Economy-wide effects of VAT-free chicken meat in South Africa: Implications for food security

By

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Presentation outline

- Background
- Modelling and data framework
- Results and discussions
- Conclusions and policy implications(s)

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Background

❑ Poultry industry importance

- ✓ Largest contributor to the GPV of agriculture; GDP and employment, safeguarding food security
- ✓ Chicken is the most consumed source of protein (with 27.10kg pp), followed by beef, pork & mutton.
- ✓ Nexus of challenges; i.e., rising feed costs, disease outbreaks, rising cheap imports, etc.
- ✓ These threaten the industry's sustainability & competitiveness ~ Also, reducing affordability for low-income households.

❑ Food security in South Africa

- ✓ Approx 3.7 million households faced moderate to severe food insecurity, while 1.5 million households endured severe hunger in 2023
- ✓ Poorest 10% of households in South Africa spend approximately 7% of their total expenditure on chicken products compared to about 1% spent by the wealthiest 10% of households.
- ✓ Most of this is bone-in portions (ranging from 55-65% of domestic demand)

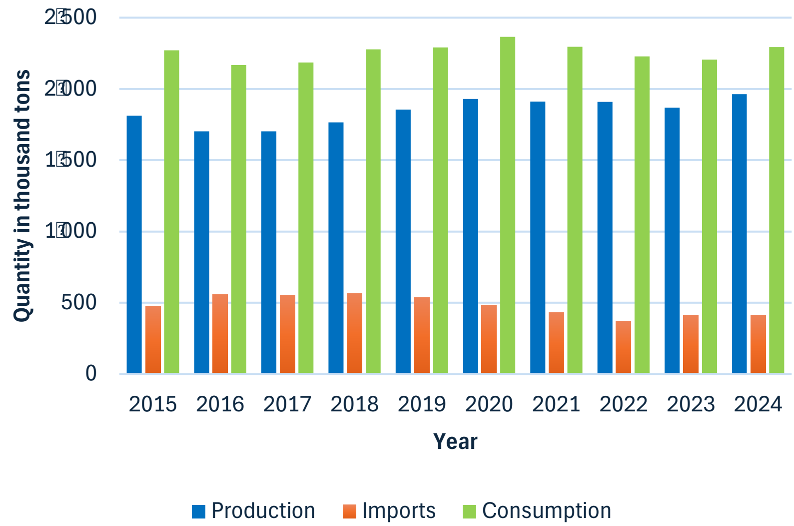


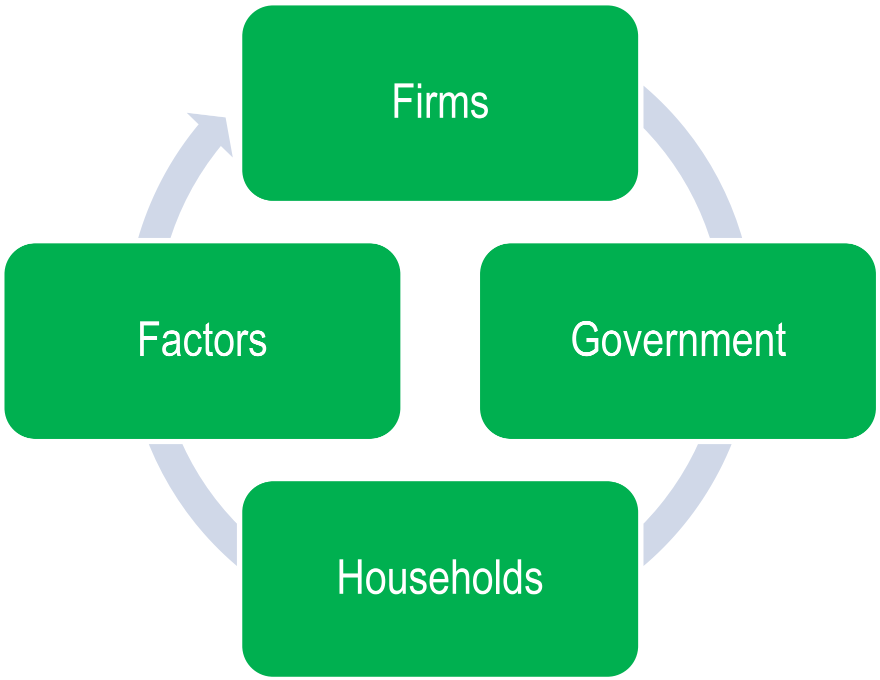
Figure 1: South Africa's chicken production, consumption & imports.

Source: DoA (2025) & Trade Map (2024)

❑ VAT policy in South Africa

- ✓ Introduced in 1991 to replace the GST of 13%~ Increased from 14%-15% in 2018
- ✓ Second most source of government revenue
- ✓ Aimed to increase revenue collection while sparking debates about the impact on affordability for low-income households.

Modelling & data framework: DEMETRA



- Capturing interlinkages across households, firms, sectors, & government
- Has been widely employed to produce ex-ante impact analyses mainly of food security related topics (Nechifor et al., 2021; Omoju et al., 2024; Agyei-Holmes et al., 2024).
- Assumes:
  - ✓ Perfect competition, utility maximization, cost minimization
  - ✓ Small open economy (South Africa is a price taker globally)
  - ✓ Armington assumption (imports ≠ domestic goods)
  - ✓ CET function governs trade-off between exports and domestic sales

Modelling & data framework: DEMETRA

Table 1: Data sources for the structure and estimation of the 2019 SA SAM

Data item	Data source	Data year
Macroeconomic scheme		
Supply & Use Tables	Statistics South Africa	2019
National Accounts	Statistics South Africa	2019
	UNData	2019
Import and Export tariffs	World integrated trade solution (WITS)	2019
Tax statistics VAT	South African Revenue Service	2019
Labour disaggregation		
Labour Market Dynamics	Statistics South Africa	2019
Agriculture disaggregation		
Census of Commercial Agriculture	Statistics South Africa	2017
Agricultural Survey 2021 (P1101)	Statistics South Africa	2019
Production and Trade data	FAOSTAT	2019
Households' disaggregation		
General Household Survey 2019	Statistics South Africa	2019
Living Conditions Survey 2014-15	Statistics South Africa	2014/15
Employment disaggregation		
Labour Market Dynamics	Statistics South Africa	2019

Modelling & data framework: DEMETRA

Table 2: Summary of the 2019 South Africa SAM accounts

Account	Detail	Segmentation
Activities	Regional and National	- 9 Provincial activities - 123 National activities
Commodities	National (125)	- 9 crop products - 7 livestock products - 20 food products
Factors	Labour (144) and Capital	Labour by: - 9 Provinces - 2 Gender - 4 Education - 2 Formal/informal
Institutional sectors	Households (36) Enterprises Government Rest of the World	Households by: - 9 Provinces - 2 Gender - 2 Formal/informal
Taxes	Indirect Taxes Direct Taxes	- Indirect tax - Sale tax - VAT taxes
Investment-Saving	Investment	Investment Change in inventories
Other accounts	Trade and transport margins	

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Policy Simulation Scenarios

- The study simulates different scenarios to assess the impacts of VAT removal:

Policy 1

- The economy after the VAT-zero rating 50% chicken meat, assuming all other taxes and policies remain the same.

Policy 2

- The economy after the VAT-zero rating 65% chicken meat, assuming all other taxes and policies remain the same.

- The study adopted the government accounts macroeconomic closure which is appropriate for models used to investigate fiscal policy considerations.
  - ✓ Flexible government expenditure closure

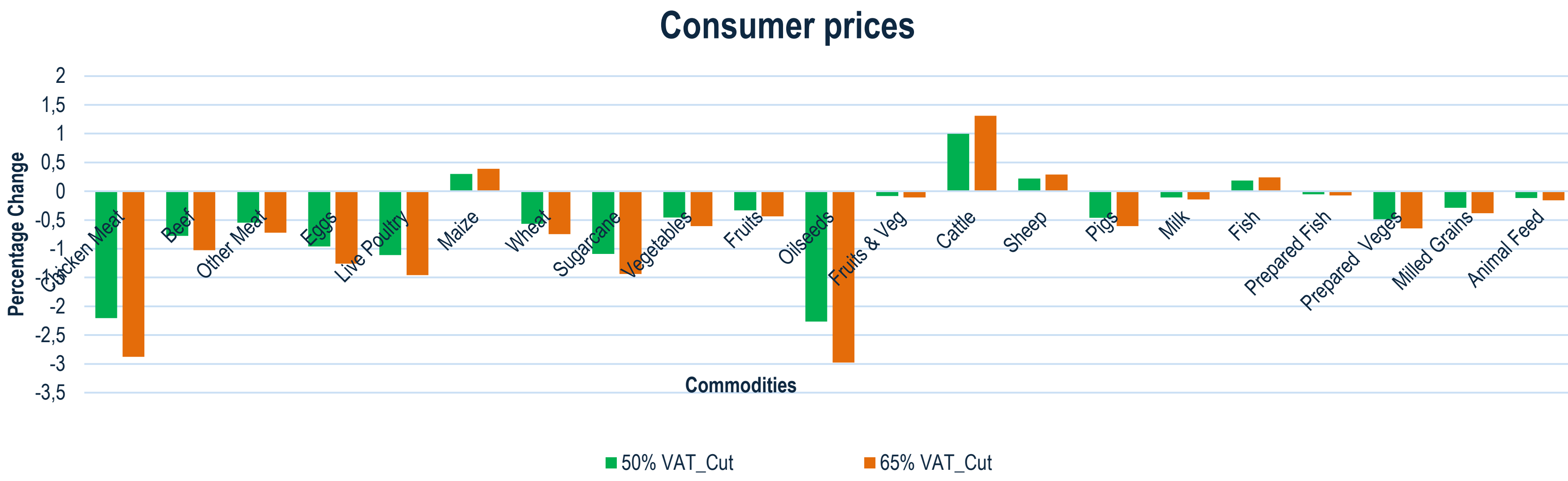
Results and discussion

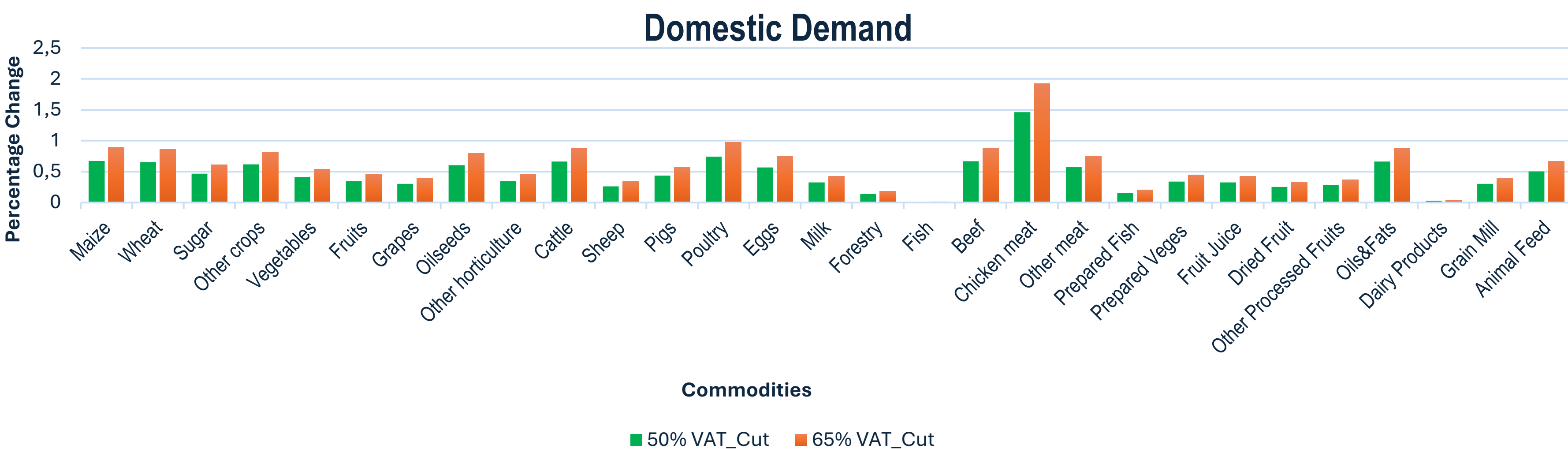
Table 3: Provincial demand for labour and capital in agriculture

	Capital Demand			Labour Demand	
	VAT-zero rating 50% of chicken meat	**VAT-zero rating 65% of chicken meat**		**VAT-zero rating 50% of chicken meat**	**VAT-zero rating 65% of chicken meat**
Eastern Cape	0,09	0,12	Eastern Cape	0,10	0,13
Free State	0,12	0,16	Free State	0,12	0,15
Gauteng	**0,82**	**1,08**	Gauteng	**0,83**	**1,09**
KwaZulu-Natal	0,40	0,53	KwaZulu-Natal	0,38	0,50
Limpopo	-0,31	-0,41	Limpopo	-0,24	-0,31
Mpumalanga	**2,49**	**3,29**	Mpumalanga	**2,05**	**2,70**
Northern Cape	-0,34	-0,45	Northern Cape	-0,23	-0,31
North-West	**1,08**	**1,42**	North-West	**0,81**	**1,07**
Western Cape	**0,69**	**0,91**	Western Cape	**0,55**	**0,72**

Source: DEMETRA simulation results (in percentage change)

Results and discussion





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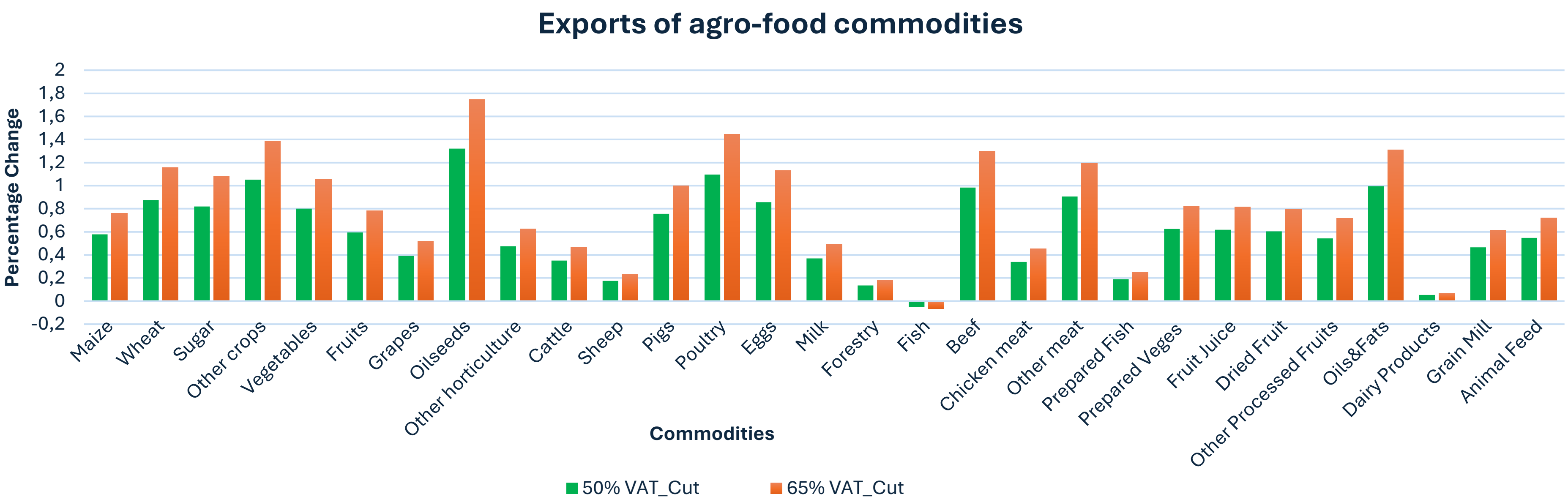
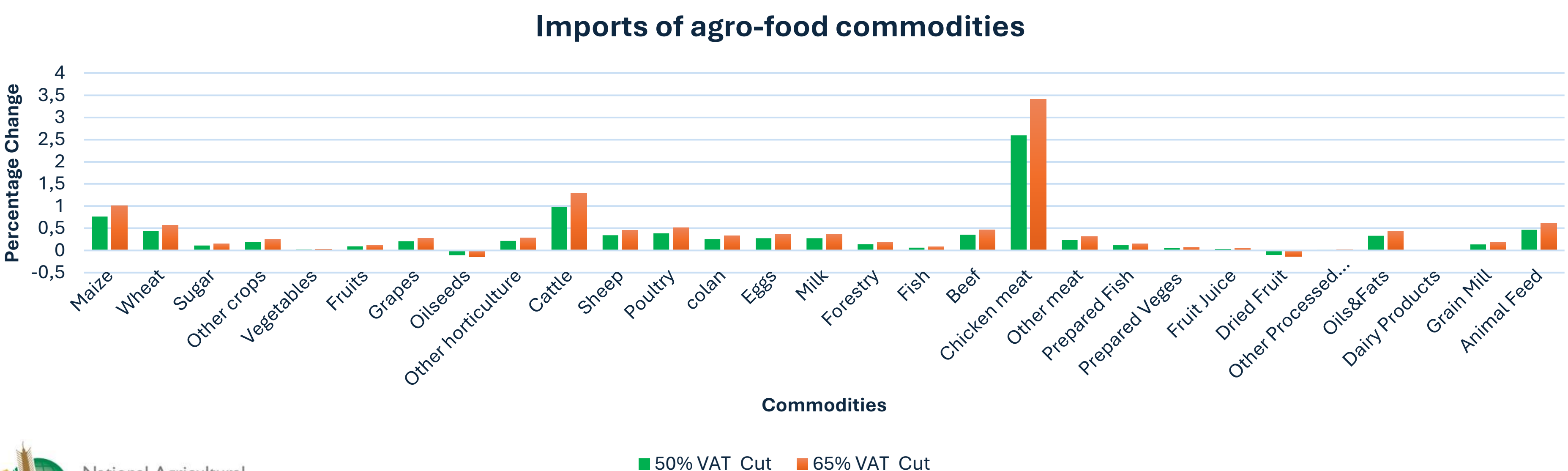
Source: DEMETRA simulation results (in percentage change)

Results and discussion





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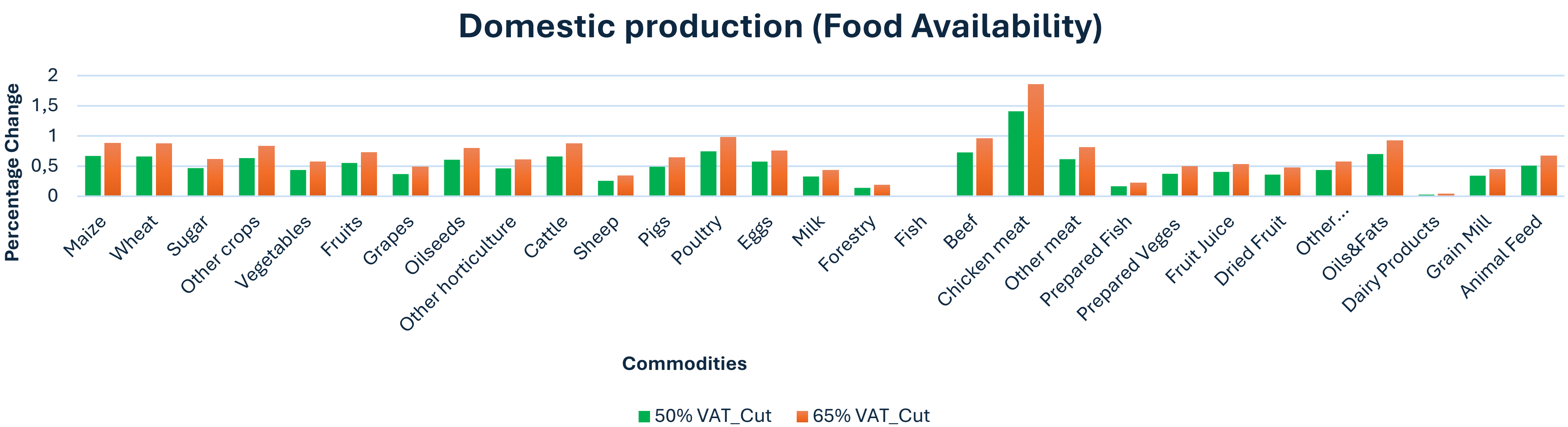

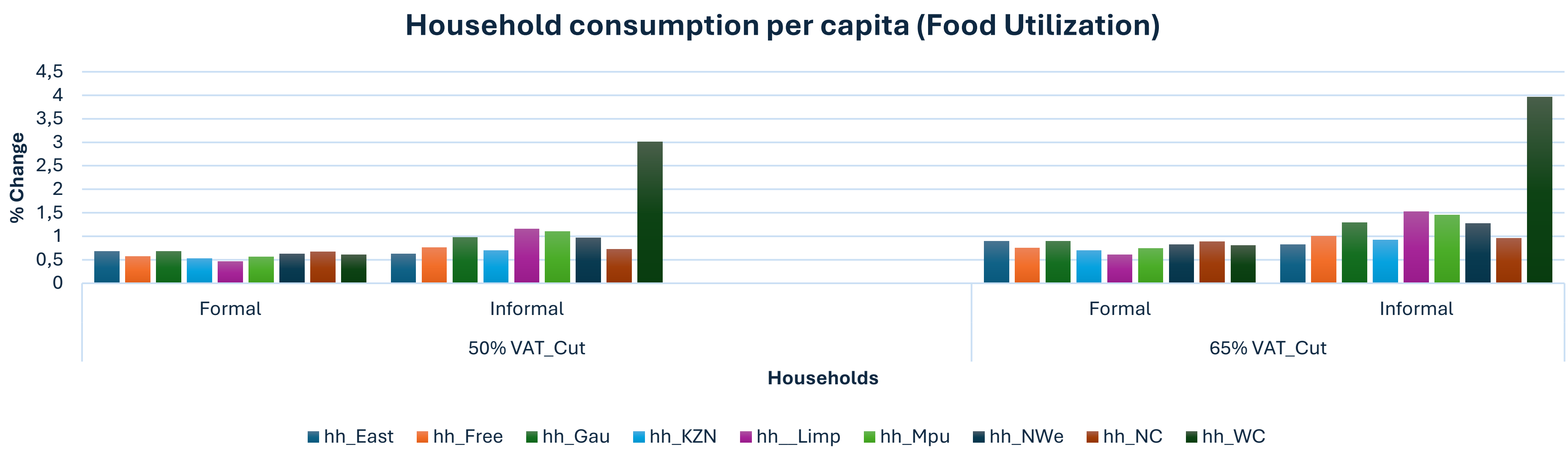

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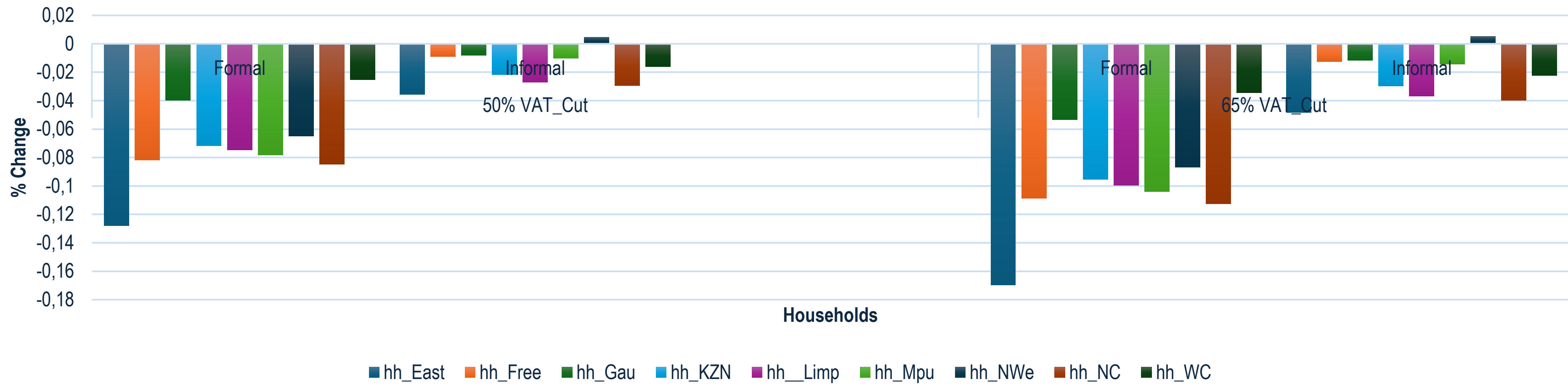
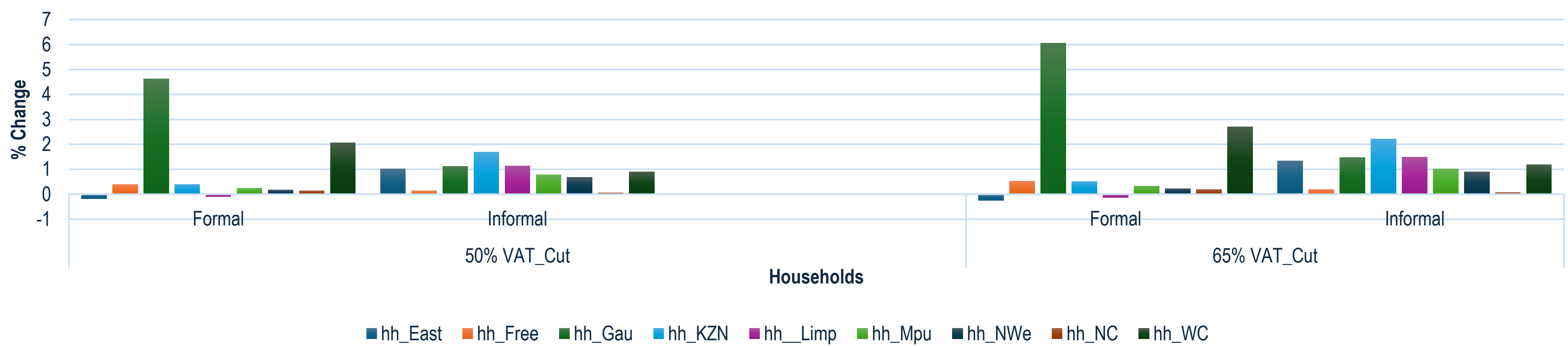
Source: DEMETRA simulation results (in percentage change)

Results and discussion

Household average disposable income (Food Accessibility)



Household welfare (Stability)



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Source: DEMETRA simulation results (in percentage change)

Conclusions and policy implications

- The findings offer several important insights that can be that can assist South African authorities with their decision-making regarding policy debates on food security, tax policy, and economic development in South Africa
- Overall, the results that partial zero-rating chicken meat might produce positive effects for the agriculture and food producing industries, more so under the 65% VAT exemption policy scenario.
- Specifically, the study shows that partial VAT exemption of chicken meat is likely to result in stronger demand for both capital and labour in dominant poultry producing provinces. Suggesting that this policy could boost agro-industrial activity in terms of investment and employment within these regions.
- The study also implies that this policy could improve affordability and better access to food by households, as depicted by reduction in consumer prices for most essential food items such as grains and oilseeds, chicken meat, eggs, and other meat types.
- Moreover, the study found that partial VAT exemption of chicken meat could potentially increase domestic production and demand for agriculture and food commodities coupled with increased household consumption pp. implying that the policy could potentially improve food availability and utilization.

THANK YOU

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