The curious idea of Friedrich von Siemens

A tax charged on all sales but with credit or refund of tax charged on purchases

Clever because:

• Does not ‘stick’ on businesses’ input decision (unlike turnover tax)

• Revenue protected if compliance chain breaks (unlike retail sales tax)

So long, that is, as everything works well…

In little more than fifty years, from zero to 30 percent of all the world’s tax revenue
The Rise of the VAT

Source: IMF Internal International Tax Rates Database
Has the VAT done its job?

VAT Revenue: High and Rising

Key questions

- Do countries with a VAT raise more revenue that those without?
  - Yes, except mixed results for SSA

- Is the VAT more growth friendly than other taxes?
  - Yes, but design matters: broadening the base is better for growth than raising the rate

Source: IMF Internal World Revenue Longitudinal Database (WoRLD)
But VATs differ widely

Number of VAT Rates

<table>
<thead>
<tr>
<th></th>
<th>High Income</th>
<th>Upper Middle Income</th>
<th>Lower Middle Income</th>
<th>Low Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>3.16</td>
<td>2.76</td>
<td>2.71</td>
<td>2.39</td>
</tr>
</tbody>
</table>

VAT Threshold in % of GDP per capita

<table>
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<th>Low Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>57.04</td>
<td>23.31</td>
<td>7.99</td>
<td>1.69</td>
</tr>
</tbody>
</table>

Source: IMF Internal International Tax Rates Database
Trends in C-efficiency

A handy indicator:

$$C\text{-efficiency} = \frac{VAT\ revenue}{Standard\ rate \times Final\ consumption}$$

(also known as the VAT revenue ratio)

• This is 100 percent for a ‘perfect’ VAT (or possibly a very bad one)

• And gives a sense of revenue potential: if LIDCs in the lowest quartile by C-efficiency were to raise it to the LIDC median, they would raise additional revenue of around 3.5 percent of GDP.

Source: IMF Internal World Revenue Longitudinal Database (WoRLD), Internal International Tax Rates Database, World Economic Outlook Database (WEO)

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And shortfalls of C-efficiency from 100 can be decomposed

- **A compliance gap**: The additional revenue that could be raised if current VAT rules were perfectly enforced.

- **A policy gap**: The additional revenue that would be raised, given perfect enforcement, if all consumption were taxed at the current standard rate.
The perennial question: The incidence of the VAT

- Preferential rates on items on which the poor spend a large proportion of their income are badly targeted—because the rich spend absolutely more on them.

- Question is whether there are better targeted instruments; which, increasingly there are.

To bear in mind too:

- Is the VAT fully passed on to consumers? Some signs that reduced rates are not.

- Poor may buy largely from small unregistered businesses.
Other issues

Some old

• Noncompliance, refund fraud and other: But is VAT more vulnerable than, say, the income tax?

• Treatment of financial sector: Exemption distorts business use and misses consumer margin

• Treatment of government: Revenue washes out, but concerns to ensure a level playing field; budgetary management issues

• VAT in federations: Now many models addressing in different ways problems from zero-rating across internal borders. How well have they worked?

Some new

• Cross-border intangible services

• Digital platforms

• Links with corporate taxation as it become open to an element of destination basing

• Technological innovations – with blockchain, will we need a VAT?