

Notes on the value-added tax base of South Africa

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Introduction

The Commission of Inquiry into the Tax Structure of the Republic of South Africa, popularly known as the Margo Commission, recommended in their final report of 1987 the introduction of a comprehensive business tax (CBT) to augment the revenues raised by the then existing general sales tax (GST). The Margo proposals comprised, amongst others, the lowering of the general sales tax rate to a relatively modest level and the levying of the comprehensive business tax (at a higher rate than GST) to compensate for the revenue forfeited on account of the lowering of the general sales tax rate. The comprehensive business tax suggested was essentially a value-added tax to be imposed on businesses, using their financial statements for the calculation of value added.²

As an alternative system of indirect taxation, the Margo Commission suggested that the general sales tax be replaced in full by a value-added tax of the transactions type. In the case of this alternative it was recommended that transaction values shown on invoices should serve as the base for determining the amount of tax payable, and that taxes paid on the costs of inputs should be refundable to producers. In the government's response to the report of the Margo Commission it was indicated that this alternative tax proposal was preferred and it was decided that general sales tax would be replaced entirely by an invoice-based value-added tax.

In presenting his Budget to Parliament for the fiscal year 1991/92, the Minister of Finance announced the introduction of value-added tax from 30 September 1991 at a rate of 12 per cent to replace general sales tax, which was then levied at a rate of 13 per cent. The proposed introduction of value-added tax met with strong resistance from certain consumer bodies and labour unions, mainly because certain basic foodstuffs which had been exempted from the general sales tax, were included in the value-added tax base. To soften the impact of value-added tax on the cost of living of the needy, the Minister of Finance announced on 21 August 1991 a reduction of the rate from 12 to 10

per cent as well as some other fiscal measures to recover the tax revenue forfeited in the process. Value-added tax was adjusted further when the Minister announced on 29 September 1991 that a number of basic food items would be taxed at zero rate until 31 March 1992.³ This concession was later extended indefinitely.

In the final five months of the fiscal year 1991/92 the actual collections of value-added tax amounted to R8,0 billion, which exceeded the amount that had been envisaged by the fiscal authorities at the time of the Budget. In his budget proposals for the fiscal year 1992/93 the Minister of Finance anticipated that value-added tax collections would amount to R21,0 billion for the full fiscal year 1992/93. It eventually turned out that the value-added tax collected had been overestimated by some R3,9 billion, or by 18,6 per cent of the budgeted amount.

This large overestimation of the value-added tax collections was to some extent due to the deepening of the recession during 1992, whereas the budget projections had been based on the assumption of a mild recovery. Also significant was the fact that refunds to businesses, which occur when input value-added tax exceeds output value-added tax, increased from an average monthly value of R433 million in the last five months of 1991/92 to about R667 million from April 1992 onwards. This obviously raises the question whether the estimated value-added tax base was reliable. An *ex post* evaluation of the tax base for the fiscal year 1992/93 could provide useful insight into the reasons for the overestimation of the expected value-added tax collections. In these notes estimates of the value-added tax base and the recovery rate are provided.

Estimating the value-added tax base

The approach followed in estimating the value-added tax base recognises this type of taxation as a tax on domestic expenditure rather than as a tax on value added in the true sense of the national-accounting interpretation of this concept. The base is accordingly derived from estimates of macro-economic aggregates as they appear on the expenditure side of the standard national accounts and not on the production side, where value added is calculated as the sum of the remuneration of employees and operating surpluses.

1 The authors are indebted to Bernie de Jager for helpful comments and suggestions. However, the opinions expressed in these notes are those of the authors and do not necessarily also reflect those of anybody else or of the South African Reserve Bank.

2 Value added as the basis of the comprehensive business tax was defined as remuneration of employees + net interest payments + royalty payments + net rent payments + net profit + depreciation - gross investment.

3 Where goods and services are taxed at a zero rate, no value-added tax is charged on the final sale to the end-user of such goods and services and all value-added tax payments on inputs are refunded.

The national-accounts spending aggregates are valued at current market prices, implying that net indirect tax payments (indirect taxes less subsidies) are incorporated in the valuation. In order to calculate the value-added tax base, excluding value-added tax payments, it is necessary to adjust the expenditure aggregates as they appear in the national income and expenditure accounts by a factor of 0,909 (= 100/110) in fiscal 1992/93. This ratio depends, of course, on the value-added tax rate applicable in a specific year.

The relevant components of the expenditure on the gross domestic product which are taken into consideration in the calculation of the value-added tax base, are private consumption expenditure, consumption expenditure by the general government, and gross domestic fixed investment. Changes in inventories and the exports and imports of goods and services are therefore, not taken into account.

Changes in inventories are excluded from the calculations because value-added taxes payable on the purchase values of commercial and industrial inventories are refundable to tax-paying entities. Value-added taxes paid on inventory acquisitions are, therefore, repaid to producers, and these reverse tax flows are normally made shortly after the original tax payments. To estimate the value-added tax base it was accordingly deemed appropriate to focus on the value of final sales only.

Exports of goods and services are also not taken into account, because South Africa's value-added tax mechanisms adhere to the principle of "country of destination". In terms of this principle, value-added taxes are imposed on imports and the domestic tax is rebated on exports. Although this seems to indicate that the value of imports should form part of the tax base, the value-added tax paid on imported goods serving as intermediate goods is (as in the case of inventories) refundable. Leaving imports of goods and services in the tax base would, therefore, effectively mean a double-counting of the imported component of domestic final transactions. Only that fraction of total imports that is destined for final household consumption expenditure should form part of the value-added tax base.

The bulk of value-added tax collections in South Africa, as in other countries where such taxes are levied, is derived from the levying of this tax on consumption expenditure by private households. Private consumption expenditure estimates therefore constitute a very important element of the value-added tax base. In terms of the Value-Added Tax Act, No. 89 of 1991, expenditure on certain goods and services is exempted⁴ from the value-added tax and spending on these items should accordingly be excluded from the estimated value-added tax base. The more prominent items in this category in fiscal 1992/93 were petrol and

fuel and various exempted services such as rent, educational services, transport services for commuters, financial services (excluding short-term insurance), wages of domestic servants, services rendered in foreign countries and expenditure by non-profit organisations. Food items taxed at the zero-rate are also not included in the base. In addition to these items, the national-accounts estimates of private consumption expenditure contain a number of imputed expenditures which do not involve commercial transactions and should therefore not form part of the value-added tax base. These imputations represent mainly rental values of owner-occupied dwellings and food output, on commercial farms and in the subsistence agricultural sector, which is used for own consumption.

The consumption expenditure of the general government as estimated for purposes of the national income and expenditure accounts, reflects the current cost of services rendered by the general government and incorporates the remuneration of employees and spending on goods and other services of a non-capital nature. In practice, however, value-added tax is not levied on employee remuneration. Consequently, only the general-government consumption expenditure which represents the purchases of goods and services other than labour services, excluding the imputed depreciation of the fixed assets of the general government (a relatively small amount), have been incorporated in the estimated aggregate value-added tax base.

As far as fixed investment spending is concerned, the Value-Added Tax Act stipulates that value-added taxes paid on the purchases of capital goods may be deducted from the tax liability of business enterprises. This leaves only three categories of investment spending within the value-added tax base, namely outlays on materials purchased for the construction of private residential buildings, the erection of non-residential buildings and structures by the general government for purposes of providing community, social and personal services, and the purchases of new motor cars by producers which are not deductible against output tax in terms of clause 17(2) of the Act. Transfer costs are a component of gross domestic fixed investment and are part of the value-added tax base, but estate duties that form part of transfer costs are excluded.

The estimated value-added tax base for fiscal 1992/93, as provided in the table, was adjusted further to allow for the non-refundable input taxes paid on expenditures exempted from value-added tax.

4 The exemption of goods and services from the value-added tax means that this tax is not levied on the final sale to the end-user of the goods and services concerned, and value-added tax payments on inputs used are also not rebated.

Value-added tax base in fiscal year 1992/1993

	R millions
Private consumption expenditure	210,1
less Goods and services exempted and taxed at zero rate	28,9
less Imputed expenditure.....	16,7
Consumption expenditure by the general government on goods and services other than labour services.....	24,0
Domestic fixed investment.....	17,1
Taxable inputs of exempted expenditures.....	5,9
Total.....	212,5
Value-added tax base*	192,3

* Total adjusted by factor to account for value-added tax payments included in the national accounts spending totals.

Value-added tax recovery rate

Multiplying the value-added tax rate of 10 per cent with the estimated tax base for fiscal year 1992/93 produces a potential amount of R19,2 billion which the government could have expected to raise from value-added tax in that year. Because of time delays between tax collections by vendors and remittances to the authorities, it is unlikely that actual value-added tax revenues will ever correspond precisely with the estimated potential value-added tax revenue. Inefficient tax administration, non-registration of vendors, deliberate attempts to evade the value-added tax, and outright fraud, are some other reasons why actual tax collections will not necessarily match the estimated potential tax revenue. Among the fraudulent ways of tax evasion count exaggerated rebate claims, unrecorded cash purchases, credit claimed for invoices from unregistered suppliers, credit claimed for purchases that are not creditable, underreported sales, tax collected but not remitted to the authorities, and false export claims.

The ratio of value-added tax collections to the revenues which could potentially be collected in terms of the law, gives an indication of the effectiveness of the tax administration. This ratio is usually referred to as the recovery or compliance rate. Actual value-added tax collections in South Africa in 1992/93 amounted to R17,1 billion, indicating a recovery rate of 90,6 per cent. Such a recovery rate compares favourably with compliance rates in other countries where estimates of revenue foregone range from 2 to 4 per cent of total potential revenue in the United Kingdom to 40 per cent in Italy.⁵ Commentators of reputable international organisations expressed the opinion that a recovery rate

of 90,6 per cent is indicative of a sound and healthy tax administration.

The recovery rate for any particular country depends also on how the value-added tax is structured in terms of rates and exemptions. When the value-added tax is imposed at a single rate and with few exemptions (rather than at multiple rates and with many exemptions), a relatively higher recovery rate can reasonably be expected. In the South African case the limited number of exemptions and zero-rated items, and the uniform rate, had a bearing on the comparatively high calculated recovery rate.

The high recovery rate can also be interpreted as evidence of the accuracy of the estimates of the macro-economic expenditure aggregates. These expenditure aggregates for South Africa are estimated independently of the statistics pertaining to value-added tax. A high level of correspondence between the potential tax revenues derived from estimates of aggregate spending and actual tax collections therefore suggests that expenditure aggregates are being estimated with a fairly high degree of reliability.

Summary

Comparing actual value-added tax collections in the fiscal year 1992/93 with an independently estimated potential value-added tax revenue reveals a high degree of correspondence between the two magnitudes. This seems to confirm that the initial overestimation of expected value-added tax revenues in the Budget for the fiscal year 1992/93 was more the result of forecast errors than of an incorrect specification of the value-added tax base. The implicit high value-added tax recovery rate is indicative of an efficient tax collection system, but also of a fairly high level of accuracy in the estimation of the expenditure aggregates in the national income and expenditure accounts.

5 See Tait, A.A. *Value-Added Tax - International Practice and Problems*, International Monetary Fund, Washington, D.C. (1988), p. 304.