How VAT reductions on capital commodities can foster industrialization and boost growth in Tanzania

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Key messages

- Reducing the VAT rate on capital commodities can help the Tanzanian economy meet the country’s industrialization development targets.
- By letting spending adjust to a reduced VAT on capital commodities (rather than decreasing savings), the government can protect the important industrial and construction sectors while helping to reduce unemployment, income inequality and poverty.
- However, reducing the VAT on capital commodities is most likely to be effective as an industry-specific subsidy as it has only a small redistributive effect on inequality and poverty.

Policies promoting industry aim to encourage development

The Tanzanian government is taking active steps to foster industrialization under the Tanzania Development Vision (TDV) 2025 plan. By 2025, the industrial sector should contribute 40% to GDP. The government’s priorities include interventions to encourage economic growth and industrial development, and create a conducive business environment.

One of the initiatives for industrial development is a VAT exemption on capital goods to reduce the procurement costs of machines and equipment used for production.

The exemption applies to capital goods used in the production of edible oil, textiles, leather, and pharmaceutical (including veterinary) products. It aims to promote the use of these goods—especially in industry—to encourage the growth, employment, savings, and investment necessary to improve the population’s welfare.

While the VAT exemption aims to promote manufacturing and processing, it also reduces government tax income and may reduce the funds available for development programs against poverty and income inequality.

Sectors that use capital goods contribute a lot to Tanzania’s GDP, with manufacturing contributing over 25%. Thus, a team of local PEP researchers sought to understand the impacts of a partial VAT reduction, rather than a complete exemption, on capital commodities.

Capital commodities, which include electricity, gas and steam, vehicles, machinery, and electrical and transportation equipment, are used to produce consumer goods.

The analysis

The research team used a Computable General Equilibrium (CGE) model and a Social Accounting Matrix of the 2015 Tanzanian economy to analytically examine a decrease in the VAT rate on capital commodities. They sought to understand the short-term impact it may have on households and the overall economy. They also investigated whether a partial VAT reduction would provoke the intended economic benefits of the policy, without reducing government revenues too much.

The team simulated two scenarios for how the government could adapt to the losses of governmental income due to a partial reduction in the VAT rate on capital commodities:

**Simulation Scenario 1:**
10% decrease in VAT rate on capital commodities under flexible government savings and fixed government expenditure.

Flexible government savings allow a decrease in government income to be reflected in decreased savings and thus increased government deficit. Under this scenario, the government can increase its borrowing to cover inadequate tax receipts, but is required to repay those debts in future.

**Simulation Scenario 2:**
10% decrease in VAT rate on capital commodities under fixed government savings and flexible government expenditure.

Under this scenario, the government can adapt to the losses (caused by the decrease in VAT tax collection) by reducing spending.
Key findings

Analysis of the tax structure in Tanzania reveals that the government budget relies more on indirect taxes (particularly the VAT) than on direct taxes as a revenue source. As such, a partial VAT reduction on capital commodities can be expected to have a certain impact on government income.

Reducing VAT rate on capital commodities by 10% can contribute to economic growth. Additionally, it is found to:

### 1. Under flexible government savings
- Increase real GDP by 0.04% (due to a 0.1% fall in the consumer price index)
- Decrease domestic prices more than the decrease in import prices.
  - This makes domestic goods more attractive and increases domestic demand for 50/54 commodities.
- Increase exports and decrease imports under fixed international prices.
- Increase total output in 53 sectors.
  - Particularly in the capital commodities sector and in manufacturing sectors that use capital commodities for production purposes.
- Reduce production (0.18%) and labour demand for all types of workers (0.15%) in the labour intensive construction sector, **slightly increasing the average unemployment rate (0.1%)**.
  - This is driven by decreased total investment (0.3%) because the construction sector uses capital commodities mainly for investment purposes.
- Decrease the consumer price index more than the nominal income, thereby increasing household purchasing power and, potentially, easing poverty.

### 2. When government savings remain fixed
- Increase the output for 46 production sectors relatively more than the industrial sectors.
  - This is a result of lower domestic commodity prices.
- Decrease the output of the government, livestock, and services sectors.
  - Attributed to a decline in government spending.
- Increase the total output and exports in the industrial sector, leading to a **small average decrease in the unemployment rate (0.03%)**.
  - Despite a marginal reduction of investment in the economy.
  - Unemployment decreases relatively more for households with secondary and tertiary education.
    - Their members were employed in sectors whose total output rose.
    - However, unemployment increases for uneducated and less-educated households.
- Increase the income share of the bottom 40% of households, reducing both the income-inequality ratio and poverty, despite a reduction of nominal household income.

### Changes in Total Output (%) in Selected Sectors

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Flexible Govt. Savings</th>
<th>Fixed Govt. Savings</th>
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<tbody>
<tr>
<td>Construction</td>
<td></td>
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<tr>
<td>Capital commodities for manufacturing</td>
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Conclusions and policy implications

A VAT rate reduction under fixed government savings may be more beneficial to Tanzania’s economy than one in which government savings are flexible. The important economic sectors of manufacturing and construction (contributing 25.3% and 15.7% to GDP, respectively) are protected under this scenario while unemployment, income inequality and poverty are reduced. In particular, the government can protect the construction sector from the negative effects of a relative price decrease of capital goods under this scenario.

Under flexible savings, however, despite a slight increase in the real GDP at basic prices, the construction sector suffers as it receives less government investment, leading to an overall increase in unemployment.

As such, the aim of establishing an industrialized economy in Tanzania is potentially attainable through a policy that reduces the VAT on capital commodities while fixing government savings.

Since Tanzania’s budget relies heavily on indirect taxes, and VAT in particular, the government can promote the development of the industrial sector and retain its revenue by reducing rather than exempting the VAT rate on capital commodities.

The development of the industrial sector should go in hand with the increased support to the agriculture sector, especially livestock, so as to increase the employment rate for all labour categories.

The results also show that the VAT reduction on capital commodities has only a small redistributive effect on income inequality. This means that the measure is more effective as an industry-specific subsidy than an instrument of income redistribution or poverty alleviation.

Another policy to consider would be to tie VAT reductions to industry commitments in order to develop compensation measures ensuring that the benefits of VAT reduction would reach consumers, employees, suppliers, and the economy as a whole. These might include (a) passing on at least 50% of the VAT reduction in the form of lower prices; (b) creating an agreed-upon number of new jobs; (c) providing social services to the community, or other measures.

Tanzania’s tax system faces a range of long-term challenges and reducing the VAT rate on capital goods could help make the system more growth-supporting while requiring little or no rewriting of tax laws or the creation of new collection mechanisms.

Tanzania’s VAT exemption on capital goods, such as textiles, aims to boost the manufacturing sector and encourage growth.

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