NATIONAL TAX RESEARCH CENTER

BAGONG PILIPINAS

Value Added Tax (VAT) Gap Estimates

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Philippines' VAT system

- VAT was introduced in 1988. The standard VAT rate is 10%, raised to 12% in 2006 (RVAT Law).

- The latest substantial amendments to VAT are the **Corporate Recovery and Tax Incentives for Enterprises (CREATE Act)** [2021] and **Tax Reform for Acceleration and Inclusion (TRAIN)** Law [2018]

- Tax Code lists **28 VAT-exempt** and **nine zero-rated transactions**. Zero percent VAT is imposed on direct and constructive exports.

- **More than 64 special laws grants VAT zero-rating or exemption**, e.g., certain sales to senior citizens, PWDs, and solo parents, renewable energy, cooperatives, etc.

- **Amortization of input VAT** from depreciable assets, presumptive and transitional input VAT

Estimation of Value-Added Tax Gap

- Use of **Input-Output tables** and the **National Accounts**.

- NTRC VAT gap estimate adopted the methodology developed by Carlos A. Aguirre and Parthasarathi Shome (1987).*

    - Use of a **production-based method** to determine the amount of potential VAT base, estimated based on the value added by the industry with the help of national accounts data.

    - The computed VAT is based on the difference between the VAT due on taxable output per sector and the amount of input VAT deductible per sector.

*From the study entitled: The Mexican Value-Added Tax (VAT): Characteristics, Evolution, and Methodology for Calculating the Base.

Estimation of Value-Added Tax Gap

POTENTIAL VAT BASE (TAXABLE SUPPLY)

TAXABLE SALES − TAXABLE PURCHASES net of PURCHASES USED FOR EXEMPT SALES − TAXABLE PURCHASES OF CAPITAL GOODS

ESTIMATED POTENTIAL VAT REVENUE

POTENTIAL VAT BASE (TAXABLE SUPPLY) × VAT RATE

ESTIMATED POTENTIAL VAT REVENUE NET OF PITC

ESTIMATED POTENTIAL VAT REVENUE − Presumptive input tax credit (PITC)

VALUE ADDED TAX GAP

ESTIMATED POTENTIAL VAT REVENUE NET OF PITC − ACTUAL VAT COLLECTION

*Adopted from the methodology developed by Carlos A. Aguirre and Parthasarathi Shome.

- The potential VAT base is multiplied by the applicable VAT rate to get the estimated potential VAT revenue, from which the presumptive input tax is deducted to arrive at the net estimated potential VAT revenue.

- To determine the PITC, the VAT rate is applied to such agricultural inputs used by subsectors entitled to PITC, which were estimated by relating the ratio and proportion of such agricultural inputs as reflected in the 2000 I-O, to the projected I-O in 2012.

- The VAT gap results after deducting the actual VAT collection from the net estimated potential VAT revenue.

Challenges and limitations

Limitations of Input-Output/ National Accounts

- Input-Output table is released **every 6 years**. Data on VAT base estimation were derived from the 2012 Input-Output (IO) tables from the Philippine Statistics Authority. In other words, the approach assumes that the industry structure in 2012 is maintained in the succeeding years until such time a new IO table is released.

- VAT gap estimations may show volatility over time due to revisions in the underlying estimates rather than changes in compliance. Accordingly, such revisions can be caused by:
  - periodic revision of the national account magnitudes and/or VAT revenue series. (e.g. the switching from PSNA base year 2000 to base year 2018);
  - updates of previously forecasted input data.

- Homogeneity Assumption of IO table- If each industry produces a single output, it simplifies the identification of products and their associated VAT rates. However, industries may produce multiple products, each subject to different VAT rates. (e.g. taxable medications and VAT-exempt medications in pharmaceutical industry).

Challenges and limitations

Limitations of the calculation which may cause deviations from Actual VAT

- Exemptions and exclusions from VAT are mere estimates using the **ratios derived from the 2012 IO structure**.

- Production of marginal firms is derived using the 1999 **ratio of informal sector** per Heidi Arboleda and Loh Meng Kow's "Estimation of Contribution of Informal Sector to GDP on Regular Basis," ESCAP.

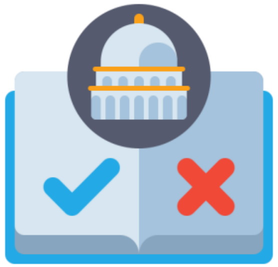
- The stock outside of VAT base is calculated by multiplying the domestic consumption (net of exemption/exclusions) by the ratio of change in stocks to the sales.

- **Use of actual tax returns** to validate or cross check with the estimates derived from the input-output tables was **not employed**.

Reasons for Tax Gap

The estimated tax gap may be attributed to the following possible abuses and leakages in the tax system:

Excessive claims of input VAT credit



Unlawful claims of presumptive VAT

Under declaration and non-declaration of Vatable sales

Use of Tax gap results to improve VAT

- Identifying high-risk sectors and businesses
- Benchmarking and industry norms
- Customizing enforcement strategies
- Periodic monitoring and evaluation
- Policy and legislative Reforms

Thank you.

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