to the 'ultimate holding company' question. However, Table 4 shows a significant decrease in the number of firms

responding to this question. SARS officials highlighted the possibility of companies misinterpreting the revised 'group of companies' question. It could be that companies think responding 'Yes' would imply the company itself prepares consolidated statements. The fact is that many companies with subsidiaries are not preparing consolidated statements if the ultimate parent company is preparing consolidated statements because it may be a listed company. Based on the significant drop-off in the number of companies reporting to be part of a group, without a similar drop-off in firms responding to the ultimately controlled question, we decided to rely on the ultimately controlled question only. There is a decrease in 2017, but this is more likely due to a lower level of assessment relative to earlier years. To be clear, this is a move away from the two-step approach outlined in Table 2.

Below is the STATA code that creates the ITR14_c_foreign_strict indicator:

```
gen ITR14_c_foreign_strict = 1 if ITR14_c_fgnhold ==1
label var ITR14_c_foreign_strict 'Foreign firm indicator: strict'
```

4.2 Broad foreign firm indicator: ITR14_c_foreign_broad

The creation of the broad firm indicator involved the use of six fields on the ITR14 form, whose responses indicate foreign ownership. Table 5 shows the number of companies that responded 'No' to the question 'Is the company resident in South Africa for income tax purposes?'. Two follow-up questions ask these companies to provide a reason for their non-residency. The follow-up questions require companies to indicate if they are non-residents due to foreign incorporation or treaty to avoid double taxation. Table 5 shows the numbers of companies that responded 'Yes' to each of the two reasons. SARS officials highlighted that these reasons could overlap as residence under some tax treaties could be based on foreign incorporation. It is also important to note that a foreign incorporated company could be a South African resident (even after applying the relevant tax treaty) if its place of effective management is in South Africa.

Table 5 shows that not all companies responding 'No' to being a South African resident provided a reason for non-residency. Therefore, using only the two reasons as indicators of foreign residency leads to the undercounting of foreign residents in the dataset. The broad foreign firm indicator would identify a foreign company if it responded 'No' to the question about being a South African resident or responded 'Yes' to any of the two reasons for non-residency.

The broad foreign firm indicator also captures companies that responded 'Yes' to having an ultimate holding company that is not resident in South Africa. As outlined above, the ownership threshold for this question is 70% for the years before and including 2016, and more than 50% from 2017 onwards. The ITR14_c_foreign_broad indicator identifies foreign firms by including firms that face a reduced rate of dividends taxation due to a Double Taxation Agreement (DTA). In essence, the DTA relief depends on the shareholding percentage requirement of each specific DTA, depending on the tax residence of the shareholder. Some treaties may reduce the dividends tax rate even if there is a foreign shareholder owning only 1% (or even less) of the shares in the South African company.

Table 5: Broad foreign firm indicator

			Non-Residency					
Tax year	All firms	Not resident in SA for income tax	Due to foreign incorporation	Due to treaty to avoid double taxation	Ultimately foreign Controlled	Dividends subject to Double Taxation relief	Branch/ permanent establishment or agency of a foreign firm	ITR14_c_foreign_broad
		purposes		tana		100.	a 10.0.g.1	
2008	690,249	1,053	13	[<10]	40	[<10]	1,514	2,573
2009	595,980	2,710	24	13	119	[<10]	3,392	6,125
2010	754,750	3,603	32	18	118	[<10]	4,996	8,608
2011	757,522	7,254	68	34	348	[<10]	6,920	14,313
2012	813,419	22,356	249	151	2,326	202	14,481	38,490
2013	833,077	60,400	391	338	3,324	467	19,987	82,644
2014	855,929	61,337	376	213	3,559	416	18,836	82,633
2015	873,371	61,153	394	210	3,827	447	17,575	81,599
2016	918,050	170,390	2,797	2,595	3,917	437	18,846	189,153
2017	908,405	171,604	2,856	2,689	2,903	487	17,778	188,370
2018	788,527	140,780	1,947	1,977	1,391	276	14,282	153,580

Note: where there are less than 10 firms in a category the number is 'masked' for data security reasons. Tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel.

Source: CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

All companies that responded 'Yes' to the question about being a 'branch/permanent establishment or agency of a foreign company' are categorized as foreign by the broad foreign firm indicator. There are several cases in the data where firms responded 'Yes' this question, but 'No' to having an ultimate holding company that is not a South African resident. According to SARS officials, such a case could arise when the company filing the return is a foreign company with a branch in South Africa, but its ultimate parent company is South African, or it does not have a parent company.

Below is the STATA code that create the ITR14_c_foreign_broad indicator:

```
gen ITR14_c_foreign_broad = 1 if (ITR14_c_sarestax==0 |
ITR14_c_foreignincorp==1 | ITR14_c_foreignincorpddt==1 | ITR14_c_fgnhold==1
| ITR14_c_fgnbranch==1|c_divdtr >0 & c_divdtr<.)
label var ITR14_c_foreign_broad 'Foreign firm indicator: Broad'</pre>
```

5 Identifying South African MNEs

There are two fields on the ITR14 corporate income tax (CIT) form that refer to multinational enterprises. The first is contained in the 'Company Information' section and asks the question: 'Is the company a member of a Multinational Entity (MNE) group as defined in the Country-by-Country (CbC) regulations? (see Figure 3). According to South African regulations specifying the Country-by-Country Reporting Standard for Multinational Enterprises:⁹

... the term 'Group' means a collection of enterprises related through ownership or control such that is either required to prepare Consolidated Financial Statements for financial reporting purposes under applicable accounting principles or would be so required if equity interests in any of the enterprises were traded on a public securities exchange. The term 'MNE Group' means any Group that includes two or more enterprises the tax residence for which is in different jurisdictions, or includes an

⁹ Available here: https://www.gov.za/sites/default/files/gcis_document/201612/40516rg10677gon1598.pdf

enterprise that is resident for tax purposes in one jurisdiction and is subject to tax with respect to the business carried out through a permanent establishment in another jurisdiction. (Tax Administration Act 2011 (11). Regulation 2016: 29-30)

However, there is an important exclusion included in the definition of an MNE group. The effect is that an MNE Group as defined in the regulations only includes those with total consolidated group (worldwide) revenue of ZAR10 billion or more. This field was only introduced on the ITR14 form in the year 2017 and it is not currently included in the CIT-IRP5 panel. Figure 2 is a snapshot of the MNE field on the ITR14 form, and Box 2 shows the guiding text on how to complete this field.

Figure 2: Group and MNE fields on the ITR14 form



Source: ITR14 Form v2018.00.05, available from SARS. Reproduced here with permission.

Box 2: Guiding text of how to complete the 'Group' and MNE fields on the ITR14 form

Is the company a member of a Multinational Entity (MNE) group as defined in the Country by Country (CbC) regulations?

If "Yes" is selected, the section in the Multinational Entity (MNE) group details on the income tax return will be displayed for completion.

Source: external guide: How to complete the Income Tax Return (ITR14) for companies IT-GENG01 Revision 8: 99. available from SARS. Reproduced here with permission.

The MNE indicator that is included in the CIT-IRP5 panel v4.0 sourced from the 'Additional Assessment' information section of the ITR14 form. This indicator has a wider definition and taxpayers would simply use the dictionary definition of an MNE. There is no specific definition or guidance on what qualifies as an MNE for South African tax purposes.

A South African parent of an MNE would be an MNE belonging to either category A or C in Table 1. The two questions used to construct Table 2 help in narrowing down the search for South African parents MNEs within the dataset. Classifying a firm as a 'local-held' group could be considered as the first step toward identifying a South African parent of an MNE. To establish an indicator for a South African parent of an MNE, this first step needs to be augmented with other indicators available in the dataset. The best indicator that can be considered is the Controlled Foreign Company (CFC) indicator. A non-resident (foreign) company is a CFC if South African tax residents, directly or indirectly, hold more than 50% of its issued share capital. Another indicator worth considering is the participation exemption indicator. If a South African resident company owns more than 10% of a foreign company, they do not pay tax on foreign dividends. This may be a sign that the company could be a South African parent of an MNE.

6 MNE indicators in the CIT-IRP5 panel.

Incorporated into version 4 of the CIT-IRP5 panel are two MNE indicator variables that researchers can use to identify foreign firms and South African MNEs. These variables are ITR14_c_mne_type and ITR14_c_fcf. This section details the creation of these indicators.

6.1 South African MNE type: ITR14_c_mne_type

The creation of the ITR14_c_mne_type indicator involves a two-step process where the identification of firms belonging to the 'local-held' group (see Table 2)¹⁰ happens in the first step and the identification of the South Africa parents of MNEs in the second. Table 6 shows the first step. Firms classified as locally-held are those that responded 'No' to having an ultimate holding company that is not a South African Resident. Companies that responded 'Yes' to the same question are ultimately foreign-owned MNEs. These are what the ITR14_c_mne_type indicator classifies as 'foreign parents' of MNEs (see Table C2 of Appendix C for the number of firms classified as either South African or Foreign parent of an MNE, using the ITR14_c_mne_type indicator, by company type). To be clear, the 'group of companies' question referred to in Table 2 is not used to construct this indicator.

Table 6: Local-held and foreign held groups

		Ultimate holding company outside SA?			
tax year	All firms	No	Yes	Local-held group	(Ultimately) Foreign held
2008	690,249	113	40	113	40
2009	595,980	279	119	279	119
2010	754,750	305	118	305	118
2011	757,522	696	348	696	348
2012	813,419	4,145	2,326	4,145	2,326
2013	833,077	8,313	3,324	8,313	3,324
2014	855,929	8,525	3,559	8,525	3,559
2015	873,371	8,689	3,827	8,689	3,827
2016	918,050	8,723	3,917	8,723	3,917
2017	908,405	7,566	2,903	7,566	2,903
2018	788,527	7,801	1,391	7,801	1,391

Note: tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel

Source: CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

Table 7 illustrates the second step in the process of identifying South African parents of MNEs. South African parents are locally-held firms that have foreign connections. Table 7 shows the numbers of locally-held firms that responded 'Yes' to one or more of the following questions:

- 1. Is the company part of a multinational enterprise?
- 2. Has the company claimed an exemption for any foreign dividends as referred to in \$10(1)(k)(ii)(dd) or \$10B (2)(a) ?
- 3. Were any of the foreign dividend subject to participation exemption?
- 4. Does the company directly or indirectly hold more than 10% of the total participation rights or voting rights in a Controlled Foreign Company (s9D)?

-

¹⁰ The creation of the ITR14_c_mne_type indicator did not make use of the 'group of companies' questions due to the change to the question from 2017 onwards and the potential misinterpretation of the revised question. Using the 'group of companies' questions could lead to undercounting the MNEs from 2017 onwards.

Table 7: South African parents of MNEs

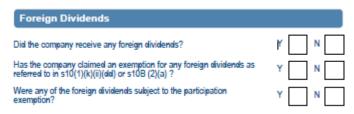
tax year	local-held group	Part of an MNE	CFC ownership	participation exemption	dividend exempted from taxation	SA parent of MNE
2008	113	n/a	[<10]	[<10]	[<10]	[<10]
2009	279	n/a	[<10]	[<10]	[<10]	[<10]
2010	305	n/a	[<10]	[<10]	[<10]	[<10]
2011	696	n/a	18	[<10]	13	18
2012	4,145	n/a	179	41	125	185
2013	8,313	n/a	286	66	218	303
2014	8,525	n/a	288	72	254	312
2015	8,689	n/a	289	81	291	318
2016	8,723	947	290	100	331	1,131
2017	7,566	1,388	284	74	319	1,511
2018	7,801	1,561	276	81	229	1,687

Note: there are other exemptions, besides the participation exemption, available for foreign dividends. Where there are less than 10 firms in a category the number is 'masked' for data security reasons. Tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel.

Source: CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

One important point to note is that questions 2 and 3 are both about section 10B(2)(a) (see Figure 3). The participation exemption applies to a company holding more than 10% of the shares and voting rights in a company issuing the dividend. The s10(1)(k)(ii)(dd) reference is the old participation exemption, which required a 20% ownership threshold. The replacement of s10(1)(k)(ii)(dd) with S10B(2)(a) happened in 2012. It is, therefore, appropriate to consider the two questions as capturing the same information. The data in the panel, on the other hand, contains cases where firms provided different responses to the two questions. At the time of writing, the reason for the mismatch in responses to the questions is unknown.

Figure 3: ITR14 questions on foreign dividends



Note: the fields have been checked and are the same in the versions ITR14 v2013.0.13, ITR14v2014.0.5, ITR14v2015.00.28, ITR14v2016.00.19, ITR14 v2017.00.24 and ITR14 v2018.00.05

Source: ITR14 Form v2018.00.05, available from SARS. Reproduced here with permission.

Table 8 shows the number of firms classified as either foreign parent or South African parent by the ITR14_c_mne_type indicators. For foreign parents, this classification is strict in the sense that it uses a more than 50% ownership threshold. Researchers may be interested in using a 10% ownership threshold to identify South African MNEs. The study by Hlatshwayo (forthcoming 2020) refers to these firms as foreign-connected firms (FCFs). The ITR14_c_ftf indicator captures these firms in the CIT-IRP5 panel which we discuss next.

Table 8: MNE Type indicator

		ITR14_c_mne_type				
Tax year	All firms	SA parent	Foreign parent			
2008	690,249	[<10]	40			
2009	595,980	[<10]	119			
2010	754,750	[<10]	118			
2011	757,522	18	348			
2012	813,419	185	2,326			
2013	833,077	303	3,324			
2014	855,929	312	3,559			
2015	873,371	318	3,827			
2016	918,050	1,131	3,917			
2017	908,405	1,511	2,903			
2018	788,527	1,687	1,391			

Note: where there are less than 10 firms in a category the number is 'masked' for data security reasons. Tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel

Source: CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

Below is the STATA code that creates the ITR14_c_mne_type indicator:

```
gen foreign_parent = 1 if ITR14_c_fgnhold==1
gen local_held_group = 1 if ITR14_c_fgnhold==0
gen SA_parent= 1 if (local_held_group ==1 & c_cfcownership==1) |
(local_held_group ==1 & ITR14_c_mne==1) | (ITR14_c_fdivpexmpt==1 &
local_held_group ==1) | (local_held_group ==1 & ITR14_c_fdivexmpt==1)
gen ITR14_c_mne_type =.
replace ITR14_c_mne_type = 1 if SA_parent == 1
replace ITR14_c_mne_type = 2 if foreign_parent ==1
label define mne_type 1'SA parent' 2'Foreign parent'
label values ITR14_c_mne_type mne_type
label var ITR14_c_mne_type 'MNE indicator: South African parent /Foreign parent'
```

6.2 Foreign connected firms: ITR14_c_fcf

The creation of the *ITR14_c_fcf indicator* followed the method employed by Hlatshwayo (forthcoming). Table 9 shows the variables used in creating this indicator (See Table C3 of Appendix C for the number of firms classified as FCFs, using the *ITR14_c_fcf indicator*, by company type). The *ITR14_c_fcf* indicator captures domestic firms that are:

- 1. headquarter companies with minimal asset rules, where at least 80% or more of the cost of the total assets are attributable to a qualifying foreign company.
- 2. have participation or voting rights in a controlled foreign company
- 3. have foreign dividends exempt in terms of s10B(2)(a)
- 4. have foreign dividends subject to participation exemption
- 5. have foreign income and expenditure in terms of s31(1)(a) in the Income Tax Act.

The ITR14 question used to identify Head Quarter Companies asks, 'Does the company elected to be a headquarter company in terms of s9I?' Specified in section 9I of the income Tax Act No. 58 of

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¹¹ The question is the same in the versions ITR14 v2013.0.13, ITR14v2014.0.5, ITR14v2015.00.28, ITR14v2016.00.19, ITR14 v2017.00.24 and ITR14 v2018.00.05

1962 is the definition of 'head quarter company' (HQC). The HQC regime aims to enhance the attractiveness of South Africa to MNEs wishing to invest in Africa. The regime overcomes previous obstacles that prevented South Africa from becoming a regional HQC jurisdiction. These obstacles included CFC rules, withholding taxes on royalties, transfer pricing rules, and tax on outgoing dividends. The HQC regime stipulates that for a company to qualify to be HQC, 'it must be resident in South Africa, and each shareholding must hold at least 10% of equity shares and voting rights. Furthermore, 80% or more of the total assets' cost must be attributable to one or more of the following:

- I. interest in equity shares in, or
- II. a debt (loan, advance or debt) to, or
- III. intellectual-property licensed to any foreign company in which HQC holds at least 10% or more of the equity shares and voting rights' (Ho 2013).

T 11 0	O 4		
Table 9:	SA	foreign-connected firms	

Foreign Connection								
Tax year	All firms	HQC with minimal asset rules	Foreign- controlled company	Dividends exempted from taxation	Participation exemption	Foreign income s13(1)(a)	Foreign expenditure s13(1)(a)	ITR14_c_fcf
2008	690,249	[<10]	[<10]	[<10]	[<10]	[<10]	10	20
2009	595,980	[<10]	19	[<10]	[<10]	38	42	70
2010	754,750	[<10]	968	[<10]	[<10]	37	43	1,019
2011	757,522	18	885	13	10	103	117	1,032
2012	813,419	89	728	125	79	749	923	1,775
2013	833,077	213	614	218	129	1,297	1,534	2,466
2014	855,929	189	611	254	155	1,503	1,832	2,760
2015	873,371	188	636	291	166	1,682	1,948	2,944
2016	918,050	181	655	331	206	1,801	2,046	3,075
2017	908,405	168	606	319	170	1,839	2,025	3,039
2018	788,527	107	358	229	128	8,49	778	1452

Note: where there are less than 10 firms in a category the number is 'masked' for data security reasons. Tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel

Source: CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

The ITR14 form contains sub-questions related to the HQC question used to identify FCFs. These questions are listed below:

- I. Does the company comply with the requirement that each of its shareholders (alone or together with any other company that forms part of the same group of companies as the shareholders) hold at least 10% of the equity shares and voting rights in the company throughout the year of assessment and all previous years of assessment?
- II. Does the company comply with the requirement that at least 80% of the cost of its total assets (excluding cash and bank deposits payable on demand) is attributable to assets as listed in s9I(2)(b)?
- III. Does the company comply with the requirement that where its gross income (excluding exchange differences determined in terms of s24I) exceeds ZAR5 million, at least 50% of that gross income consists of amounts described in s9I(2)(c)?

Below is the STATA code that create the ITR14_c_mne_fcf indicator:

7 Conclusion

The identification of foreign firms and domestic MNEs in the CIT-IRP5 panel can be challenging. The process of identifying foreign firms and MNEs requires the researcher to be knowledgeable about fields on the ITR14 form, where responses indicate foreign or domestic ownership. Furthermore, the researcher needs to be aware of the previous changes that have happened to the ITR14 fields of interest and how they affect the final sample size of foreign firms or MNEs. This note has provided the relevant information on some ITR14 fields that researchers can use to identify foreign firms and South African MNEs. The note has highlighted how the ITR14 fields have been used to create four foreign firm and MNE indicator variables introduced in version 4 of the CITIRP5 panel. The four indicator variables will be available in subsequent versions of the dataset. However, given that the ITR14 fields are subject to changes, it is not guaranteed that the process followed in the creation of these indicators will remain the same.

References

- Aterido, R., A. Hlatshwayo, D. Pieterse, and A. Steenkamp (2019). 'Firm Dynamics, Job Outcomes, and Productivity: South African Formal Businesses, 2010–14'. Policy Research Working Paper 8788. Washington DC: World Bank. https://doi.org/10.1596/1813-9450-8788
- Hlatshwayo, A. (forthcoming). Foreign connected firm spillovers through worker mobility.
- National Treasury and UNU-WIDER (2020). CIT-IRP5 Firm Panel 2008-2017 [dataset]. Version 4. Pretoria: South African Revenue Service [producer of the original data], 2019. Pretoria: National Treasury and UNU-WIDER [producer and distributor of the harmonized dataset].
- Ho, S. (2013) 'The headquarter tax regime'. SA Tax guide [online] available: http://www.sataxguide.co.za/the-headquarter-tax-regime/ (accessed 26 July 2020).
- Lumsden, W. (2014). 'Branch vs. Subsidiary: Key tax considerations' South African Institute of Tax Professional (SAIT) [online]. Available: https://www.thesait.org.za/news/186975/Branch-vs.-Subsidiary-Key-tax-considerations.htm (accessed 26 July 2020).
- Sørensen, B.B. (2020). 'Turnin' It Up A Notch: How Spillovers from Foreign Direct Investment Boost the Complexity if South Africa's Exports'. WIDER Working Paper 2020/3. Helsinki: UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2020/760-6
- Tax Administration Act 2011. No.28. *Government Gazette*, 10677(40516), 23 December 2016. Government notice No.R1598. Pretoria: Government Printer. Available at: https://www.gov.za/sites/default/files/gcis_document/201612/40516rg10677gon1598.pdf (accessed November 2020).
- Wier, L., and H. Reynolds (2018). 'Big and "unprofitable": How 10 per cent of multinational firms do 98 per cent of profit shifting'. WIDER Working Paper 111/2018. Helsinki: UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2018/553-4

Appendix

A Foreign firm classifications

Appendix A presents different scenarios that would produce foreign firms belonging to categories B, C, and D of Table 1. This section will also show how the strict and broad foreign firm indicators would classify the companies in each scenario (see Table A1)

Scenario A: a branch of a foreign firm

A foreign company called BB decides to do business in South Africa by establishing a branch, B1. Company B1 would be considered a branch of a foreign firm in South Africa and would belong to category D of Table 1.

Branches of foreign firms, such as company B1 respond 'Yes' as branches of foreign firms and have an ultimate holding company resident outside South Africa. Both strict and broad foreign firm indicators will, therefore, capture branches as foreign firms.

Scenario B: a subsidiary of a foreign firm

A foreign Company, CC, decides to buy a South African owned company, DD. Company DD's operations started in South Africa, but a foreign company CC now controls it. Company DD would belong to category B in Table 1.

Subsidiaries such as company DD would respond 'Yes' to having an ultimate holding company resident outside South Africa. These companies will be identified as foreign by both strict and foreign firm indicators.

Scenario C: a subsidiary of a foreign firm

A foreign Company CC decides to do business in South Africa by establishing a subsidiary C1 in South Africa. The company C1 would be considered a subsidiary of a foreign firm and would belong to category D of Table 1.

Subsidiaries of foreign firms like company C1 respond 'Yes' to having an ultimate holding company resident outside South Africa. These companies are also classified as foreign by both the strict and broad foreign firm indicators.

Scenario D: Associate of a foreign firm.

Company EE decides to extend its business to South Africa by establishing an Associate E1 in South Africa. Going by the definition of an associate, the parent company EE owns less than 50% of the shares of E1. If South African companies hold more than 50% of the shares of E1, E1 will be locally controlled and belong to category C of Table 1.

Associates like E1 are do not respond 'Yes' to having an ultimate holding company resident outside South Africa. The strict foreign firm indicator does not identify these companies as foreign. The broad foreign firm indicator, on the other hand, classifies these companies as foreign through the 'total dividends subject to DTA' field.

Table A1 shows how the companies in the scenarios are classified as foreign by the strict or/and broad foreign firm indicators.

Table A1: Classification of foreign firms based on scenarios in appendix A

Scenario Company	Table 1 Category	ITR14_c_strict	ITR14_c_broad
Branch of a foreign firm (B1)	D		1
Subsidiary of a foreign firm (D1)	В	1	1
Subsidiary of a foreign firm (C1)	D	1	1
Associate of a foreign firm (E1)	С		1

Source: authors' illustration of foreign firm classifications based on based on Table 1 and scenarios in appendix A.

B Explaining the values in the last columns of Tables 4–9 in the note on identifying foreign firms and MNES

The last columns on Tables 4–9 contain the number of firms captured by the new indicators. The indicator variables are created using the variables listed in the other columns of each table. Reading the table values of these indicators as aggregates of the other columns could imply a double-counting problem associated with these indicators. However, the fact is that there is no double-counting associated with any of these columns. This appendix attempts to explain the creation of the table.

All the column headings represent variables in the CIT-IRP5 panel v4.0. Most of these variables are 'Yes' or 'No' variables; a zero value represents a 'No' response, and 1 represents a 'Yes' response. Table B 1 is an example table created using data from Table B3.

Table B1: Broad foreign firm indicator

			Non-residency					
tax year	All firms	Not resident in SA for income tax purposes	Due to foreign incorporation	Due to treaty to avoid double taxation	Ultimately foreign controlled	Dividends subject to double taxation relief	Branch/ permanent establishment or agency of a foreign firm	ITR14_c_foreign_broad
2010	6	4	2	2	2	1	2	4
2011	8	5	3	2	2	1	2	5

Note: the data in the table is fictitious.

Source: authors' illustration on a table of counts based on data in Table B3.

Below in Table B 2 are the ITR14 variable names associated with the columns in Table 1:

Table B2: Variables names and description.

Variable	Description	
taxyear	Tax year	
ITR14_c_sarestax	Not resident in SA for income tax purposes	
ITR14_c_foreignincorp	Due to foreign incorporatio:	
ITR14_c_foreignincorpddt	Due to treaty to avoid double taxation	
ITR14_c_fgnhold	Ultimately foreign-controlled	
c_divdtr	Dividends subject to double taxation relief	
ITR14_c_fgnbranch	Branch/permanent establishment/agency of a foreign company	

Below is the STATA code that create the ITR14_c_foreign_broad indicator:

```
gen ITR14_c_foreign_broad=1 if ITR14_c_sarestax==0 | ITR14_c_foreignincorp==1 | ITR14_c_foreignincorpddt==1 | ITR14_c_fgnhold==1 | ITR14_c_fgnbranch==1|c_divdtr >0 & c_divdtr<.
```

Table B3 illustrates how the information in Table B1 would appear in the dataset.

Table B3: Illustration of the data used to create Table 5

taxrefno	taxyear	ITR14_c_sarestax	ITR14_c_foreignincorp	ITR14_c_foreignincorpddt	ITR14_c_fgnhold	c_divdtr	ITR14_c_fgnbranch	ITR14_c_foreign_broad
AA	2010	0	1	0	0	0	1	1
AB	2010	0	0	1	1	2000	0	1
AC	2010	1	0	0	0	0	0	
AD	2010	1	0	0	0	0	0	
AE	2010	0	1	0	1	6000	1	1
AF	2010	0	0	1	0	3000	0	1
AA	2011	0	1	0	0	0	1	1
AB	2011	0	0	1	1	2000	0	1
AC	2011	1	0	0	0	0	0	
AD	2011	1	0	0	0	0	0	
AE	2011	0	1	0	1	6000	1	1
AF	2011	0	0	1	0	3000	0	1
AG	2011	0	1	0	0	0	0	1
AH	2011	1	0	0	0		0	

Note: the data in the table is fictitious.

Source: authors' illustration of the data in the CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

C Foreign firms and MNE type by company type classification

Table C1: Foreign firms by company type

		Company type			
Tax year		micro	small	medium-large	
2008	Broad	523	921	204	
	Strict	0	0	40	
2009	Broad	1,053	23,33	580	
	Strict	0	0	119	
2010	Broad	1678	3,195	704	
	Strict	0	[<10]	116	
2011	Broad	2,173	6,380	1,493	
	Strict	0	[<10]	345	
2012	Broad	4,632	19,330	6,056	
	Strict	0	45	2,281	
2013	Broad	7,329	51,135	14,038	
	Strict	0	11	3,313	
2014	Broad	6,970	51,512	14,419	
	Strict	0	[<10]	3,557	
2015	Broad	6,479	51,080	14,794	
	Strict	0	[<10]	3,825	
2016	Broad	114,685	49,325	14,921	
	Strict	0	0	3,917	
2017	Broad	121,164	44,583	13,181	
	Strict	0	246	2,657	
2018	Broad	98,030	37,929	10,328	
	Strict	0	194	1197	

Note: the company type classification is based on the gross income and total assets amounts reported by firms Where there are less than 10 firms in a category the number is 'masked' for data security reasons. Tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel

Source: authors' illustration of the data in the CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

Table C2: MNEs by company type

		Company type		
Tax year		micro	small	medium-large
2008	SA parent	0	0	[<10]
	Foreign parent	0	0	40
2009	SA parent	0	0	[<10]
	Foreign parent	0	0	119
2010	SA parent	0	0	[<10]
	Foreign parent	0	[<10]	116
2011	SA parent	0	0	18
	Foreign parent	0	[<10]	345
2012	SA parent	0	[<10]	182
	Foreign parent	0	45	2,281
2013	SA parent	0	0	292
	Foreign parent	0	11	3,313
2014	SA parent	0	0	294
	Foreign parent	0	[<10]	3,557
2015	SA parent	0	0	298
	Foreign parent	0	[<10]	3,825
2016	SA parent	0	0	1,115
	Foreign parent	0	0	3,917
2017	SA parent	0	112	1,386
	Foreign parent	0	246	2,657
2018	SA parent	0	145	1,525
	Foreign parent	0	194	1,197

Note: the company type classification is based on the gross income and total assets amounts reported by firms. Where there are less than 10 firms in a category the number is 'masked' for data security reasons. Tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel

Source: authors' illustration of the data in the CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).

Table C3: FCFs by company type

	Company type				
Tax year	micro	small	medium-large		
2008	0	[<10]	20		
2009	0	[<10]	70		
2010	375	24	446		
2011	286	40	613		
2012	118	53	1,651		
2013	[<10]	59	2,673		
2014	0	53	2,898		
2015	0	49	3,086		
2016	0	46	3,198		
2017	0	44	3,186		
2018	[<10]	35	1.529		

Note: the company type classification is based on the gross income and total assets amounts reported by firms. Where there are less than 10 firms in a category the number is 'masked' for data security reasons. Tax year 2018 is not fully populated due to delays in tax reporting; this results in the lower numbers in 2018 in this version of the panel. Number would likely be revised upward in future version of the panel

Source: authors' illustration of the data in the CIT-IRP5 panel v4.0 (National Treasury and UNU-WIDER 2020).