2024 SUSTAINABLE DEVELOPMENT TRANSFORMATION FORUM

A Partial Least-Square Analysis of Gender Inequality,
Occupational Segregation, and Economic Growth: Evidence
from Sub-Saharan Africa.

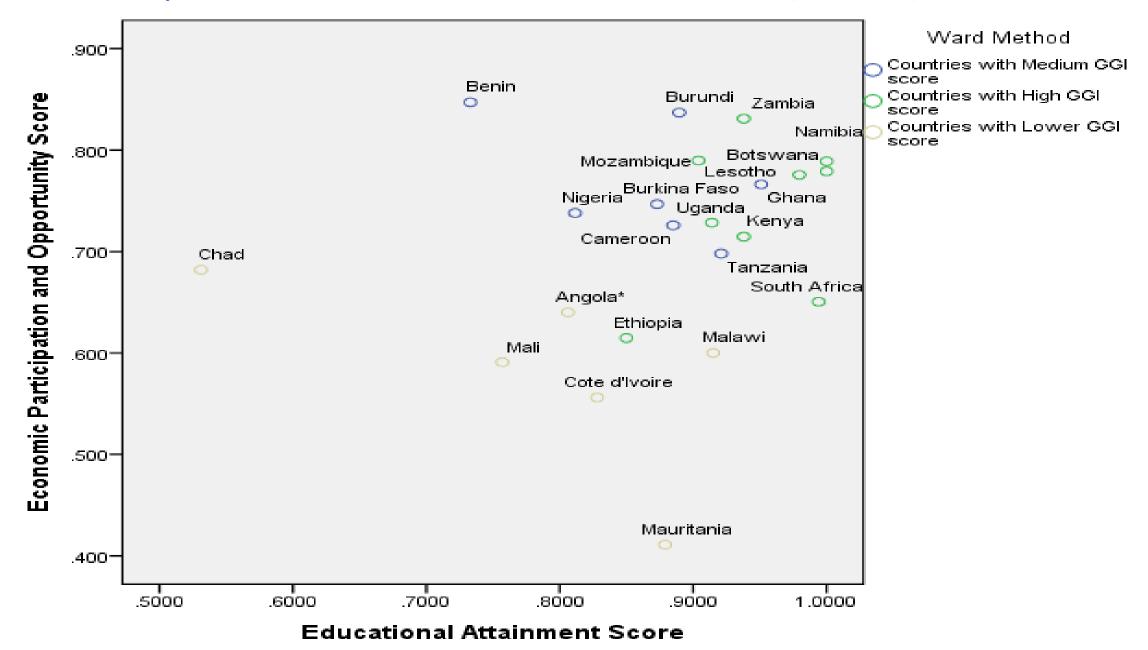
W.O. Alwago

University of Szeged, Hungary/Visiting Fellow, UNU-WIDER

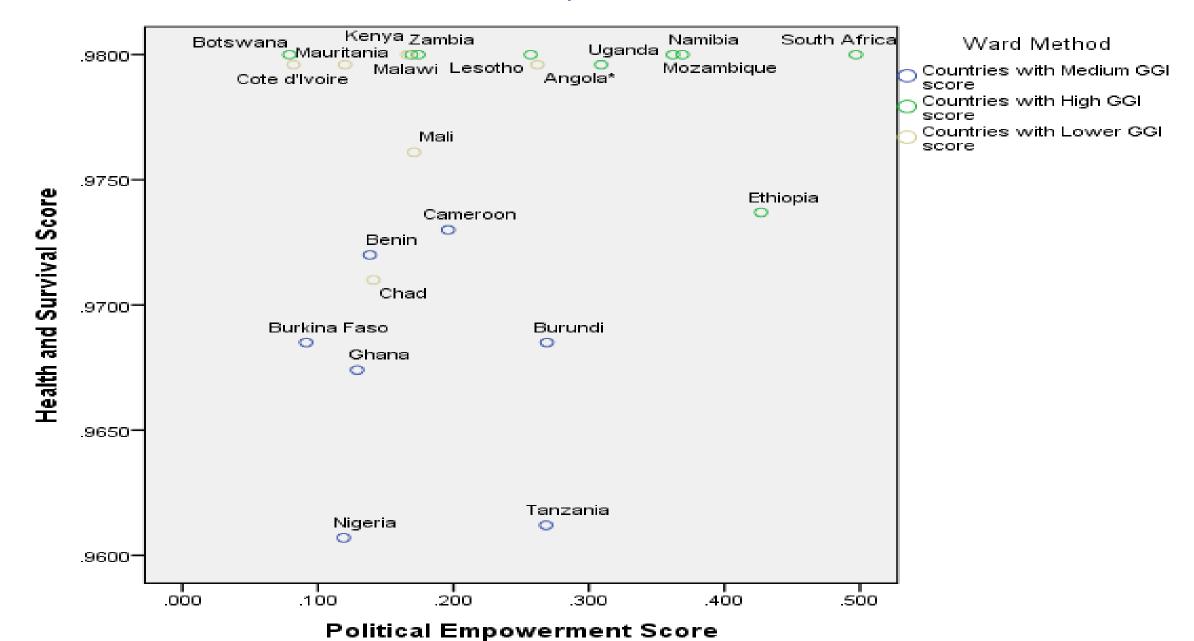
Motivation

- 1) Gender inequality is "not one homogeneous entity, but a collection of distinct and interconnected societal concerns" [...] (Sen, 2001)
 - o The gender gaps are closing faster in developed nations than in developing countries (World Economic Forum, 2023; Blau & Khan, 2020).
 - o The barrier to an egalitarian Sub-Saharan Africa (SSA) is the deeply ingrained structural obstacles; **patriarchal societies** are supported by social institutions and cultural alignments (Adekunle et al., 2020).
- 2) Despite 1); SSA has made significant progress in narrowing gender inequalities in education, health, economic empowerment and pollical representation (World Economic Forum, 2023; Alwago, 2023)
- 3) In line with 2); to achieve Sustainable Development Agenda 2030 (#decent jobs and economic growth), Africa Agenda 2063 (*the Africa we want*), gender inclusivity; social, economic, and political inclusion is all crucial., (UN [Addis Ababa Action Agenda], 2015).

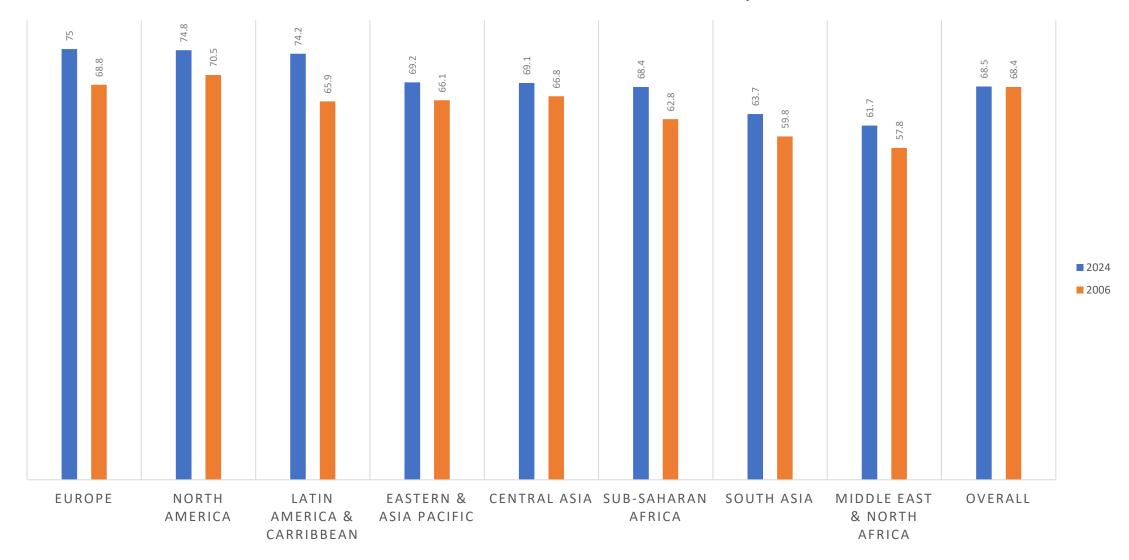
Economic Empowerment index vs Education attainment [clusters]



Health & Survival index vs Political Empowerment score [clusters]



GENDER GAP INDEX PER GLOBAL REGION, 2024



This study

• We revisit assertation (3) and explore the interconnection between gender inequalities, occupational segregation, and economic growth in Sub-Saharan Africa.

- We introduce macroeconomic instruments and trade openness for gender mainstreaming; they are not gender neutral.
- We use dataset from World Bank, World Development Indicators, and United Nations Development Program; between 2000-2020 for 20 SSA countries and apply the PLS-SEM approach.

Summary of Key findings.

► Gender inequality had a significant **growth-retarding effect** on regional economic growth (period 2000-2020) through the moderating effect of macroeconomic fiscal policies and trade openness; gender mainstreaming.

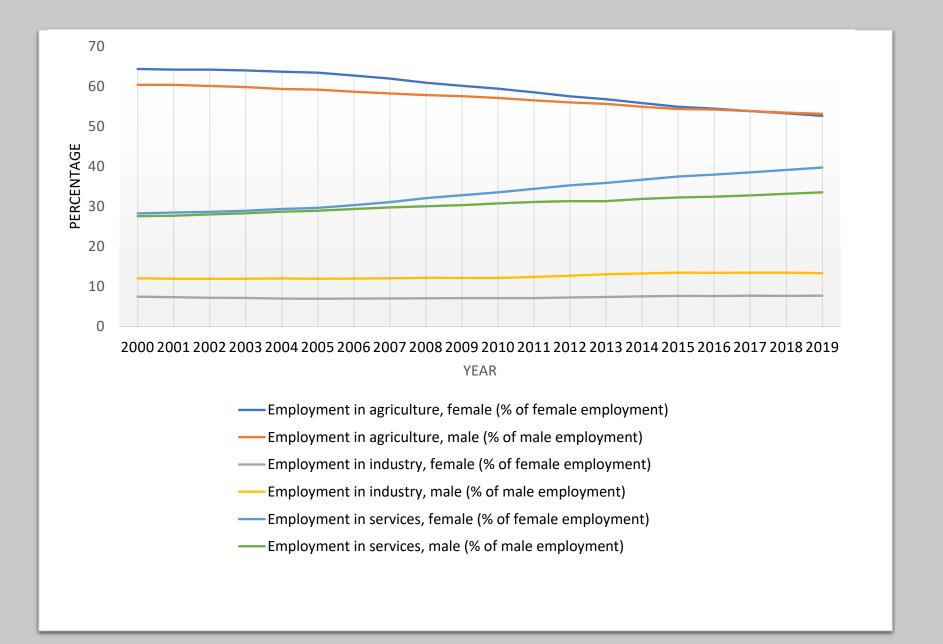
The macroeconomic fiscal policy tools and trade openness are essential for region's economic development; however, there's a **growth** retarding twin-deficit effects in SSA.

Data

 We focused on sub-indices of Gender Inequality Index (GII)

Latent Variable	Construct measure					
	Adolescent fertility rate (births per 1,000 women ages 15-19)					
	School enrollment, primary and secondary (gross), gender					
Gender Inequality	parity index (GPI)					
• •	Labor force participation rate, male (% of male population					
	ages 15+)					
	Labor force participation rate, female (% of female population					
	ages 15+)					
	Maternal mortality ratio (modeled estimate, per 100,000 live					
	births)					
	Share of women's seats in parliament (%, seats in parliament)					
Occupational Segregation	Employment in services, male (% of male employment)					
	Employment in services, female (% of female employment)					
	Employment in agriculture, male (% of male employment)					
	Employment in agriculture, female (% of female employment)					
	Employment in manufacturing, male (% of male employment)					
	Employment in manufacturing, female (% of female					
	employment)					
Economic growth	GDP per capita growth (annual %)					
	Gross capital formation (annual % growth)					
	GDP growth (annual %)					
	Gross national expenditure (% of GDP)					
Macroeconomic Policies &	Globalization Index (ratio of exports less imports to GDP; X-					
Trade openness	M/GDP)					
	Fiscal tools: Taxes and government purchases					
	1 130ai 130is. Taxes aria governinent parenases					

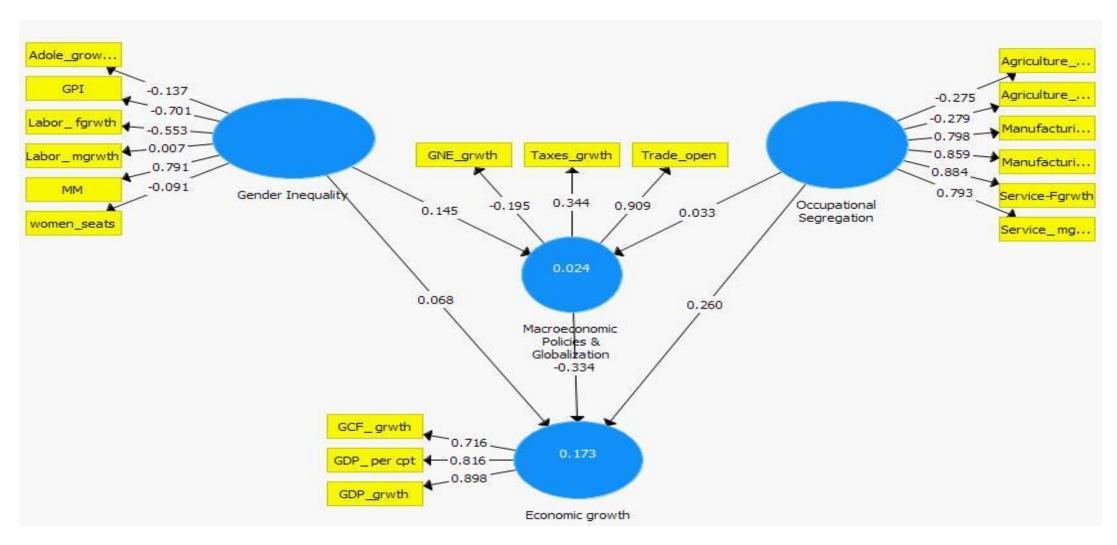
Occupational distributions by employment sectors and gender in SSA



SSA GDP PER CAPITA GROWTH (%)



RESULTS



PLS Path model analysis using bootstrapping computations

Bootstrapping path coefficients (**Direct effects**)

	Coefficients	Standard Deviation	t-statistics	p-values
Gender equality → Economic growth	0.068	0.097	0.702	0.483
Macroeconomic Policies & Trade openness → Economic growth	-0.334***	0.090	3.696	0.000
Occupational Segregation → Economic growth	0.260***	0.049	5.277	0.000

Bootstrapping path coefficients (Indirect effects)

	Coefficient	Standard Deviation	t-statistics	p-values
Gender Inequality→Fiscal tool & Glob index→Economic growth	-0.048**	0.025	1.934	0.035
Occupational Segregation→Fiscal tools & Glob index→ Economic growth	-0.011***	0.003	3.487	0.000

Discussions



1) Twin-deficit hypothesis:

- ✓ These reveal that government expenditures (social consumption expenditure) and tax policies have growth retarding effects in SSA countries.
- ✓ The constant fiscal deficits recorded by SSA countries make the region resort
 to borrowing to finance the budget deficits in the delivery of public goods and
 services through public expenditure.
- ✓ This in the long-run results in high debt service-to-GDP ratio (above the threshold) which generates negative impacts on economic growth
- ✓ SSA countries are net importers (i.e., exports raw agricultural products and unfinished goods) hence, experiencing BOP deficits.
- 2) Significant negative indirect effect of gender inequality.
 - ✓ **Budgetary restrictions** sparks a wave of austerity measures that limit social spending, increasing the amount of unpaid care and domestic work performed by women in the informal economy; the share of women in agriculture and service sector.
- 3). Insignificant direct effect of gender inequality
 - ✓ Policy responses and mitigation strategies in SSA
- 4). Occupational segregation effects (β = 0.26, p < 0.05).
 - ✓ Positive effects- skills specialization and effeciency; market diversification and flexibility
 - ✓ Negative indirect effect- Income inequality and consumer demand